IUSSP XXIV General Population Conference Salvador de Bahia, August 2001 S64. Population Change and Political Transitions

Demography in Israel/Palestine: Trends, Prospects, Policy Implications

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Background

Population variables and processes are intimately and crucially related to the past, present and future of the Israeli-Palestinian conflict. This paper reviews some of the main demographic trends among Jews and Arabs in Israel and Palestine, presents some new population projections covering the period 2000-2050, and discusses some possible policy implications of the emerging demographic scenarios.¹

The Israeli-Palestinian conflict stems from ideological, historical, religious and political differences whose roots go back to antiquity. During the 19th and 20th centuries, the Jewish and Arab national movements provided new symbolic meanings, added new contentious frameworks to old disagreements, and thus reinforced mutual hostility rendering solutions more difficult. At the core of the contemporary conflict, two peoples - Jews and Arabs - claim rights of settlement and political sovereignty over the same territory - Palestine (in Arab: Falastin, in Hebrew: Eretz Israel) - they both view as homeland. Around this local core, two additional tiers further complicate the conflict. The first tier reflects hostility of Arab societies against the state of Israel. This regional dimension is demonstrated by repeated direct interventions of Middle Eastern countries and political movements in support of the Palestinian side of the conflict. The second tier relates to the broader contentious between Islam and the Western civilization, especially since Khomeini's Islamic Revolution in the late 1970s. This global dimension is demonstrated by the impressive array of contemporary conflicts opposing Islamic and other forces in Asia, Africa, Europe, and America, and by the explicit or implicit ideological ties among them all. In this respect, Israel is simply part of a cluster of other Western, Christian, or otherwise non-Islamic entities.

In an attempt to solve the core conflict, on November 29, 1947 the United Nations General Assembly approved resolution 181 providing the legal foundations to partition of the territory of the former British Mandate over Palestine through the establishment of an *Arab* state and a *Jewish* state. Further provisions concerned the status of the Jerusalem and Bethlehem area. Following such U.N. resolution, the Jewish side complied with territorial partition and independence of the State of Israel was declared on May 14, 1948, thus implementing the

¹While this paper is written with an effort of objectivity, the author is aware he may have stressed an Israeli point of view in some of the judgements expressed below.

Jewish claim to a state in Palestine. The Arab side rejected the U.N. resolution and no parallel declaration of independence of an Arab state in Palestine followed, although such intention has been claimed ever since. The reasons why independence of an Arab state in Palestine was never declared - at least in a form that would command clear international recognition - are complex and cannot be discussed here.²

War between neighboring Arab countries and Israel erupted in 1948 at least partly motivated by the Israeli-Palestinian conflict. Major Arab-Israeli wars followed in 1967 and in 1973. Israel launched major retaliation campaigns in 1956 against Egypt and in 1982 against Lebanon; during the 1991 Gulf war, Iraq launched a missile strike against Israel. Cease-fire agreements were signed between Israel and its neighbors, namely Syria, in 1949, 1967, and 1973, each reflecting battlefield results and affecting (temporary) boundary definition between the parties inside and outside Palestine. Peace treaties were signed between Israel and Egypt in 1978 and between Israel and Jordan in 1994. With the withdrawal of occupying Israeli forces from Lebanon in 2000, the U.N. established the exact international boundary between the two countries. An agreement of intents was signed in 1993 between Israel and the Palestinian Authority but subsequent negotiations did not lead to a peace treaty. In 1987, and again in September 2000 the Palestinians initiated an *intifadah* (popular upraise) - the latter, and Israeli military response, still under way at the time of this writing.³

In the prevailing situation of prolonged and unsolved conflict, observation of demographic trends in Israel and Palestine unveils the deeper layer of political, cultural, religious, social, economic and environmental factors inherently involved in such conflict. Because of the crucial connection that exists between population development and environmental variables in a small and densely settled territory, Jewish and Arab population trends in Palestine are better analyzed through an integrated approach. Looking at the different parties involved in the conflict not only as separate and hostile entities but also as one integrated regional societal system may help to sharpen perception of the complexities of the problems at stake. It may also help to discern some possible mechanisms toward reducing tensions.

This paper reviews a few scenarios concerning Jewish and Arab population development in Israel and Palestine over the period 2000-2050. New projections are presented based on official baseline data published by the state of Israel and by the Palestinian Authority. The projections presented below, however, reflect the author's independent research. Assumptions for population scenarios rely on analysis and evaluation of past trends with regards to health and mortality, fertility, international migration, and territorial population redistribution. Cultural, community, and institutional variables deserve significant weight in such appraisal.

Beyond a general expectation of rapid population growth over a relatively small territory, population projections indicate the important role of differential growth for different ethnoreligious subpopulations, territorial regions, and functional age groups. Prospective changes in Jewish and Palestinian population size, densities, manpower characteristics and mutual ethnoreligious balance may be a primordial factor in enhancing conflict, but also may stimulate innovative thinking about policies aimed at conflict resolution.

The concluding discussion focuses on demography as a primary force in shaping political, environmental, socioeconomic and sociocultural interests of the contending parties. Political boundaries and the very viability of the respective countries are powerfully related to ethnoreligious population composition, population densities, environmental constraints and socioeconomic development. Possible policy interventions may concern fertility, international

²One explanation may be that the Arab international community was more opposed to the establishment of a Jewish state in Palestine than it was interested (if at all) in the establishment of a new Arab state on the same land.

³U.N. resolution 242 called for withdrawal of Israel from territories occupies in the 1967 war; U.N. resolution 338 confirmed the essentials of resolution 242 after the 1973 war; U.N. resolution 425 called for Israel's withdrawal from Lebanon after the 1982 war.

migration, the population's geographical mobility and distribution, and investments in public facilities and economic infrastructure. From the different perspectives of the two main parties in the Israeli/Palestinian conflict, a serious appraisal of prospective demographic trends might lead to policy decisions enhancing the transition if not to conflict resolution, at least to a less conflictual situation.

Population Change in Israel/Palestine: Patterns and Frameworks *Territory*

Boundaries of the territory known among other appellatives as Kna'an, Eretz Israel, The Holy Land, and Palestine have changed continuously over history. At times the relevant piece of land formed one single political unit or was at the core of a significantly more extended one; during other periods of history, it was divided between different powers with respect to whom it constituted a more or less distant peripheral province.

This paper refers to the geographical concept of *Palestine*, or more accurately Western Palestine, as to the whole territory comprised between the Mediterranean Sea and the Jordan River. This area formed the British Mandate between 1922 and 1948, and comprises some 28,000 square kms. (Table 1). Of this total, 21,671 km² of land (plus 474 km² of lakes) are included in the State of Israel, reflecting armistice or cease-fire agreements with Lebanon and Syria, and more recent peace treaties with Egypt and Jordan. For the purposes of this paper, this Israeli surface *includes* 1,154 km² of Syria's Golan heights held by Israel since the war of June 1967, and about 73 km² including the Eastern neighborhoods of Jerusalem and adjacent land that between 1948 and 1967 were part of the Hashemite Kingdom of Jordan and in July 1967 were incorporated in the Jerusalem municipality. Not included in Israel are the *Palestinian Territories* - sometime here abbreviated into *Palestine* as a political concept. These include the West Bank [of the Jordan River] comprising 5,506 km² (included in Jordan between 1948 and 1967), and the Gaza strip comprising 378 km² (administered by Egypt between 1948 and 1967).

⁴ The United Nations Population Division's 2000 revised population projections adopt the caption "Occupied Palestinian Territories" instead of the previous label of "West Bank and Gaza". The decision to change denominations reflected discussions at the U. N. Legal Office, Department of Political Affairs, Office of the Secretary General, and General Assembly following a request from the Palestinian Authority supported by the group of Arab States. That led to a 1999 instruction to the Population Division to report statistics according to the new denomination. The decision is documented in a series of internal memoranda based on a more general decision by the General Assembly that does not refer specifically to statistical reporting. The label "Occupied Palestinian Territories", besides being politically oriented, is neither geographically clear nor accurate. In the current (2001) political-military reality of the whole territory of Palestine between the Mediterranean sea and the Jordan river, and following the 1993 Oslo agreements, there are four types of geopolitical situations: 1. The State of Israel: Full Israeli sovereignty; 2-4. The Palestinian Territories, subdivided into: 2. The "A" zones: these areas, including all main Palestinian cities in the West Bank and Gaza and 64% of the Palestinian Territories' population (Fargues, 2000a), are in full administrative and security control by the Palestinian Authority and host no Israeli military or civilian settlement; 3. The "B" zones: 33% of population, Palestinian administrative responsibility, Israel army's security responsibility; 4. The "C" zones: 3% of population, full responsibility by the Israeli army. Only the "B" and "C" zones host both a military and a civilian presence of Israelis and can accurately be described as "occupied territory", but as noted most Palestinians live in the "A" zones. To be faithful to the U.N. terminology, two separate sets of statistical data should be provided for "Occupied Palestinian Territories" and "Autonomous Palestinian Territories". In Middle Eastern political rhetoric the State of Israel itself has often been referred to as "Occupied Palestinian Territory". Were that line of thought implemented, how would the U.N. Population Division be instructed to label Israel's population data? There are several other territorial conflicts around the world, and the notion of "Occupied Territory" applies to many other places - at least from the point of view of one of the contending parties. Exclusive use by the U.N. - including its Population Division - of the term "Occupied" only for parts of Palestine does not serve any scientific standards nor adds to data reliability. A better label for "West Bank and Gaza" would be "Palestinian Territories" or simply "Palestine".

