

THE SUM OF THE PEOPLE

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THE SUM OF THE PEOPLE

HOW THE CENSUS HAS SHAPED NATIONS,
FROM THE ANCIENT WORLD TO THE MODERN AGE

ANDREW WHITBY

BASIC BOOKS

New York

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To Anna—
Some things are beyond quantification.



And Moses and Eleazar the priest spake with them in the plains of Moab by Jordan near Jericho, saying, Take the sum of the people, from twenty years old and upward; as the Lord commanded Moses and the children of Israel, which went forth out of the land of Egypt.

—Numbers 26:3–4, King James Version



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PROLOGUE

Where Counting Really Counts

IN THE FAR NORTH of the West Bank, just outside the village of Faquq'a, Mohammed Atari stands in the generous shade of an olive grove. These trees, he tells me, are Roman—an extraordinary claim, but one corroborated by their gnarled trunks, two or three arm-spans in circumference. Mohammed is dressed in a black shirt, zip-off trousers, a wide-brimmed cloth hat, and a black-and-brown keffiyeh. He watches the trailing members of our group descend the hill toward us, counting them wordlessly as they approach. He does this with his right hand, middle and index fingers extended, marking out each pair as they settle amid the trees. In total we are eighteen: fourteen Swiss tourists and their Swiss guide; me, the Australian interloper; Mohammed, Palestinian; and his colleague, Ahmed, also Palestinian, who leads a donkey named Casimiro.

One day's walking ahead of us is another, larger party, of thirty Norwegians. Their guide, Nedal, does not count them directly. Instead, he has divided them into six groups of five; when they stop, each group quickly enumerates itself to check that nobody is missing. This efficient procedure is necessary because unlike us they stop often, to sing a hymn or read from the Bible. The Norwegians are pilgrims, whereas the Swiss, for the most part, are just regular tourists—albeit intrepid

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ones—here to enjoy the landscape, the culture and the history, as well as the physicality of travelling by foot.

Both Mohammed and Nedal watch carefully, each in his own way, over their respective flocks. We're all following the Nativity Trail, a long-distance walking route from Nazareth in Israel to Bethlehem in the West Bank, and our guides don't want us wandering off. This ancient landscape is shot through with modern lines, not all of them visible: the unhealed wounds of an unsolved conflict.

But today, under the olive trees, all is peaceful. The sun is shining, the path is relatively smooth, and the walking is easy. Mohammed's group is happy and relaxed. This is what they came for. My interest in this place is different. Though these adventurous Swiss retirees have kindly adopted me, I relate more strongly to the pious Norwegian group. Though religion is not my motivation, I too am embarking on a pilgrimage.

• • •

In fifth grade—1991—my parents transferred me to a well-regarded Anglican school. We weren't particularly religious, but it was a good school, and I soon got used to the weekly rhythm of chapel services. One day, in the final school week of that first year, I sat on a wooden pew, stewing in the heavy, listless air of a Brisbane summer. A boy stood and took his place at the eagle-winged lectern. "A reading from the book of Luke," he began, "chapter two, verses one to seven" (New International Version).

In those days Caesar Augustus issued a decree that a census should be taken of the entire Roman world. (This was the first census that took place while Quirinius was governor of Syria.) And everyone went to their own town to register. So Joseph also went up from the town of Nazareth in Galilee to Judea, to Bethlehem the town of David, because he belonged to the house and line of David. He went there to register with Mary, who was pledged to be married to him and was expecting a child. While they were there, the time came for the baby

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to be born, and she gave birth to her firstborn, a son. She wrapped him in cloths and placed him in a manger, because there was no guest room available for them.

He stumbled over *Quirinius*. I marveled at the exotic sound of *Galilee* and *Judea*. And of *census*, a word new to me.

Had I been a more attentive child, it wouldn't have been, for Australia had conducted its own census just a few months earlier, on August 6, 1991. Though I evidently took no note of it, it duly noted me among nearly seventeen million others. I imagine that my mother filled out the orange-tinted form on our kitchen bench, amid the usual pile of half-opened mail. (I was probably watching television in another room.)

Years later, now living in the United States, I found an archived blank of the 1991 Australian census form online. "The Census is like a stocktake of our nation," it begins. That's a favorite description of census takers, one that goes back more than century. I think I understand why they keep using it: whereas the suspiciously sibilant *census* comes from Latin, *stocktaking* is reassuringly Anglo-Saxon. Stocktaking suggests counting boxes on the shelves of a warehouse: this many of product A, that many of product B. A stocktaking is routine: nothing to worry, or even think particularly hard, about.¹

But counting people is quite different from counting boxes. People do not sit still, waiting inertly to be tallied, as boxes do. People do not come in simple varieties—"zero percent fat" and "low carb"—although statisticians sometimes like to pretend they do. There is a method to counting people, a science even, but it's not accounting. Boxes are unaffected by being counted, whereas the act of counting people can oppress or empower them, or even change their self-identities. People may embrace, or resist, being counted.

Today, the vast majority of the world's nations conduct a count of their populations at least once every decade: a *decennial* census, the adjective another Latin import. Between the words we use to describe it and Luke's account of the nativity, quoted above, you could be forgiven for supposing the Romans started all this, but they did not. As

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with laws, taxes, and religion, counting people is an institution of community that goes back as far as community itself, in ancient China, the Fertile Crescent, and probably everywhere else that people began to live together in large numbers.

Nor does the modern census look much like the Roman one. Like any long-lived institution, the census has had many different, conflicting functions over its history. It arose to satisfy the administrative needs of despots yet eventually developed a crucial role in supporting democracy. It drew the attention of statisticians before they called themselves that, and then flourished, as an instrument of scientific inquiry, once they did. As nations and empires coalesced, it served to define and support them. More than once, it was coopted for protest and dissent against those empires.