TABLE 1. ISRAEL AND PALESTINE, LAND SURFACE, KM²

Surface	Total Israel	West Bank	Gaza	Total Palestinian Territories	Grand Total
Km^2	21,671	5,506	378	5,884	27,555

Although comparatively small - in fact the equivalent of a medium-size region in a typical European country or one of the smallest states in the United States - the territory of Palestine comprises significant variation of morphological and climatic regions. Among these one would primarily distinguish between the Mediterranean coastal plane to the west, the hilly north-south central backbone, and the Jordan valley to the east. Israel's southern part - the Beer Sheva Sub-District - comprises 12,946 km² of mostly desert or arid land, or about 60% of the country's total surface. Extremely variable land and climate conditions consequently prevail regarding potential and actual settlement patterns.

Population trends in the past

In long term historical perspective, existing evidence indicates that the total population of Palestine - regardless of internal political divisions - was characterized by significant shifts in size and composition. The rough reconstruction in Table 2 reflects prevailing scholarly assumptions of a large population size during the early centuries of Christian Era, significant population decline after the 5th century, long-term population stagnation until the beginning of the 19th century, and rapid growth ever since. In the modern period, the total population of Palestine repeatedly doubled, from 275,000 in 1800 to over half a million in 1890, over a million in 1931, about two millions in 1947, and four millions toward the end of the 1960s. More recently, population again doubled from over 4.5 millions in 1975 to over 9 millions in 2000. Over the period 1800-2000, Palestine's total population grew by a factor of nearly 34 times. Between 1947 and 2000 total population grew by 4.7 times.

Population distribution by main ethno-religious groups shows since the beginning of the Christian era an uninterrupted presence of Jews, Christians and Muslims over most of the last 20 centuries, as well as significant changes over time in the absolute and relative size of these groups. Archeological and other documentary evidence shows an early prevalence of Jewish population, political organization and culture. Between the 2nd and the 6th centuries, during the Byzantine period, the majority of population was Christian. With the rise of Islam, after the 7th century a Muslim majority emerged. This lasted through 1947, when out of an estimated total population of about 2 million, close to 1.2 million (60%) were Muslims, about 650,000 (32%) were Jewish and about 150,000 (7%) were Christian.

Following Israel's 1948 independence and the subsequent war and far-reaching political changes, a Jewish majority emerged again relative to the whole territory of Palestine. One of the determinants of the latter shift was the flight from Palestine of 625-675,000 Arabs (according to Israeli sources, Bachi, 1977) or 700-800,000 (according to Palestinian sources, Kossaifi, 1996) - since recognized, together with their descendants, as the Palestinian refugees. Another key determinant of population change was large-scale unrestricted Jewish immigration, amounting to 2,850,000 between 1948 and 2000. Differential natural increase of the main ethnoreligious groups further contributed to the changes in total population size and composition in Palestine.

At the end of 2000, the total population of Palestine was estimated at 9.3 million, thereof about 5 million (53%) Jews, close to 3.9 million (42%) Muslims, and over 200,000 (2%) Christians. Of this grand total, Israel's total population - including Jewish residents of the

⁵Evidently we cannot enter here into a discussion of the causes and modalities of the great Palestinian flight of 1948. Suffice to recall that the Palestinian thesis is forceful expulsion by the Israeli army, and the Israeli thesis is mainly voluntary flight in response to encouragement by Arab leadership in the framework of a war Israel did not initiate.

Palestinian Territories - amounted at about 6,350,000, thereof 4,969,000 Jews, 199,000 non-Jews related to the recent large-scale Jewish immigration from Eastern Europe, and 1,178,000 Arabs and others, mostly Muslim Palestinians but also Christians and Druzes. The total population of the Palestinian Territories approached 3 million, thereof 1,845,000 in the West Bank and 1,128,000 in the Gaza area.

TABLE 2. POPULATION IN PALESTINE WEST OF JORDAN RIVER, BY RELIGION GROUPS, $\mathbf{1}^{ST}$ CENTURY-2000 - ROUGH ESTIMATES, THOUSANDS

Year	Jews	Christians	Muslims	Total ^a
First half 1 st century C.E.	Majority	-	-	~2,500
5 th century	Minority	Majority	-	>1 st century
End 12 th century	Minority	Minority	Majority	>225
14 th cent., bef. Black death	Minority	Minority	Majority	225
after Black death	Minority	Minority	Majority	150
1533-39	5	6	145	157
1690-91	2	11	219	232
1800	7	22	246	275
1890	43	57	432	532
1914	94	70	525	689
1922	84	71	589	752
1931	175	89	760	1,033
1947	630	143	1,181	1,970
1960	1,911	85	1,090	3,111
1967	2,374	102	1,204	3,716
1975	2,959	116	1,447	4,568
1985	3,517	149	2,166	5,908
1995	4,522	191	3,241	8,112
2000	4,969	217	3,891	9,310

a Including "Others": Druzes, other small religious minorities, and since 1990, immigrants from the former USSR without religious affiliation.

Sources: Until 1975: R. Bachi (1977); after 1975: Author's estimates based on: Israel Central Bureau of Statistics; Palestinian Central Bureau of Statistics.

Homelands and diasporas

One of the most significant aspects of population dynamics in Israel and Palestine was the continuous interaction between trends occurring locally and in the much broader frame of reference of a Jewish and a Palestinian diaspora. Of particular salience was the role of international migration that led to large-scale and in a sense reverse processes of concentration and dispersion of Jews and Arabs worldwide.

Interactions between a Jewish population core in Palestine and an ancient and globally dispersed diaspora constituted a notable factor in shaping the very essence of Jewish history, identity, and culture. In modern times Jewish population patterns in Israel were crucially affected by large scale and initially very heterogeneous immigration. At the root of Jewish population trends in Israel stands the transition of immigrant Jews from being part of a multitude of communities representing small minorities in the respective countries of residence, to forming the majority of the state of Israel's total population. Complex processes of absorption in a new societal context, and growing sociodemographic homogenization were foreshadowed by the prescriptive societal goals of *the ingathering of the exiles* and *the fusion of the diasporas*. In actual experience, large-scale immigration and absorption involved a large amount of social friction, the accumulation of social gaps, and occasionally the exploitation of conflicts of interests by political agents that thrived on these problems (Schmelz, DellaPergola, Avner, 1991). At the same time, the Jewish diaspora continued to constitute a potential source of Jewish population growth and - at least in the prevailing normative ethos of Israeli society - it belonged to a broad perception of Jewish peoplehood transcending geographical boundaries.

The Palestinian migration experience was in a sense symmetric and reverse since the development of a large-scale diaspora was a recent development. International population dispersal mostly followed the 1948 war and to a lesser extent the 1967 war. In the Palestinian case, too, the prevailing normative ethos looks at the diaspora as a substantial reservoir for potential immigration - in this case the *return of Palestinian refugees*.⁶

Table 3 presents a rough reconstruction of the size and geographical distribution of worldwide Jewish and Arab Palestinian populations on the eve of Israel's independence in 1948, and in 2000. In 1948, the total world's Jewish population was estimated at 11.2 million, of which 650,000 (6%) lived in Palestine, 945,000 (8%) lived in Middle Eastern and North African countries, and the balance (86%) lived in other Eastern European and Western countries. Israel's independence and the voluminous international migration it allowed had a huge impact on the geographical distribution of world Jewish population, along with other changes related to the balance of natural increase and identificational retention vs. assimilation. It should be noted, however, that world Jewish population grew rather slowly since World War II, and since the mid-1970s was close to zero population growth. In 2000, out of a total of 13.2 million Jews, 4.9 million (37%) lived in Israel, only 28,000 remained in Muslim countries (amounting to virtual ethnic cleansing), and the balance (63%) mostly lived in North America and other Western countries

Palestinian Arabs mostly lived in Palestine on the eve of partition in 1948, though some emigrant communities already existed both in the Middle East area and in several Western countries. It can be roughly estimated that the total Palestinian population worldwide grew from about 1.6 million in 1948 to about 8.5 million in 2000 reflecting significant natural increase in the intervening period. A major factor of local, regional, and global Palestinian population redistribution was the exodus connected with the 1948 war. In 1949, about 156,000 Arabs were left in the areas that had become the state of Israel. A further flight of Palestinians from the West Bank followed the 1967 war. In 2000 it could be estimated that about half of the whole Palestinian people - over 4.1 million, or 48% - lived on the territory of Palestine, whether in the state of Israel, in the West Bank or in the Gaza area⁸. Another 3.7 million (44%) were estimated

⁶In the following we refrain from entering the specific question of the demographic development of Palestinians who hold a status of refugee. While we quote available population estimates that basically refer to Palestinian refugees, we prefer to address the total Palestinian population as such. The question of who is a refugee and who is not, besides being politically overcharged, is complex and requires intensive scrutiny. Issues demanding clarification concern the exact procedures for recording of vital events, namely cases of death, among refugees especially considering that UNRWA benefits associated with refugee status might be lost in case of death. In case of marriage between a refugee and a non-refugee, evaluation of the advantages associated to belonging to either status and transferability to spouses and descendants may affect the choice of status. More specifically, the current belonging of (former refugee) Palestinians to refugee or non-refugee status in the West Bank and Gaza reflects individual decisions and processes of social mobility that escape rigid accountancy rules. These and other issues make the definitional boundaries of the refugee population and the accountancy of Palestinian refugees and their descendants an exemplary case in the study of poorly defined subpopulations. Many of the same research issues apply to Jewish populations, namely those who left Arab countries and immigrated to Israel. The majority of Jews who ever immigrated to Israel would indeed qualify for the status of refugees, having lost most of their belonging and being unable to return to the countries of origin. A significant difference is that Jewish immigrants in Israel were incorporated into a major public effort of absorption within the mainstream of Israeli society. In the case of the Palestinians, a major effort was instead invested in refraining from solving the social problems of immediate relevance while postponing and subordinating those issues to the final solution of the Israeli-Arab conflict.

⁷Jewish population figures derive from a systematic, country-by-country evaluation of sources of data and estimates (DellaPergola, 2000; DellaPergola, Rebhun, Tolts, 2000). Palestinian population figures still need to undergo a similar critical evaluation (Abu Libdeh, 1999).

⁸Regardless of citizenship, refugee or non-refugee status, and whether or not living in their localities of birth. The number of people in refugee camps was estimated at 580,000 in the West Bank (31% of the total Palestinian population there), and 818,000 (73%) in the Gaza area.

to live in neighboring Muslim countries in the Middle East and North Africa - over 60% of them in Jordan. The balance (8%) lived in other, mostly Western countries.

TABLE 3. WORLD JEWISH AND PALESTINIAN POPULATIONS BY MAJOR REGIONS, NUMBERS (THOUSANDS, ROUGH ESTIMATES) AND PERCENTS, 1948-2000

Region		Je	ews		Palestinians			
	Number		Percent		Number		Percent	
	1948 ^a	2000 ^b						
Total world	11,185	13,192	100.0	100.0	1,600	8,508	100.0	100.0
Israel/Palestine	650	4,882	5.8	37.0	1,340	4,108	83.8	48.3
Middle East ^c , North Africa	945	28	8.4	0.2	(160)	3,700	10.0	43.5
Other countries	9,590	8,282	85.8	62.8	(100)	700	6.2	8.2

a May 15.

Under the current terms of Israeli-Arab conflict in Palestine, Diaspora populations constitute a frequently mentioned potential for immigration, hence a relevant element in the evaluation of possible future population trends in the area. Whether or not actually motivated to move back to Israel/Palestine, diasporas have represented and continue to represent a powerful factor of mobilization of public support and economic resources, both internally within the respective Jewish and Arab constituencies and *vis-à-vis* external actors in the international community. As such, they have played and will continue to play if not a direct, at least a significant indirect role in the overall development of population trends in Israel/Palestine.

Territorial aspects of population distribution

Palestine's 1947 partition plan suggested the creation of six areas, three with a Jewish majority, three with an Arab majority, plus the Jerusalem-Bethlehem area intended as a *corpus separatum* under U.N. tutorship. Following the military results of the 1948 war and the 1949 armistice agreements, the Jewish-Israeli side expanded its territorial hegemony at the expenses of the Arab side. As a consequence several enclaves of Arab territory passed under direct Israeli rule. The 1967 war produced further territorial changes, namely the expansion of Israeli rule (civil or military) over the whole of Palestine. As noted, in 1967 Israel annexed East Jerusalem and surrounding territory, and the Israeli legal jurisdiction was subsequently extended to the Golan heights. On the contrary, in the West Bank and Gaza the Israeli administration did not suspend application of the preexisting Jordanian or Egyptian legal frameworks toward the local population. At the same time, Israel promoted an extensive network of Jewish settlements throughout the West Bank, the Gaza area, and the Golan heights. Consequently, each part of Palestine ended up by having a presence of both Jews and Arabs, though the respective proportions greatly varied.

Table 4 provides an approximate classification scheme of Jewish and Arab population distribution over the different political and administrative units of the whole territory that after the 1967 war was submitted to various modes and frameworks of Israeli rule. Within the state of Israel proper, reflecting the underlying assumptions of the 1947 partition plan and the noted consequences of the 1948 war, certain areas continued to display an Arab majority. In 1999 this applies to 9 out of Israel's 45 Natural Regions - a detailed territorial subdivision of the 14

b January 1.

c. Including Turkey, Syria, Lebanon, Jordan, Iraq, Gulf States, Saudi Arabia, Egypt, and other countries in the region. Sources: DellaPergola, Rebhun, Tolts (2000); PASSIA (1998); UNRWA (2000).

⁹Residential segregation between Jews and Arabs is extremely high within single localities, and within residential neighborhoods in the few localities with a mixed Jewish-Arab population. The following discussion refers to population distribution by administrative units.

¹⁰Not including three Natural Regions in the Golan heights. The 9 Natural Regions with an Arab majority are: Eastern Lower Galilee, Kokhav Plateau, Nazareth-Tiran Mounts, Shefar'am Region, Karmi'el Region,

administrative Sub-Districts, in turn a subdivision of the 6 major Districts. Israel's 36 Natural Regions with a typical Jewish majority hosted an "enlarged" Jewish population of 4.5 million (93% of the total population of the same areas). In the remaining 9 Natural Regions, about 600,000 Arabs represented a majority of over 76%, and Jews represented less than 24% of the total population there. These areas were located in the northwestern and central parts of Galilee in Israel's north, and bordering the West Bank in Israel central region's so-called "little" and "big Triangles".

TABLE 4. AREAS IN ISRAEL AND IN THE PALESTINIAN TERRITORIES, BY JEWISH^a AND ARAB^b POPULATION DISTRIBUTION, 1999

Area	Nun	nber (tho		Percer	nt	
	Jewish	Arab	Total	Jewish	Arab	Total
Grand Total	5,065	4,117	9,182	55.2	44.8	100.0
Total Israel	4,881	1,144	6,025	81.0	19.0	100.0
Pre-1967 borders	4,681	925	5,606	83.5	16.5	100.0
Natural regions with Jewish majority	4,500	334	4,834	93.1	6.9	100.0
Natural regions with Arab majority	181	591	772	23.5	76.5	100.0
Post-1967 borders	200	219	419	47.7	52.3	100.0
Golan Heights	15	19	34	45.3	54.7	100.0
East Jerusalem	185	200	385	48.0	52.0	100.0
Total Palestinian Territories	184	2,973	3,157	5.8	94.2	100.0
West Bank	178	1,845	2,023	8.8	91.2	100.0
Gaza	6	1,128	1,134	0.6	99.4	100.0

a. Including non-Jewish members of Jewish households, referred below as the "enlarged Jewish population". b. Including others.

Source: Israel Central Bureau of Statistics (2001); Palestinian Central Bureau of Statistics (1997); DellaPergola (2001).