The idea of a census is not limited to nations and empires: smaller communities, cities, and provinces, hold them too. Even Black Rock City, a temporary town in the Nevada desert, rebuilt from scratch every year for the anarchist-inspired Burning Man festival, has a census (2018 population: around seventy thousand). But the census of nations is the focus of this book. That procedure is heavy with symbolism. It delineates boundaries no less than a map or border wall does. It is a moment of communal self-reflection: a stocktaking only if you imagine that cans of beans could decide to count themselves.²

• • •

I've come to the Holy Land, and specifically to the West Bank, to try to understand this ancient institution more deeply. I want to retrace the steps of that famous biblical account of the institution's Roman ancestor; that is my pilgrimage. But this is also a revealing part of the world in which to examine the modern census. Palestine is an unfinished state. Like the jumble of pipes, wires, and elevator shafts visible in a building under construction, the infrastructure of a modern state—which includes the census—lies exposed in Palestine.

There's a further reason I've come here in particular: in the narrow strip of land between the Mediterranean Sea and the Jordan River,

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demography is a battlefield. According to its latest count, Israel has around nine million inhabitants, of whom seven million are Jewish and the remainder mostly Arab Israeli or—equivalently but not identically, in a region where terms are never neutral—Palestinian Israeli. Adjacent to Israel lie the Palestinian territories: the West Bank, sandwiched between coastal Israel and Jordan, and Gaza, a tiny sliver of land adjacent to Egypt, in-cut to Israel's coast. They are home to around five million people, who by ethnicity if not citizenship are the siblings of those two million Arab Israelis. Here, seven million Jews and seven million Arabs lie on either side of an arithmetic knife-edge.

The land comprising Israel and Palestine, around the size of Belgium, is the subject of two incompatible claims to sovereignty. That conflict has simmered for decades, exploding into violence with deadly regularity. It looms disproportionately large on the global stage, a byword for complex, intractable problems. The history of the region is vigorously contested. Even present facts rarely escape dispute—including the populations I quoted above. There is, however, one thing that people generally agree upon. The conflict, if it is resolved, will be resolved in one of two ways: a “two-state solution” or a “one-state solution.”

The two-state solution was formalized in the 1947 United Nations partition plan for what was then the British Mandate of Palestine. This proposal, a state of Israel alongside a fully realized state of Palestine, has long been favored by the international community. It has been consistently popular among ordinary Israelis and Palestinians. Its high-water mark came with the mid-1990s Oslo accords, a series of agreements that established a working relationship between Israel and the Palestinians and gave birth to Palestine's embryonic government. Not long afterward, the Israeli prime minister, Yitzhak Rabin, was assassinated at a peace rally by one of his own citizens. Prospects for a two-state solution have been receding ever since.

The alternative one-state solution imagines the two groups, Jewish and Palestinian, living harmoniously within a single set of borders, sharing sovereignty and power in government. Israel today is already *de facto* a binational state by virtue of its substantial Arabic-speaking non-Jewish

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minority. But if the West Bank and Gaza were formally incorporated, this minority would be much larger, a numerically coequal nation within the shared state. This makes the one-state solution unimaginable to many Jewish Israelis, who hold foundational the principle that Israel should be a refuge for the Jews.

• • •

Challenging demography is nothing new to Israel. The 1947 UN partition plan was based on population data drawn from the British censuses of 1922 and 1931. Muslims, Jews, Christians, and others were cleanly separated in the columns of the census report, but on the ground they were mixed. Under the UN plan—under any possible plan—a substantial minority of Arabs would be included in the proposed Jewish state. “That is the demerit of the scheme,” the official report noted drily. The Jewish majority, in fact, would be barely 50 percent: hardly a comfortable margin to maintain a purportedly Jewish state. For Israel’s founders, this was not merely a demerit but an existential threat.³

Conflict broke out sporadically starting in late 1947 and in earnest after Israel’s declaration of independence in 1948. The demographic situation changed rapidly. As many as three-quarters of a million Arabs fled their homes in the territory designated for the Jewish state (the figures, again, are contested). It was, at least in part, an intentional campaign of expulsion. Palestinians call it the *Nakba*, the catastrophe. Today it is the defining event in their national story, their own Exodus.

On the demographic battlefield, the census was quickly weaponized. The first enumeration of the state of Israel occurred quickly, on November 8, 1948, at the height of the war. From a statistical perspective, this was absurd: for accuracy, censuses should be timed with periods of stability. Current international recommendations state that “a time should be chosen when most people are staying at their place of usual residence. . . . Traditional festivals, pilgrimages and fasting periods are . . . unsuitable times for census work.” The midst of war is so obviously unsuitable that

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it doesn't even make the list. Nevertheless, a seven-hour curfew was imposed to ensure residents remained at home, enumerators were given military escorts, and it was done.⁴

At the time, the *Palestine Post* opined disapprovingly that the government was exploiting “a time of emergency to saddle on the people a permanent system of surveillance.” The *Post* was half right. Though Israel's government was exploiting a time of emergency, it was not building a system of surveillance but defining something far more foundational: the citizenry of the new state. Each resident of a household was issued a registration number as they were enumerated, and this became his or her record of citizenship. People absent from their homes—not least, several hundred thousand displaced Arabs—were not counted, did not receive a registration number, and did not become Israeli. Literally overnight they lost the chance to become citizens in the state that now claimed their homes. This was no stocktaking. The first Israeli census did not so much count a population as create one, making permanent a favorable demographic balance.⁵