Regarding areas directly administered by Israel since the 1967 war, at the end of 1999 the Golan heights had a total population of 34,000 (55% Druzes and 45% Jewish), and the East Jerusalem area had a total population of 385,000 (52% Arabs, thereof 4% Christians, and 48% Jewish). The aggregate population of Israel and these directly ruled territories was 6,025,000, thereof 81% Jewish and 19% Arab.

In the Palestinian Territories, the total population of the West Bank and Gaza was estimated at about 3 million Arabs (94% of the total) and over 180,000 Jews (6%). The percentage of Jewish residents of the Palestinian territories was 9% in the West Bank and less than 1% in the Gaza area. Following partial implementation of the Oslo agreements and withdrawal of Israeli Defense Forces, the majority of Palestinians lived in autonomous districts subject to the Palestinian Authority. At the same time, as a consequence of the current wave of violence, the Palestinian territories were highly fragmented and free circulation across the whole area was strictly limited by decision of the Israeli defense forces.

In sum, in 1999 the grand total population of Israel/Palestine - the area that once was the British Mandate plus the Golan heights - was about 9.2 million, 55% of which Jewish and 45% Arab. This mosaic of interspersed Jewish and Arab majority and minority areas stands at the center of a complex and often bloody human interaction and political process, and constitutes one of the most sensitive issues in any study of population trends and their implications.

Yehi'am Region, Elon Region, all in the Northern District; Alexander Mount, in the Haifa District; and East Sharon, in the Central District.

¹¹ Including non-Jewish members of Jewish households, mostly immigrants from the former Soviet Union. See below for further discussion.

Israel/Palestine's Demography in Comparative Context: Past and Prospective *International migration*

As already noted, international migration operated as a leading mechanism of population growth in Palestine. While events developed in totally different ways for Jews and Palestinians, it is important to keep in mind the continuing socioeconomic osmosis that prevailed over time across religioethnic boundaries. During most of the 20th century Jewish immigration constituted a main engine of economic growth and modernization in the whole area. Immigration functioned primarily as a reinforcing mechanism that allowed for further Jewish immigration to be absorbed, but also stimulated economic change that allowed for largescale employment of Palestinian Arabs and, especially during the British Mandate, for Arab immigration from neighboring countries (Metzer, 1998). Consequently, on the one hand, an Arab labor force became one of the essential prerequisites for the construction of a modern Jewish state. On the other hand, were it not for the state of Israel, a large share of the Palestinian labor force would have missed the possibility to find employment locally, thus having to seek for alternative markets through emigration elsewhere. Indeed, sustained emigration of about 140,000 occurred during the 1960s from the West Bank - at the time under Jordan. After the 1967 Israeli occupation and until 1989, 171,000 Palestinians emigrated from the West Bank and 114,000 from Gaza, in connection with the new opportunities that were created in the booming economy of the Gulf States. After the Gulf war about 30,000 returned, and 30,000 mostly related to the Palestinian Authority's military forces returned after the Oslo agreements (Zureik, 1997).

Between 1967 and 1987, a growing number of Palestinian commuter workers amounting to up to 200,000 were employed within Israel's territory. With the 1987 upraise, their number was drastically curtailed bringing about a dramatic decline in Palestinian income levels and standards of living. The most recent chapter in the intertwined relationship between Jewish and Palestinian economies and migrations concerns again the consequences of political tensions. After a few years' partial recovery, the 2000 upraise brought the Israeli-Palestinian labor force interaction to a virtual end. Seeking for substitute manpower, the Israeli economy found it in a growing number of foreign-worker immigrants, some on temporary contracts and many remaining illegally in the country. In 2000 their number was estimated at about 250,000. All of these apparent contradictions in strictly political and normative terms constitute nonetheless important building blocks in the long-term evaluation of international migration as a main component of population growth.

The mechanisms governing Jewish international migration and immigration to Israel in particular fundamentally responded to the variable conditions of Jewish communities worldwide *vis-à-vis* general political and socioeconomic trends at the global, national, and local level (DellaPergola, 1998). Migration policies in the sending and receiving countries played a key role, namely quotas imposed in the U.S. since the early 1920s or by the British in Palestine in the 1930s. Since 1948, the *Law of Return* allowed nearly unlimited immigration to Israel of Jews, their children and grandchildren, and spouses. Large-scale, push-dominated Jewish emigration translated into repeated waves of migrants mostly from less developed or less politically emancipated countries to Israel and to various western countries. Figure 1 exemplifies the changing volume and rate per 1000 residents of Jewish immigration to Palestine/Israel between 1919 and 2000. The two major waves in absolute terms included, in 1948-1951, the mass transfer of Jews from Muslim countries and survivors of the destruction of European Jewry during World War II, and since 1990, the major exodus from the (former) Soviet Union. Emigration from Israel reached an estimated 15-20% of the total volume of immigration - a comparatively low amount in the experience of major immigration countries.

Much as a consequence of migration, the geographical distribution of the Jewish diaspora tended to become increasingly aligned with the more stable and affluent countries characterized by a scarcity of migration-stimulating factors. Hence, the potential for future Jewish migration would appear to be rapidly declining. Indeed a projection assuming continuation of the emigration rates that prevailed during the 1990s in the major current

countries of residence of Jews predicted a sharp decline of net migration to Israel, down to a few thousands a year over the first half of the 21st century (see Table 5). Nevertheless, in view of the longer-term past experience the possibility that in the future disruptive factors might become operative in areas currently attractive to diaspora Jewish communities cannot be absolutely ruled out.

FIGURE 1. JEWISH IMMIGRANTS TO ISRAEL, 1919-2000 - ABSOLUTE NUMBERS AND RATES PER 1000 RESIDENTS

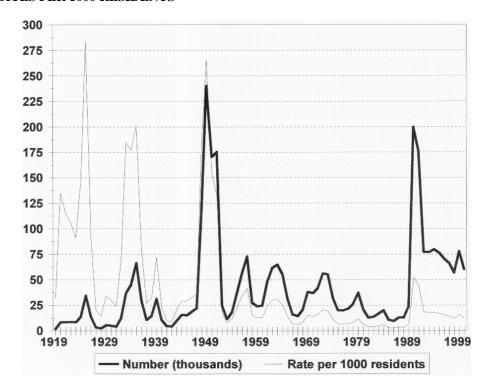


TABLE 5. WORLD AND DIASPORA JEWISH POPULATION, BY MAIN FACTORS OF CHANGE, ASSUMING MIGRATION AND FERTILITY RATES AS OF LATE 1990s, 2000-2050 (THOUSANDS)^a

Region and	-2000	-2010	-2020	-2030
factors of change	2010	2020	2030	2050
Total world				
Initial Jewish population	13,109	13,428	13,847	14,125
Final Jewish population	13,428	13,847	14,145	14,480
Difference	319	419	298	355
Thereof: Diaspora				
Initial Jewish population	8,235	7,863	7,619	7,250
Final Jewish population	7,863	7,619	7,250	6,251
Difference	372-	244-	369-	999-
Net migration balance with Israel	105-	49-	28-	34-
Natural and other change ^b	267-	195-	341-	965-

a. Beginning of year estimates. Projection baseline: 1995. Minor discrepancies due to rounding.

Source: DellaPergola, Rebhun, Tolts (2000).

b. Balance of births, deaths and Jewish identification change.

Regarding the future of Palestinian migrations, the possibility of a large-scale influx of refugees and others in the areas now governed by the state of Israel and by the Palestinian Authority has been raised as a central tenet of political discourse.¹² What the actual likelihood of migration would be is not clear, especially if a plan of economic compensation could be worked out in the framework of a political settlement. The demographic implications of a minor scale influx of Palestinian refugees in Israel will be discussed below.

Health and longevity

Given the prevailing context of conflict, an interesting paradox relevant to health patterns relates to the extremely high genetic proximity that exists between Jews and Arabs, particularly the Palestinians (Hammer et al., 2000; Nebel et al., 2001). Recent research in population genetics based on DNA comparisons unveiled that Sephardi (Mediterranean-Middle Eastern) and Ashkenazi (Central-Eastern European) Jews and the majority of Middle-Eastern Arab populations, namely the Palestinians, clearly share common ancestry in spite of wideranging international migrations and physical separation and inbreeding over many centuries. Contemporary mortality differences between Jews and Arabs largely reflect cultural and environmental distances between the respective subpopulations.