It worked. By the time 1948 was over, the Jewish population of Israel exceeded 80 percent, a far more convincing guarantee of the Jewishness of the state. For hundreds of thousands of Palestinian refugees, the census turned short-term displacement into long-term exclusion, creating a humanitarian calamity, a permanent refugee problem, and a major obstacle to peace.⁶

• • •

International recommendations for census taking specify far more than just timing. The UN Statistics Division, custodian of such things, defines a population census as:

the total process of planning, collecting, compiling, evaluating, disseminating and analysing demographic, economic and social data at the smallest geographic level pertaining, at a specified time, to all persons in a country or in a well-delimited part of a country.⁷

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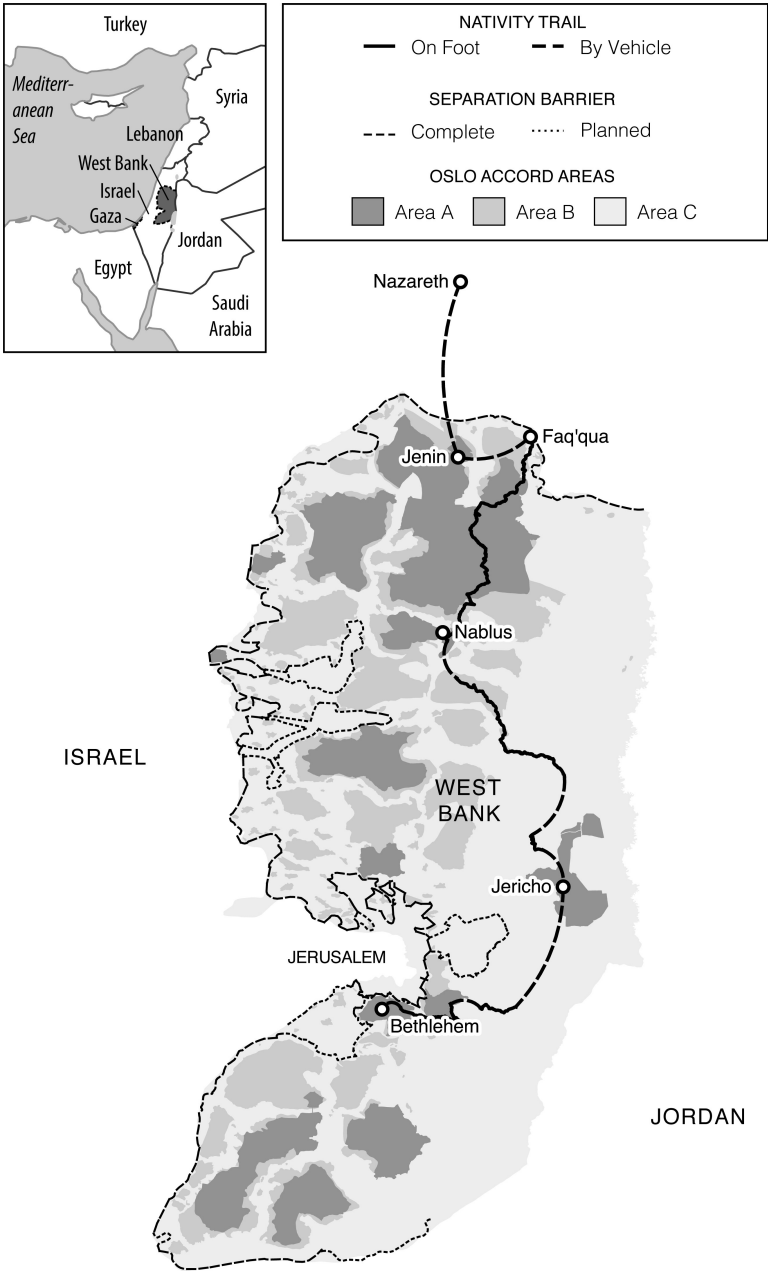
These words come from the bible of enumeration, *Principles and Recommendations for Population and Housing Censuses*. For a long, technical document written by committee, *Principles and Recommendations* is a model of clarity. At least I thought so, when I first paged through it near the UN's headquarters in midtown Manhattan. Now, in the West Bank, it seems riddled with ambiguity, full of terms that are suddenly ill-defined: citizen, resident, territory, legal authority, country.

Palestine in 2019 is not quite a country. In 1988, the Palestinian leader Yasser Arafat declared, from exile, an independent Palestinian state. As I write this, Palestine is recognized as such by 137 out of 193 UN member states. Israel is not among them, but it does recognize and deal with Palestine's government, the Palestinian Authority. Palestine claims all of the West Bank, although in practice the Authority governs only an archipelago of enclaves amid areas controlled by Israel. It also claims the Gaza Strip, although that has been ruled by a competing Palestinian faction, Hamas, since 2007. Palestine claims Jerusalem as its capital, and some of the city's residents as citizens, but the Palestinian Authority is forbidden from operating there.⁸

Within the West Bank, two communities live in superposition. The Palestinian state exists, practically speaking, in regions designated Areas A and B. These are the areas that, when the Oslo accords were being negotiated in the 1990s, had substantial Palestinian populations—people who are now effectively citizens of Palestine. The rest of the West Bank, designated Area C, is under Israeli control, beyond the jurisdiction of the Palestinian Authority. It contains some six hundred thousand Israeli citizens living in more than one hundred settlements, built progressively since Israeli occupation began in 1967. The UN Security Council considers these settlements a violation of international law.⁹

As my Swiss companions and I walk each day, we encounter scattered physical signs of this complex geopolitical landscape. The most prominent is the so-called Separation Barrier, which the government of Israel has built to control movement between its territory and the West Bank. The barrier (at its most imposing, a twenty-six-foot-tall wall) generally follows the 1949 armistice line, but in places it detours deep inside the

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According to the Bible, Mary and Joseph travelled from Nazareth to Bethlehem to register for a Roman census. The Nativity Trail, a modern tourist route, loosely retraces the biblical journey across a complex political landscape. (Map data credit: Natural Earth, UN OCHA oPT, Imbach Reisen.)

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West Bank, in order to wrap around larger settlements and draw them back in to Israel proper. We had crossed it soon after leaving Nazareth, at a checkpoint near Jenin. The internal boundaries that separate the Oslo accord areas are less obvious, though I soon realize that's partly because our route is designed to avoid them. Settlements are ever-present, dotting the hills that surround us, but always some distance away.

In the central part of the West Bank, in the vicinity of Jerusalem, the official frontiers are especially convoluted. Walking through here would be difficult, so instead our route veers southeast, toward the Jordan Valley and Jericho. The Norwegians' guide, Nedal, explains that Mary and Joseph may have taken a similarly circuitous route two thousand years ago, as they answered the call of the Roman census. An ancient road known as the Way of the Patriarchs connected Nazareth and Bethlehem directly, but it passed through the territory of the Samaritans, a group related to, but sometimes hostile to, the Jews. There's no clear consensus on this; other evidence suggests that Jewish travel through Samaritan lands was routine. But even this best case meant a journey of around eighty miles. The terrain in this region is beautiful but often stony and unforgiving. At times Ahmed has to cajole Casimiro, the donkey, into continuing. It would be an unpleasant trip, I imagine, for somebody in the final days of pregnancy—infuriating, even, given that the purpose of the census was Roman tax collection.¹⁰

Modern censuses are not used for collecting taxes. Nor do they require such arduous journeys of those they count. Each of the Palestinian Authority's three censuses of the West Bank and Gaza—1997, 2007, and 2017—was conducted in accordance with the UN recommendations. Two thousand years ago, Roman census records would have been recorded onto papyrus scrolls at central locations. Today, Palestinian enumerators travel to the homes of the people they are tasked to count, armed with paper forms and tablet computers. In richer countries, people often enumerate themselves, receiving and returning a census form by mail or completing it online. In a handful of countries, censuses are now virtual, compiled from a register of the entire population that is kept continuously up to date.

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Palestine is not there yet. Even in 2017, its tablet-toting census takers followed a fairly traditional process, first mapping out the areas where people were thought to live and then travelling door-to-door, collecting information about each person in every household they encountered. It was the enumerators, and not those being enumerated, who had to contend with the complex topology of the Palestinian proto-state: the manned and unmanned checkpoints, the walls, gates, ditches, and barbed wire. Census taking everywhere involves more logistics than statistics, but in Palestine it involves diplomacy as well.

• • •

I meet the census team from the Palestinian Central Bureau of Statistics (PCBS) at their office in Ramallah, the administrative capital of the Palestinian Authority. Ramallah is located to the north of Jerusalem, just off Highway 60, the modern day equivalent of the Way of the Patriarchs. Mary and Joseph might have passed here on the way to Bethlehem, which is only sixteen miles further south. Today that distance seems much greater, stretched by the tangled frontiers that surround Jerusalem. Since our nativity route took us west to avoid all that, I have circled back afterward, on my own.

Once I find the right building, I'm joined by four senior officials from the bureau, a man and three women, some of whom have been involved in Palestinian census taking since its modern reintroduction in 1997. Tea is brought, and we start to discuss the complexities of conducting a census in Palestine.¹¹

The greatest challenge for each of the three censuses has been East Jerusalem. After the 1948 war the city was split: Israel in the west and Jordan in the east (a UN plan for an international city came to nothing). After Jordan's defeat in the 1967 war, the eastern part came under Israeli control. At that time, a census was taken by Israel, and Palestinians present were given a status of permanent residence in Israel. Today they are issued with Israeli identity cards and can in theory apply for full Israeli citizenship. Most—reportedly 95 percent—have not. Their status remains somewhat precarious.

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The Palestinian Authority views East Jerusalem as occupied Palestinian territory, an integral part of the future Palestinian state; the people living there, then, should naturally be included in the census of Palestine. At the first census in 1997, the Authority set out to do exactly that. It was an act of open defiance against Israel, a continuation of Palestinian resistance by statistical means. The then-head of Palestinian statistics called it “a civil intifada,” borrowing the word given to the period of unrest that had been brought to an end with signing of the Oslo accords. Israel argued that the Authority’s actions violated the accords, moving to outlaw Palestinian census taking in East Jerusalem. There was at least one arrest, and the census of East Jerusalem was halted.¹²

In 2017, seventeen arrests were reported of people associated with the Fatah Party, which rules the Palestinian Authority. Israeli police accused them of “taking part in activity related to a population census.” At the time, the Palestinian Central Bureau of Statistics denied operating in East Jerusalem and claimed the arrests “had nothing to do with the population census.” And yet there in the final census report are census counts for East Jerusalem.¹³

I ask the Palestinian statisticians about this. Their response is one of calculated vagueness, echoing the official denials. (I infer that the enumeration was undertaken by Fatah affiliates already living in Jerusalem, rather than employees of PCBS.) While enumerators used electronic tablets for the rest of the West Bank and Gaza, paper forms were used in East Jerusalem. The questionnaire was shorter than elsewhere in Palestine. These strategies seem designed to avoid drawing too much Israeli attention. Needless to say, this is not a situation addressed in the 299 pages of the UN’s *Principles and Recommendations*.