Early in the 20th century, mortality levels were extremely high among the native population in Palestine. Life expectancy at birth among Muslims during the 1930s was less than 30 years (Bachi, 1977). Health patterns in Palestine dramatically improved following Jewish immigration and thanks to better infrastructures developed by the British administration. Immigrants brought about better personal health standards as against the veteran population, imported know-how related to medical and health training and enhanced the development of new, more efficient health services.

Since 1948, Jewish immigrants from less developed countries, mainly in Asia and Africa, quickly closed the life-expectancy gap with immigrant communities that had brought about better health standards. Life expectancy at birth steadily increased at a rhythm of about one additional year of life every five calendar years. Israeli Arabs followed suit, starting at a much lower life-expectancy level but consistently narrowing the gap. Their infant mortality rates reached a lower level than in any contemporary Arab country (with the possible exception of Kuwait). Health improvement among Arabs in the Palestinian Territories after 1967 was significant too, though slower. Recent measures of life-expectancy indicated smaller gaps between Jews and Arabs in Israel than between Arabs in Israel and in the Palestinian Territories.

A common and well-known trait of both Jewish and Palestinian health patterns is the uniquely narrow gap between male and female longevity. Looking at the general context provided by other sociodemographic and economic indicators this appears to result from especially low male mortality rather than from high female mortality. At any rate, over the second half of the 20th century health and mortality patterns of Israel/Palestine definitely entered into the realm of the more developed countries. They share with the latter the expected future course of evolution.

It can be assumed, indeed, that ongoing health improvement will continue to produce continuing declines in age-specific and in most cause-specific mortality rates. In our projections, initial life expectancies at birth for the Israeli population were as during the second half of the 1990s - 76.3 for Jewish men and 80.2 for Jewish women, and 74.2 for Arab men, and 77.4 for Arab women. In the West Bank the projection's initial life expectancies were 71.4 for men and 75.5 for women; and in the Gaza area, 70.4 and 73.4, respectively. Our assumption in all population projections is that, as in the recent past, life expectancy at birth would continue to increase by about one year every five calendar years.

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¹²U.N. resolution 194 called for the return of Palestinian refugees who would accept to life peacefully with their neighbors, or for resettlement trough economic recompensation.

Marriage and fertility

Reviewing the recent demographic trends of Israel and Palestine, one is impressed by an apparent lack of consistency among key demographic indicators, Israel's Muslim population had a TFR of over 10 during the 1960s, declining to slightly above 4.5 by the mid-1980s, and steady at that level throughout the subsequent fifteen years. By the mid-1990s the TFR among Israeli Jews was 2.6, only moderately down from its highest level of 4 in 1951, and higher than among the total population of any developed country. Overall Jewish fertility levels in Israel resulted from the significant lowering of the fertility of immigrants from Asia and Africa and measurable increases among immigrants from Europe and America. Interestingly, stable TFRs obtained among Israel's Jews notwithstanding declining marriage propensities, and among Muslims in spite of rising marriage propensities (DellaPergola, 1993). TFR was nearly the same as the Jews' among Israel Christian Arabs, and it was quickly converging at the same level among Israel Druzes. The TFR of Bedouins, an originally nomadic group now increasingly relocated to permanent settlements especially in Israel's Southern District (the Negev desert), was cautiously estimated at 10 to 12 by Israel's Central Bureau of Statistics. In the Palestinian Territories, TFR was 5.4 in the West Bank; and 7.4 in Gaza - one of the highest on record worldwide. One may further note that the Muslim Bedouin subpopulation in Israel probably featured the highest fertility currently on record worldwide. Such fertility patterns can only be explained by a unique combination of factors rarely jointly found among the same population.

In the first place, strong pro-natalist attitudes were rooted in or derived from religious and cultural traditions, ideals, norms shared by the vast majority of population (Peritz, Baras, 1992; Abu Libdeh et al., 1993; Ziegler, 1995). In this context, and in spite of a relatively high level of education, moral imperatives, widespread conventions, and last but not least, the competitive logic of conflict significantly boosted individual family behaviors among Jews and Palestinians alike. In the more extreme case of the Muslim population, women were often discouraged from employment and career rewards and pushed toward early marriage and reproduction as a primary goal. Secondly - while acknowledging that the criteria for satisfaction may vary considerably across cultures and societies - the Israeli households' comparatively favorable situation from the point of view of accumulation of income, durable goods and other resources also allowed them to "purchase" larger size families. Thirdly, a well-articulated and universally accessed public health system developed in Israel, consistently with its configuration as a modern society. Other things being equal, good adult and child health allowed for prolonged and fecund reproductive spans translating into more children.

This unusual combination of three factors (traditional values, economic growth, and modern public health) rarely found together in contemporary societies helped to explain the fertility surplus observed among Muslims - and also to some extent among Jews - in Israel and in the Palestinian Territories. This does not mean that social pressures did not emerge leading to a more stringent limitation of family size. These pressures, though, were counterbalanced by active pro-natalist interventions at the community level.

While in the framework of a general scheme of demographic transition mortality and fertility levels, and indicators of socioeconomic development tend to form one coherent cluster, this is not the case for the Jewish population in Israel or for the Muslim populations in Israel and in the Palestinian Territories. Table 6 exemplifies the respective fertility levels in 1995-2000 and matches them with similar fertility levels observed among contemporary populations worldwide. Israel Jewish TFRs were matched by similar levels in 20 other countries; Israel Muslim's TFR had 10 matches worldwide; the West Bank's TFR had 12 matches; and Gaza's TFR had 6. A comparison of Israeli and Palestinian infant mortality rates with the average rates in these matching countries unveils distinctly higher levels among the latter. Matched countries had infant mortality rates 3 to 7 times higher on the average than the respective Israeli/Palestinian rates. By converse, a comparison of GNP per capita unveils levels 2 to 10

times higher in Israel/Palestine than in the same matched countries.¹³

TABLE 6. SELECTED DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS, ISRAEL JEWS AND MUSLIMS, PALESTINIAN TERRITORIES, AND MATCHED COUNTRIES, 1995-2000

Country	TFR	TFR ^a	Infant Mortality ^a	GNP/PC US\$ ^a
Israel Jews	2.6	2.62	5.0	17,000 ^b
Matched countries ^c	2.4-2.8	2.62	26.1	3,164
Ratio Israel Jews/Matched		1.00	0.19	5.37
N. of countries		20	20	16
Israel Muslims	4.7	4.67	9.2	$8,000^{b}$
Matched countries ^d	4.5-4.9	4.67	65.5	758
Ratio Israel Muslim/Matched		1.00	0.14	10.43
N. of countries		10	10	10
West Bank	5.4	5.44	25.5	1,618
Matched countries ^e	5.2-5.6	5.40	78.4	891
Ratio West Bank/Matched		1.01	0.33	2.34
N. of countries		12	12	11
Gaza	7.4	7.41	30.2	1,468
Matched countries ^f	7.0+	7.36	115.9	284
Ratio Gaza/Matched		1.01	0.26	5.16
N. of countries		6	6	5

a. Average of selected countries.

Sources: Israel Central Bureau of Statistics (2001); Palestinian Central Bureau of Statistics (1997); Palestinian Central Bureau of Statistics (1998); United Nations (2001); Population Reference Bureau (2001).

If one views fertility levels as the product or at least a correlate of several other variables such as health patterns and socioeconomic development, recent TFRs in Israel and Palestine are definitely out of the range of behaviors normally observed in the international community. Such intriguing difference can be described in fact as an excess of fertility over the average level of countries with other comparable characteristics. Fertility levels in Israel/Palestine most likely reflected the intervening effects of a full array of cultural determinants - including the influence of religion in society, the peculiar nature of ethnic identities, and the influence of political and military conflict on fertility patterns. These cultural influences apparently translated into a variety of mechanisms affecting - actually supporting - fertility levels at the individual/household, community, and overall societal level (DellaPergola, 1997, 2001; Fargues, 2000b).

Fertility levels in Israel/Palestine are further affected by a complex of public incentives and constraints reflecting national policies.¹⁴ Israel can be described as having moderately pronatalist policies that include a package of mother-child allowances, extensive public child-education facilities, and relatively benign provisions for working women. It cannot be

¹³ Separate income figures for Israel Jews and Arabs are the author's estimates, based on Israel Central Bureau of Statistics (2001). Figures for the Palestinian Territories were adapted by the author, based on Palestinian Central Bureau of Statistics (1998).

b. Author's rough estimates.

c. Albania, Argentina, Bahamas, Bahrain, Brunei, Chile, Colombia, Costarica, French Polynesia, Guyana, Jamaica, Mexico, Mongolia, New Caledonia, Panama, St. Lucia, Turkey, Uruguay, Uzbekistan, Viet Nam.

d. Ghana, Jordan, Kenya, Lesotho, Nepal, Papua New Guinea, Samoa, Sudan, Swaziland, Vanuatu.

e. Bhutan, Cambodia, Central Africa, Comoros, Gabon, Iraq, Laos, Namibia, Pakistan, Senegal, Solomon Isl., Tanzania.

f. Angola, Mali, Niger, Somalia, Uganda, Yemen.