Two other major logistical difficulties confronted the 2017 census takers. The first was the Separation Barrier, which did not exist in 1997 and had grown substantially since 2007. Travel to and from some Palestinian communities is restricted to people who are registered as living there, which makes staffing a census harder. “Mostly we recruit people from the same governorate, from the same locality, especially

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for localities behind the separation wall,” they tell me. The electronic tablets allowed data to be transmitted wirelessly to the head office in Ramallah, reducing the amount of paper shuffling required and eliminating the possibility of seizure by Israeli soldiers. A similar situation held with respect to Gaza: travel back and forth was minimized by hiring local staff and using videoconferencing and other technology. Even with such measures, the 2017 census required, they observe, “emergency plans, all the time.”

When the interview is finished, I take the number 218 public bus back to Jerusalem. It passes through the famous Qalandiya checkpoint, which divides Jerusalem from the West Bank. While we wait at the checkpoint, I skim through the official Palestinian census report once again. I make note of the population totals: 2.9 million in the West Bank, including 281,163 furtively enumerated in East Jerusalem; 1.9 million in Gaza; 4.8 million altogether. In many respects it is a typically dry, technical document, replete with obligatory discussions of statistical arcana such as nonsampling error, coverage percentages, and Whipple’s index.¹⁴

But politics is never far away. The census is a “pillar of state building” and “a genuine expression of national sovereignty.” Enumeration was impeded by “the procedures of the Israeli occupation and obstacles including the Annexation Wall and settlement expansion.” That wall, which looms over the bus as we leave the checkpoint and reenter Jerusalem, “suffocates those living behind it.” Even the usually soporific methodology section notes “instability resulting from continuing Israeli aggression, confiscation of land and isolation of the population in Palestinian Localities.”¹⁵

While I do not doubt the statistical rigor of the Palestinian census, its parallel geopolitical purpose is unmistakable. Even the now-predictable arrests play into that: there is no imminent prospect that the Palestinian Authority will actually govern East Jerusalem, so—official denials notwithstanding—its purpose in counting people there seems less administrative than symbolic: to publicly assert its territorial claim. As we pull into the bus station near the ancient Damascus Gate of the old city

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of Jerusalem, I note, before closing the report, one more potent symbol: fieldwork was completed on December 24, 2017—Christmas Eve.¹⁶

• • •

Census taking makes sense as a tactic of nation building. The conventional definition of a state under international law requires a permanent population, a defined territory, a government, and the capacity to enter into relations with other states. A census is surely the most direct way to demonstrate a permanent population. It's also evidence of a functional government.

In 1993, in a critique of the first Oslo accord, the Palestinian-American scholar Edward Said called for an immediate census: “not just as a bureaucratic exercise but as the enfranchisement of Palestinians wherever they are...an act of historical and political self-realisation outside the limitations imposed by the absence of sovereignty.” Said’s qualification—or rather lack of qualification—“wherever they are” was significant. Today there are around thirteen million people who might be considered Palestinian, by virtue of having once lived in historical Palestine or being born to parents or having grandparents who had lived there. Around half live in the West Bank, Gaza, and Israel, with the balance spread between Jordan, Lebanon, Syria, and elsewhere. In holding a census, Said argued, they would “come close to constituting a nation rather than a mere collection of people.” But the census that followed four years later in 1997 did not count Palestinians wherever they were. Instead it conformed to international norms, counting people only within the defined territory the Palestinians claimed. It reinforced a particular, concrete assertion of statehood, at the expense of Said’s vision of national self-realization.¹⁷

Census takers are constantly grappling with lines of citizenship, nationality, ethnicity, and race. Citizenship is the clearest of these, while the other categories are much fuzzier, grounded in shared history, culture, and ancestry. Israel itself illustrates this complexity. In 2013, a group of activists petitioned Israel’s Supreme Court to allow them to record their nationality as “Israeli” in the state population register. The court declined, concluding that the state of Israel contains within it

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people of Jewish, Arab, and other nationalities, but nobody of Israeli nationality. It allowed that such a nationality may one day come to exist, but upheld the lower court's ruling that "technical-statistical registration" was not a process that could have this effect.¹⁸

Arguably, the court was wrong as a matter of fact: history abounds with examples where nationality, race, and ethnicity—far from emerging organically—were assigned, or even created, precisely by "technical-statistical registration." Prior to the widespread use of self-enumeration in 1960, an American's race, on the census, was largely determined by the enumerator—who was, in all probability, a white person. That is no longer the case. Censuses in many countries increasingly treat nationality, race, and ethnicity as a matter of self-identification, refusing to arbitrate or second-guess such slippery categories. Of course, that's not quite right either. A person cannot simply arrive in Israel and successfully self-identify as Jewish. These concepts may not be objective, but neither are they completely subjective.

While I was in Israel, a debate erupted following a statement from the prime minister, Benjamin Netanyahu, that "Israel is the nation-state of the Jewish People—and them alone." Netanyahu was on firm legal ground, having passed a law to that effect in 2018. Israel is now a state in which the Jewish nationality is paramount; there is no Israeli nationality because, by law, the Israeli nationality *is* Jewish.¹⁹

That doesn't leave much room for a viable one-state solution, but as we discussed this over long days of walking, I found my Swiss companions more optimistic. As they reminded me, national identities are not fixed. In a continent that spent much of its history bloodily rearranging its constituent states along ethnic, religious, and linguistic lines, Switzerland stands as an exception, with four official languages. Roberto, a retired English teacher, German-speaking, but with a name that recalls his family's Italian origins, taught me a word the Swiss use to describe themselves. *Willensnation*: a nation brought into being, and held together, by sheer force of will. It's a hopeful story.