¹⁴ What the actual effect could be of the rhetoric of the "war of cradles" (Steinberg, 1989) is not easily quantifiable.

maintained, however, that such policies incorporate an ethno-religious bias intended to promote differential growth of specific population groups. Typically, the most recent piece of legislation enacted in 2000 strongly increased child allowances for the 5th child and above. By that provision, about 40% of the benefits went to the families of Israeli Arab newborns, whereas as noted Israeli Arabs constituted only about 20% of the Israeli population (without Palestinian territories). A further mechanism indirectly affecting fertility was public subventions to education and housing channeled through particular communities rather than at the individual level. By lowering the cost of childrairing of designated subpopulations, these provisions tended to support the respective birth rates and higher fertility overall.

What effects the considerable improvement in educational attainment among both Jewish and Arab women possibly had on attitudes and behavior toward family size and growth? Education supposedly exerted a rationalizing influence toward smaller and more efficiently planned families. However, a positive relationship between income - promoted among other things by better education - and fertility, and the reinforcing of religio-cultural influences supportive of larger families - promoted among other factors by more prolonged years of religious education - probably exerted quite mixed effects on fertility levels.

In prospective, the proven resilience of religio-cultural patterns and of derived political mechanisms underlying fertility suggests that any future changes in fertility levels might be relatively slow. Table 7 and Figure 2 indicate several possible fertility scenarios we designated for the population projections discussed below. Regarding the Israel's Jewish population, the possibilities considered involved continuation or moderate declines or increases of the currently observed TFR levels. The hypothesized changes would stem from either or both rising or lowering of current fertility patterns, or compositional changes in the Jewish population by subpopulations whose fertility behaviors have been widely at variance. Jewish fertility in fact ranges from very high among the more religiously oriented, to rather low among the more secular sections of society, including some of the recent immigrants from the former Soviet Union. The latter, however, are quickly catching-up the norms of veteran Jewish Israelis.

TABLE 7. FERTILITY ASSUMPTIONS FOR POPULATION PROJECTIONS, BY MAJOR ETHNORELIGIOUS ORIGINS AND TERRITORIAL DIVISIONS, ISRAEL AND PALESTINE, 2000-2050

Population	TFR 2000	High	Medium	Low
Jews	2.6	2.9 instant	As in 2000	2.1 instant
Non-Jewish fringe	1.9	2.9 instant	2.4 instant	As in 2000
Israel Arabs	4.0	As in 2000	2.6 by 2050	2.6 instant
West Bank	5.4	As in 2000	2.6 by 2050	2.6 instant
Gaza	7.4	As in 2000	2.6 by 2050	2.6 instant

Source: S. DellaPergola, The Hebrew University of Jerusalem.

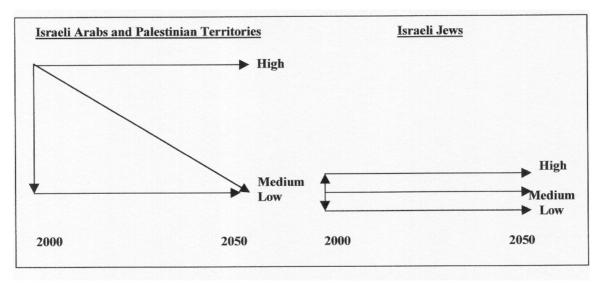
Fertility scenarios for Palestinians, whether in Israel or in the West Bank and Gaza, cover a broader range of variation. One possibility would be a gradual convergence of Palestinians to the standards of the Jewish population. This was in fact one of the hypotheses typically suggested in previous population projections (see below), but it proved not supported by reality. Here, as a medium scenario, the same process is hypothesized to occur slowly over a period of 50 years. A high scenario would consider uninterrupted continuation of current fertility levels. Although apparently untenable on conventional theoretical grounds, such scenario has corresponded to the actual situation over the last decades among large sections of the Palestinian constituency, and good and convincing arguments should be produced to overturn it. A low scenario - though quite untenable - is also suggested of instant convergence

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¹⁵A study of demographic differentials in Jerusalem during the mid-1990s estimated the range of variation of Jewish TFRs between 6.5 in the more religious neighborhoods and 1.4 in the least religious. See DellaPergola (2001).

of Palestinian TFRs to the levels of Israeli Jews. The suggested high-low range is thus merely intended to create a conceivable *maximum-minimum* range of population sizes for further discussion.

FIGURE 2. SCHEMATIC REPRESENTATION OF FERTILITY SCENARIOS FOR POPULATION PROJECTIONS, ISRAEL AND PALESTINE, 2000-2050



Population Projections, 2000-2050

Earlier experiences with population projections

Before embarking in a new round of population projections for Israel and Palestine, it is interesting to briefly review the assumptions and predictive ability of past such attempts. Scholars and administrators elaborated population scenarios and discussed emerging policy implications, particularly in the context of the debates of the 1920s and 1930s about the political future of post-Mandatory Palestine (Hersch, 1928; Palestine Royal Commission, 1937; Muhsam, 1938; Bachi, 1944; Notestein and Jurkat, 1945) and with renewed emphasis since the 1967 war (Bachi, 1977; Friedlander and Goldscheider, 1979; Schmelz, 1981).

Nearly all of these efforts significantly shared two commonalties:

Un. population change reflects the variable levels of two leading determinants: fertility and international migration;

Deux. differential growth of various ethnoreligious sectors tends to generate significant changes in population size and composition, which in turn have far reaching political implications for the present and future prospects of the region.

Rather than reviewing the amount of success of past analysts in correctly predicting future population trends, it is interesting to note some of the typical analytic foci of these past efforts. In relation to migration, its crucial role in generating long term consequences for population growth was almost universally realized, and quite certainly led the British authorities to introduce stringent limitations on Jewish immigration during the Mandate's last years. Most population scenarios focused on fixed amounts of immigration, ranging from nil to several tens of thousands a year. This reflected very different opinions about the potential and resilience of Jewish migration, from very low to moderately high - the emphasis being on migration momentum as such rather that on a detailed consideration of migration determinants. There was nearly no attempt to project international migration as powerfully fluctuating in response to the variable intensity of determinants in the countries of origin and of destination - as indeed powerfully demonstrated by the Jewish experience over the past 120 years. One such attempt (Muhsam, 1938) ended up by predicting the shift of a Jewish instead of an Arab majority among

Palestine's total population before 1960, which is what actually happened. Another element virtually ignored in past population projections was large-scale emigration, which as noted crucially contributed to the post-1948 Jewish-Arab majority shift.

With regard to fertility assumptions, the two main challenges concerned predicting correctly the main course of evolution of fertility levels, and the patterns of convergence or divergence between different subpopulations. Assumptions about moderate change generally better complied with reality than assumptions of rapid change. The predominant assumption of eventual convergence of Muslims to the lower levels of Jewish fertility did not occur, resulting in significant underestimates of that subpopulation in most projections. Nor did high Muslim fertility levels remain unchanged - another typical assumption in past population projections. Fertility of different Jewish immigrant groups converged more rapidly than was often assumed, while the contrary occurred to fertility levels of Palestinian Arabs in the state of Israel versus the West Bank and Gaza.

Overall, considering the availability of data and techniques in the past, experiences with earlier attempts to project Palestine's population provide a wealth of not entirely superseded insights. The more interesting attempts were those that carefully considered population trends prevailing among the Jewish diaspora as a predicting factor in future demographic changes in Palestine/Israel, and appropriately considered age composition as a crucial intervening factor in population movements. What demographers consistently could not and did not achieve was to predict macroscopic political events, such as World War II, the 1948 Arab-Israeli war, or the dissolution of the USSR. The demographic consequences of these events were of greatest momentum for the population equation in the Middle East. This clearly points to the volatility of sociodemographic processes in unstable political environments - such as in Israel/Palestine - and their dependency on a much broader range of geopolitical and cultural factors than in the conventional experience of other populations.