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The Church of the Nativity, in Bethlehem, is the endpoint of the Nativity Trail, by tradition the site of the stable where Jesus was born. To my (and nobody else's) disappointment, Luke doesn't elaborate on how or where the Roman census was taken, or whether the family even made it to be registered, given Mary's presumed state of indisposition and the challenge of caring for a newborn baby. So I too ended my pilgrimage here.

It was unlike any place of worship I had ever visited, not so much a church as a set of interconnected churches—Greek Orthodox, Armenian, and Roman Catholic—all sharing one site. This arrangement, known as the Status Quo, dates back to Ottoman times. It is replicated in miniature in the holiest part of the complex, the Grotto, supposedly the exact place where Mary gave birth. This subterranean space is lit by fifteen hanging oil lamps, whose numerical configuration is specified precisely by the Status Quo: six are Greek, five Armenian, and four Roman Catholic. These proportions have no contemporary meaning that I can discover: they were simply frozen in place, in 1852, by a Turkish sultan tired of religious squabbles. As I read these facts, by the lamplight of the Grotto, I was reminded of another status quo, holding tenuously 150 miles to the north.

Lebanon is the prodigal son of global census taking. Its last full count was in 1932, under French rule. When independence came, in 1943, power was divided between various religious sects on the basis of those decade-old statistics. No individual group—Maronite Christian, Sunni, Shia, and on down a list of seventeen officially enumerated—dominated, though Christians overall just outnumbered Muslims. So Lebanon created its own status quo: top government positions were allocated in proportion to the 1932 population, and the parliament and civil service were established with an exact ratio of six Christians for every five Muslims.²⁰

Over time, the ratios between these groups in the population began to drift, even as the 6:5 agreement remained fixed. Quantifying the change and revisiting the agreement was considered too destabilizing, so successive governments, from 1943 until 1975, chose instead to ignore it, refusing to count the people of Lebanon. At the conclusion of

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the civil war that lasted from 1975 to 1990, the ratio was amended to 1:1, Muslim and Christian parity, reflecting the belief—almost certainly correct, but untested by official data—that the Christian proportion had declined.²¹

You could, reasonably, see this new arrangement as a mere political compromise, divorced entirely from demography, just as every American state receives two senators, regardless of population. But that's not how the people of Lebanon see it: they subscribe to the democratic ideal that political power should reflect numbers. Since in practice it cannot—at least not without the risk of violent conflict—a fresh census would be a provocation. An official, complete count of Lebanon's estimated six million people does not seem likely any time soon.

As I exited the Church of the Nativity and stepped, blinking, into Manger Square, I wondered whether the proponents of a one-state solution for Israel and Palestine imagine that it would turn out more like Switzerland or like Lebanon.

• • •

I return from the Holy Land to the United States on April 1, 2019—exactly one year before this country's next census day. In most decades, by this point, the main parameters of the enumeration—and certainly the questions that will be asked—have been decided. Not this time. A debate is raging over a late order from the secretary of commerce to add one more question to the census, against the near-unanimous advice of Census Bureau experts: *Is this person a citizen of the United States?*

As tends to happen in this litigious nation, the debate has become a lawsuit—actually multiple lawsuits—appealed all the way to the Supreme Court. The plaintiffs argue that this last minute addition will dissuade noncitizens, especially undocumented people, from participating in the count. Oral arguments in *Dept. of Commerce v. New York* are scheduled for April 23. In an editorial, the *New York Times* bills it the highest-profile case of the court's term. While I've been looking elsewhere for the story of the census, it has found me in my adopted home.²²

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April 23 arrives, and I read the transcript as soon as it is released. In their attempts to interrogate the legitimacy of the proposed question, the justices grapple with historical and international comparisons. In the first minute, the solicitor-general, presenting the case for the Department of Commerce, declares that such a question “has been asked as part of the census in one form or another for nearly 200 years.” He is interrupted by Justice Sotomayor, who contends (correctly) that this is an oversimplification. Later, Justice Kavanaugh observes that many other countries ask about the citizenship of respondents and that the UN includes citizenship among its recommended census topics. “The question,” he says, is does “international practice, that UN recommendation, that historical practice in the United States, affect how we should look at the inclusion of a citizenship question in this case?”

This book’s answer is yes. A historical and international perspective is essential, not just to understand the issues that were at stake in that now-resolved case but to understand the meaning of the modern census more generally. The census did not appear fully formed in some particular time and place but developed in a slow, continuous interplay of ideas from around the world. The belief that vexes Lebanon, that each census should be followed by a redistribution of political power, is an essentially American idea. The notion that people should be enumerated individually, rather than simply as anonymous members of a household, is Scandinavian. The modern method of testing census accuracy was trialed first in India. Intellectually, the census extends beyond borders, across oceans, and back through centuries, even if individual censuses occur in one place, at one time.

In the chapters that follow, I argue that the census is not just a collection of separate national projects but a human project. My aim is to tell this larger story: to show how the institution of counting people has evolved, how it has changed as societies changed, and how it has sometimes changed those societies in turn. In doing so, I draw on a scholarly movement that, since the late twentieth century, has begun to treat the study of statistics as an object of study itself. This has produced some illuminating academic accounts of census taking in particular

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countries, but none that attempts, as I do here, to sketch the global history for a nonexpert reader.