Contemporary population projections

Contemporary attempts to project the population of Israel and Palestine were routinely carried out by international public agencies, primarily the United Nations (2001) but also the Population Reference Bureau (2001), by the central statistical agencies of Israel (Central Bureau of Statistics, 2001) and Palestine (Palestinian Central Bureau of Statistics, 1999), or by independent investigators (Courbage, 1999; Fargues, 2000b; DellaPergola, Rebhun, Tolts, 2000). Besides differences in defining the territorial units for analysis and the time framework of their projections, reflecting the various analysts' different political approaches, the main assumptions adopted generally preferred a continuation of current trends. Higher and lower scenarios suggested reflected varying assumptions about the likelihood of fertility decline in the Palestinian Territories, and about future immigration. The U.N. Population Division's approach to test scenarios converging at replacement fertility raises some perplexity in the Israel/Palestine context. One of the reasons is that, as noted above, the relationship between education and population growth rates can be rather tricky in Israel/Palestine. This may impinge on Goujon (1997) attempt to explore the effects of prospective changes in educational attainment on population trends, in the framework of IIASA emphasis on multi-state population projections.

However, it is not a "war of data" that emerges from these recent population projection efforts. Results obtained by different authors consistently point to rapid population growth.

Main results

We can now proceed to present the results of our own analysis. Tables 8-13 and Figures 3-7 present selected findings from a new set of projections over the period 2000-2050. The following data emphasize the possible implications of variation in current fertility levels. The role of international migration is ignored or assumed to operate at moderate and declining levels. As noted above, fertility assumptions tend to create a range between *minimum* and *maximum* likely scenarios. The baseline for all projections is end-1995 data and estimates. The figures for Israel are based on Central Bureau of Statistics projections until 2020. All figures for

the Palestinian Territories as well as the 2050 projections derive from my own work.¹⁶

The category "non-Jewish fringe" in the tables represents non-Jews who are mostly part of immigrant Jewish nuclear families from the Former Soviet Union, and therefore socially assimilated within the Jewish section of Israeli society. Together, Jews and the associated "fringe" form an "Enlarged Jewish Population". Nearly all other non-Jewish citizens in Israel, whether Muslims or Christians, are Palestinian Arabs from the point of their national cultural identity. The Druze minority is also included in this group in the data presented here. All the inhabitants of the West Bank and Gaza are Palestinian Arabs, with the exception of the Jewish residents of these areas who are included in Israel's Jewish population data. The data are presented in a way that allows for modular reconstruction and comparisons of the main ethnoreligious (Jews vs. Palestinians) or territorial (Israel vs. Palestinian Territories) aggregates.¹⁷

TABLE 8. POPULATION OF ISRAEL AND PALESTINE, BY MAJOR ETHNORELIGIOUS ORIGINS AND TERRITORIAL DIVISIONS, 2000-2050 (VARIOUS PROJECTIONS, THOUSANDS)

Year and	Jews	Non-	Total	Israel	Total	West	Gaza	Total	Total	Grand
projection			enlarged	Arabs	Israel	Bank		Palestinian	Palestinians	Total
		fringe	Jewish					Territories		
	(a)	(b)	(c)=(a)+(b)	(d)	$(\mathbf{e}) = (\mathbf{c}) + (\mathbf{d})$	(f)	(g)	$\mathbf{(h)}\mathbf{=}\mathbf{(f)}\mathbf{+}\mathbf{(g)}$	(i)=(d)+(h)	$(\mathbf{j})=(\mathbf{e})+(\mathbf{h})$
										$(\mathbf{j}) = (\mathbf{c}) + (\mathbf{i})$
2000										
High	5,000	201	5,201	1,185	6,386	1,878	1,147	3,024	4,209	9,410
Medium	4,969	199	5,168	1,178	6,346	1,845	1,128	2,973	4,151	9,319
Low	4,938	197	5,135	1,171	6,306	1,703	993	2,696	3,867	9,002
2010										
High	5,784	281	6,065	1,574	7,639	2,676	1,776	4,452	6,026	12,091
Medium	5,689	291	5,980	1,555	7,535	2,518	1,645	4,163	5,718	11,698
Low	5,574	236	5,810	1,535	7,346	2,049	1,191	3,240	4,775	10,586
2020										
High	6,521	381	6,902	2,092	8,994	3,789	2,782	6,570	8,662	15,564
Medium	6,368	329	6,697	1,976	8,673	3,338	2,342	5,680	7,656	14,353
Low	6,057	239	6,296	1,855	8,151	2,492	1,483	3,975	5,830	12,126
2050										
High	9,741	650	10,391	4,419	14,810	10826	10829	21,655	26,074	36,465
Medium	8,230	550	8,780	3,121	11,901	6,414	5,146	11,560	14,681	23,461
Low	6,873	450	7,323	2,065	9,388	3,752	2,267	6,019	8,084	15,407

Source: S. DellaPergola, The Hebrew University of Jerusalem.

Table 8 shows different population projection scenarios for the different Jewish and Arab sub-populations in Israel/Palestine between 2000 and 2050. The 2000 medium figure includes about 9.3 million people, thereof 6.3 million in Israel (including East Jerusalem, the Golan heights and the Israeli inhabitants in the West Bank and Gaza area) and about 3 million in the Palestinian territories. By 2020, the total population would range between 12.1 and 15.6 million, with a medium projection of 14.4 million. The Jewish population (enlarged to include the non-Jewish "fringe") would range between 6.3 and 6.9 million, as part of a state of Israel's total population of 8.2-9.0 million. The Palestinian Territories would reach a population ranging between 4.0 and 6.6 million, and with the addition of Israel's Arabs, the total Palestinian population would range between 5.8 and 8.7 million.

¹⁷The projections do not include the temporary resident foreign workers, whose number was estimated at about 250,000 in 2000.

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¹⁶I take full responsibility for all the data presented hereafter.

¹⁸ Our independently obtained medium projection results closely match the medium projections of Palestinian Central Bureau of Statistics (1999).

By 2050, according to the same assumptions, the following ranges would obtain: for the enlarged Jewish population, 7.3 to 10.4 million, with a medium value of 8.8 million; for the state of Israel's total population, including Jews and Arabs, 9.4 to 14.8 million, with a medium value of 11.9 million; for the total of the Palestinian Territories, 6.0 to 21.7 millions (half in the West Bank and half in the Gaza area), with a medium value of 11.6 millions; for the total Palestinian population in Israel and in the Territories, 8.1 to 26.1 million, with a medium value of 14.7 million. The total population of Israel/Palestine would thus range between 15.4 and 36.5 million, with a medium value of 23.5 million.

Some of these figures may admittedly defy imagination - especially the higher scenarios for 2050. The high and the low scenarios admittedly assume quite extreme assumptions of indefinite continuation vs. instant reduction of current fertility levels, *both* of which may seem quite unlikely to the present observer. Medium scenarios, on the other hand, assume a blend of demographic transformations that better comply with the demographic experience of the last fifty years in Israel/Palestine. The question still awaiting for an answer is why and under what conditions would a significant departure from the current trends occur.

We now turn to examine in greater detail some of the main findings of these projections.

Territorial distribution

A first issue quite naturally concerns implications of population growth for population densities, the environment and natural resources. One interesting paradox in this respect is that the question of what might be Palestine's maximum "economic capability" or "carrying capacity" constituted one of the main themes in the political debate during the British Mandate (Palestine Royal Commission, 1937; Friedlander and Goldscheider, 1979). Political leaders and experts during the 1930s looked with diffidence at future population growth and suggested high scenarios typically not much above 2 millions. The current total population of 9.3 millions for the same area clearly indicates how changing technical conditions but also very different political assumptions could drastically overturn the opinions manifested 70 years earlier. By the same token, one may ask today the same questions about Palestine's maximum possible population. It obviously stands to reason that a maximum should be determined especially in consideration of the area's scarcity of essential resources such as drinkable water. However, again, a final answer might heavily depend on the nature of future technological development.

In Table 9, the population figures presented in Table 8 are translated into current and expected population densities per km². Figure 3 portrays the expected development of population densities in Israel/Palestine on the background of selected examples of contemporary countries and large metropolitan urban areas.

In 2000 Israel's population density stood at just below 300 per km² - a comparatively high level also met in several Western European countries including Turkey's European part. The countrywide average density, though, may be misleading given the very unequal patterns of population distribution over the Israeli territory. In 1999 densities indeed ranged between a maximum of 6,887 per km² in the Tel Aviv District, wholly occupied by the central part of the Greater Tel Aviv metropolitan area, and 37 per km² in the Be'er Sheva Sub-District, including large extensions of arid and desert land and representing about 60% of the Israel's total territory. Israel population density besides the Be'er Sheva Sub-District was 636 per km².