Scholars have often cast the census as an instrument of power: as a mechanism of “state formation” and control, following the influential French philosopher Michel Foucault; as an attempt to make society “legible,” in the terminology of political scientist James Scott; or as a top-down project of nation building by the “classifying mind of the colonial state,” as the anthropologist Benedict Anderson put it. There’s a great deal of insight in these perspectives: even the simplest, most essential result of a census—the knowledge of a population’s size—can have a kind of power, as the Malthusianism of the nineteenth century and its twentieth-century echo illustrate.²³

But the census can be a tool, too, of the powerless. It has been embraced, appropriated, and even subverted by those being counted. It has served as a medium for individual and minority self-expression. Even under the strictest regimes—Nazi occupation, for example—people have found, in enumeration, a canvas for protest. Granted, a census is never a blank canvas, but more like a paint-by-numbers in which authorities define, by setting the questions and sometimes the possible answers, both the outline and the palette. Still, by answering questions against expectation, by writing—sometimes quite literally—between the lines, or in the last resort, by absenting themselves entirely, otherwise disempowered people have conspired to reject these impositions. All this is possible because the census has a fundamentally democratizing character: it requires mass participation. It is neither wholly of the state nor of the people but exists as a continuous negotiation between them.²⁴

Perhaps the most important phase in that negotiation, achieved in the eighteenth and nineteenth centuries, was the separation of the census from the individual obligations of taxation and military service that so often characterized it earlier. This happened at first casually, almost by accident, but eventually evolved into something closer to a promise. For all the tablet computers and wireless transmissions, this is the innovation that most fundamentally divides the Palestinian census of 2017 from the census of Quirinius on the same terrain, two thousand

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years earlier. Today the census is something unique: a way for the state to see the people, without seeing any individual person.

That may also be the greatest threat to its continuation, for while the traditional census has shed its role in mediating the relationships between individual citizens and their governments, those relationships have only deepened. Over the twentieth century, individual obligations were joined by individual entitlements arising from the centralized welfare state. As a result, the census today competes with many other sources of information: applications, returns, registrations, records and disclosures, each facilitating some direct relationship between the citizen and the state, each a way to render the citizen “known.”²⁵

For now the population census still sits at the center of that constellation. But this does not guarantee its future. In a world of driver’s licenses and passports, tax returns and benefits checks, fingerprints and retina scans, hourly social media status updates and minute-by-minute location tracking, the traditional census seems increasingly anachronistic—as one group of sociologists put it, “an outdated high modernist invention.” It is infrequent, expensive, and bound by strict privacy rules.²⁶

Some countries have now abandoned the decennial enumeration altogether. Instead, they maintain population registers, databases of their citizens and visitors that are kept continually up-to-date, so accurate and current as to render a special, once-a-decade enumeration superfluous. This started in the Nordic world and is now spreading to other countries in Europe and beyond. It’s very likely that population registers represent the next phase in the long history of counting and classifying people.

For now, though, the traditional census still rules, and it is the heart of this book. There is something special about an actual enumeration, with its proverbial army of canvassers. In 1882, Leo Tolstoy enlisted in one such army, going door to door in Moscow’s Khamovnitsheskiy quarter to count its residents. He took his job seriously, coming face to face with every type of working-class Muscovite: “master-artisans, bootmakers, brush-makers, cabinet-makers, turners, shoemakers, tailors, blacksmiths...cab-drivers, young women living alone...female peddlers, laundresses, old-clothes dealers, money-lenders, day-laborers,

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and people without any definite employment.” The census, he wrote, “furnishes . . . a mirror into which, willy nilly, the whole community, and each one of us, gaze.”²⁷

Far from a dry statistical exercise, the census is ultimately about people; it is a form of quantitative social history. In 1867, then congressman James Garfield noted that

till recently the historian studied nations in the aggregate, and gave us only the story of princes, dynasties, sieges and battles. Of the people themselves—the great social body with life, growth, sources, elements, and laws of its own—he told us nothing. Now statistical inquiry leads him into the hovels, homes, workshops, mines, fields, prisons, hospitals, and all places where human nature displays its weakness and its strength.²⁸

This is the story, too, of people: those who were counted but also and particularly those who did the counting. You probably imagine this latter group to be like Charles Dickens’s character Mr. Gradgrind, “a man of facts and calculations” who cared for little else. Popular culture has not, on the whole, embraced the 2009 prediction of Google’s chief economist Hal Varian, that statistician would be “the sexy job in the next ten years.” If statisticians have failed to dispel their unsexy image, then government statisticians have done even worse in the popular imagining. They are the grayest of the gray-suited bureaucrats, armed with notebooks, punch cards, calculators, or laptops, as the era allowed. (Arguably they should shoulder some of the blame: in a move entirely worthy of Dickens, the US Census Bureau has been located, since 1942, in a suburb outside Washington called Suitland.)²⁹

But the census has always been a vast and intrepid undertaking, and so its agents could be found not only besuited in government offices but crossing the North Atlantic, canoeing up uncharted rivers in the wilds of Alaska or driving for days across the Australian outback. As the function of the census has changed, so have the people behind it; it has drawn in soldiers, clergy, civil servants, scientists, international bureaucrats, and sometimes, today—too often, perhaps—lawyers.

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That said, there *are* Gradgrinds. The census invites a kind of obsession, a compulsive drive to count everyone. There is a certain kind of person, recurring in this story, who seeks to arrange the world in neat, numbered boxes. I don't want to leave them out because—and here I confess my lack of objectivity—I empathize with such people. I may even be one. As an economist I have long used census data, and while I've never been involved in running a census, I've spent many hours with the people who have. Still, I've tried my best to climb outside my box, not shrinking, for example, from the abuses and crimes that census takers have abetted.

This is only one story of the long history of counting people, out of many that could be told. In attempting to cover such a broad swathe of history and geography, I have had to be selective. Like the census itself, this book is a series of snapshots, highlighting important moments in the evolution of an underappreciated idea, tracing it backward from its present incarnation: an attempt to count everyone, everywhere. I cannot include every evolutionary step, so instead I have chosen a handful of moments, digressing where necessary to examine the people, ideas, and technologies that shaped them, and the effect, in turn, that they had on the people counted.

Ultimately, it is the distilled essence of the census—the simple idea of counting everyone—that most intrigues me. There is something almost romantic about it. To count is to have value, to matter. To be counted is to be included and, perhaps, to be known. Two thousand years ago, the emperor Augustus decreed “that a census should be taken of the entire Roman world.” A count of the entire world: by this standard, the story of the census is one of failure, a story as much of those not counted as those counted. And yet we keep trying. As I write this, the peak years of the next census decennium, 2020 and 2021, are approaching. Across more than two hundred countries, we are attempting, once again, to count every one of our kind. That we will fail is a certainty, but in failing, we may come closer than ever before.

This is the story of how we got here—and where we might go next.

THE BOOK OF NUMBERS

IN 2020, the human population will be just shy of 8 billion, a milestone we'll probably reach in 2023. One century earlier, in 1920, we numbered 1.8 billion. In 1820, just over 1 billion—though the further back we go, the less certain we can be. On sheer numbers, *Homo sapiens* is one of the most successful animal species on Earth. Today even Antarctica, the most inhospitable of places, usually has a transient population of over 1,000. Not quite the most inhospitable: as I write this, there are 3 people located to my north-northeast, 51 degrees above the horizon, about 250 miles above the surface of the planet, aboard the International Space Station.

It wasn't always this way. *Homo Sapiens* first emerged under the African sky around three hundred thousand years ago. Up until ten thousand years ago, our ancestors probably never numbered more than about ten million, but what they lacked in numbers they made up for in adaptability. From Africa they dispersed into Eurasia, Australasia, and finally the Americas. Of course, not one of those ten million knew anything of this intercontinental flourishing.

In Genesis, God promises to make Isaac's descendants "as numerous as the stars in the sky" (26:4, New International Version), a metaphor that seems straightforward but is actually as puzzling as it is ancient. The number of stars that are visible to the naked eye is surprisingly

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small: only around nine thousand. A Stone Age astronomer, looking skyward, would have had no way of knowing there were any more. Before the invention of the telescope, the vastness of the stars in the sky was more an impression than a verifiable truth.

Still, the heavens were teeming compared with the Earth. In the prehistoric world, people were rare. Early humans lived as hunter-gatherers in small groups. No person ever encountered more than a few hundred others over a lifetime. The basic social unit, a band, comprised ten to fifty people, related by ties of kinship. Larger communities, in turn, were composed of several bands, who lived closely and cooperated in activities like hunting. The evolutionary psychologist Robin Dunbar famously observed that humans can maintain only around 150 meaningful relationships. This limit, Dunbar argued, is hardwired in the human brain's neocortex. The amount of grey matter we have dictates the capacity of any of us to maintain close relationships. Dunbar's number is a natural, self-regulating population size, the largest that communities of early humans would have grown without more elaborate social structures. In these tight-knit communities, there was no need to formalize membership or to quantify it. Each person knew each other person. Without much conscious effort, they could keep track of the mutual obligations that are an inevitable part of social living: she shared her berries with me; I made him a spearhead.¹

Indeed, strict quantification was probably impossible. Some of the most ancient languages lack words for numbers, including those still spoken by the Pirahã of the Amazon and the Warlpiri of Australia's Northern Territory. In an interview for the BBC documentary *The Story of 1*, a younger Warlpiri man, Leo Jampijinpa Wayne, questions an older man, Japaljarri.

"How many grandchildren do you have?" he asks, in Warlpiri.

"Many. Bajan, Parun, Jamarai, Jangan," Japaljarri replies, his right forefinger tracing a stroke in the red desert sand for each name. "Many."

For perhaps 290,000 years this is as close to a census as *Homo sapiens* came.²

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Eventually things began to change. Larger tribes formed: collections of bands sharing culture and language, governed by a social hierarchy. In Mesopotamia, people domesticated crops and learned to farm, exploiting the fertile topsoil that was deposited by annual flooding of the Tigris and Euphrates rivers. Around six thousand years ago, the earliest agrarian civilizations arose, the independent city-states of Sumer. After another thousand years or so, one of these cities had grown to house more than fifty thousand people within its walls. That city, now vanished, was located midway between modern Baghdad and Basra. It was called Uruk and gave us the name Iraq.

Today, a population of fifty thousand is often used as a lower bound for what is considered a city. For humans alive five thousand years ago, it must have been an almost unimaginable number. But many modern cities are far larger. Fifty thousand people can, after all, be contained in just one structure in a modern city: Yankee Stadium, for example.³

In the last few decades, cognitive scientists have begun to study “number sense,” our ability to judge numerical quantity. We seem to have a range of cognitive mechanisms available to make such judgments: one for very small numbers (three or four), one for medium quantities (up to perhaps one hundred), and one for larger numbers. But these studies typically focus on how we count simple objects or abstract shapes. Because humans evolved as social animals, it’s reasonable to suspect our number sense for people is different than for dots on a screen.⁴

In this specialized case, there’s not much research, but introspection is illustrative. It’s easy to visualize five to ten people: a sports team, say. Twenty-five people fill a classroom: few enough for a quick estimate of numbers, but not to immediately identify who is present and who is absent (there’s a reason teachers take attendance each day). A large movie theatre holds a greater number, a hundred to two hundred fifty people—obviously more than a classroom but still in the realm of a reasonable estimate. Many concert halls are at least ten times larger