In the Palestinian Territories, the situation is clearly different in the West Bank, with an initial density matching the Israeli countrywide average, and in the Gaza area, with a density of about 3,000 people per km². Significantly higher population densities were recently observed in city-states such as Hong Kong and Singapore, but the level of socioeconomic development there was significantly different than in Gaza.

In prospective, expected population densities in Israel and in the West Bank while significantly growing still remain within the known range of contemporary societies. The prospects are different in Gaza where the medium and high scenarios lead to densities only comparable with the densest of contemporary large urban areas. In other words, it is not the outcome that is unacceptably high, but rather the clear unbalance between population size and

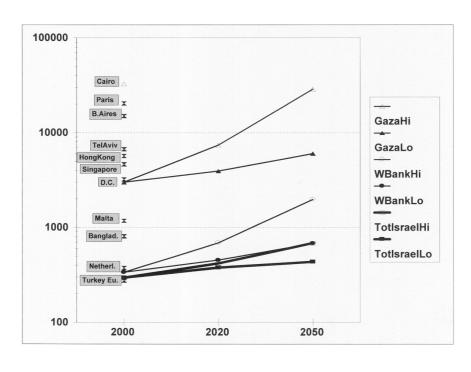
the available urban infrastructure. A population density like the one found in Paris - about 20,000 per km² - is conceivable in the context of a leading capital city founded on a highly developed urban, socioeconomic and technological infrastructure. These conditions obviously do not apply to Gaza at present or in the near future. The scenario of another Cairo extending over Gaza's 378 km² sounds more plausible - and a matter for serious reflection considering the excruciating social problems and high human costs involved.

TABLE 9. POPULATION DENSITY PER KM², ISRAEL AND PALESTINE, 2000-2050 (VARIOUS PROJECTIONS)

Year and projection	Total Israel	West Bank	Gaza	Total Palestinian Territories	Grand Total
2000					
High	295	341	3,034	514	341
Medium	293	335	2,984	505	338
Low	291	309	2,627	458	327
2010					
High	352	486	4,698	757	439
Medium	348	457	4,352	708	425
Low	339	372	3,151	551	384
2020					
High	415	688	7,360	1,117	565
Medium	400	606	6,196	965	521
Low	376	453	3,923	676	440
2050					
High	683	1,966	28,648	3,680	1,323
Medium	549	1,165	13,614	1,965	851
Low	433	681	5,997	1,023	559

Source: S. DellaPergola, The Hebrew University of Jerusalem

FIGURE 3. POPULATION DENSITY PER KM², ISRAEL/PALESTINE HIGH-LOW PROJECTIONS, 2000-2050, AND SELECTED COUNTRIES AND URBAN AREAS, 2000



Ethnoreligious population composition

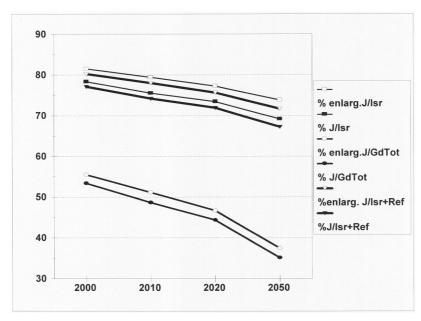
A second issue of major import concerns the ethnoreligious population balance in Israel and Palestine. Table 10 and Figure 4 present the expected percentage of Jews out of total population according to different projection scenarios, different territorial divisions - the state of Israel alone or the whole of Israel/Palestine, and different definitions of the Jewish population. The latter respectively include or exclude the non-Jewish members of Jewish households. In 2000, Jews represented 78% of Israel's total population. Adding the non-Jewish "fringe", the enlarged Jewish population constituted 81% of the total.

TABLE 10. PERCENT OF JEWS AMONG ISRAEL/PALESTINE TOTAL POPULATION, 2000-2050 (VARIOUS PROJECTIONS)

Year and projection	State	of Israel	Gran	d total	With 100,000 refugees, State of Israel	
projection	% Jewish	% enlarg. J.	% Jewish	% enlarg. J.	% Jewish	% enlarg. J.
2000						
High	78.3	81.4	53.1	55.3	77.1	80.2
Medium	78.3	81.4	53.3	55.5	77.1	80.2
Low	78.3	81.4	54.9	57.0	77.1	80.2
2010						
High	75.7	79.4	47.8	50.2	74.3	77.9
Medium	75.5	79.4	48.6	51.1	74.1	77.9
Low	75.9	79.1	52.7	54.9	74.6	77.8
2020						
High	72.5	76.7	41.9	44.3	70.9	75.0
Medium	73.4	77.2	44.4	46.7	71.9	75.6
Low	74.3	77.2	50.0	51.9	73.0	75.8
2050						
High	65.8	70.2	26.7	28.5	63.1	67.3
Medium	69.2	73.8	35.1	37.4	67.2	71.6
Low	73.2	78.0	44.6	47.5	71.6	76.3

Source: S. DellaPergola, The Hebrew University of Jerusalem

FIGURE 4. PERCENT OF JEWS AMONG ISRAEL/PALESTINE TOTAL POPULATION, 2000-2050 (VARIOUS PROJECTIONS)



Reflecting the much faster rhythm of growth of the Arab vs. the Jewish population, the projections indicate a significant change in the respective weight among Israel/Palestine's total population. Regarding the state of Israel, according to the medium scenarios by 2020 the percent Jewish would diminish to 73% and the percent of the enlarged Jewish population would diminish to 77%. By 2050, the Jewish share would further diminish to 69% and 74% respectively. Because of the leading role of fertility, namely Arab fertility, in our projections, higher scenarios produce lower percentages of Jews, and lower scenarios produce higher percentages.

Within Israel's territorial framework (basically without the territories occupied in 1967), a Jewish majority appears to be firmly established at least until the mid-21st century. However, an emerging Israeli Arab minority in the range of 30% calls to mind international comparisons such as Cyprus or more recently, Macedonia. In the former case, a 70-30% ethnoreligious Greek-Turkish balance ended up with enhanced conflict and eventual territorial and political split; in the latter case, the Macedonian-Albanian struggle is still in progress.

Looking now at the grand territorial total of Israel plus the Palestinian Territories, in 2000 a scant Jewish majority prevailed of 53% to 55% according to the mere or enlarged definition of the Jewish population. According the medium projections such majority will already be gone before 2010 or very soon after (according to Jewish population definitions). By 2020 Jews would constitute 44-47% of the total population of Palestine, and by 2050 their share might further diminish to 35-37%. The latter percentages closely resemble the Jewish-Arab population split of the early 1930s during the British Mandate.

A further scenario in Table 10 assumes that, possibly in the framework of a peace agreement, the state of Israel would agree to readmit a symbolic contingent of 100,000 Palestinian refugees on its territory. For the sake of simplicity we have assumed here that this group would have an age distribution and would display demographic behaviors similar to the weighted average of total Palestinians in Israel and in the Palestinian Territories. That initial contingent would clearly increase in absolute numbers over time. However, according to the assumptions of our projections, their impact on the ethnoreligious equilibrium would not be crucial. It would indeed manifest itself in an absolute decrease of about 1-2% in the percent Jewish out of Israel's total population. An older initial contingent of repatriated Palestinian refugees would have a lesser impact on population trends. Evidently, much larger contingents of returning Palestinian refugees, not implied in our projections, would exert a much more dramatic impact on the ethnoreligious composition of population, as well as on its size.

Age composition

Further analysis of the projected results by major age groups sharpens the findings and their implications. Age composition obviously constitutes not only one of the crucial results of demographic change but is also known to operate as a critical mediating variable in population processes. In this respect, another of the several paradoxes in the Israeli/Palestinian demographic equation ties age composition with political memory. As noted above, one of the decisive events that created the current geopolitical context in the Middle East was the June 1967 war and the subsequent Israeli occupation of the Palestinian Territories. A simple calculation of the percent of current population that lived in Israel or Palestine at that date reveals that it barely reaches 25%. This reflects the size of contemporary Jewish and Palestinian population cohorts born after 1967, as well as the volume of Jewish immigration after that date. In other words, over three out of four actors and spectators in the current conflict did not directly witness one of its most crucial developments and appear to enact roles they have learnt through mediating sources of information with intriguing consequences for an understanding of facts, their causes, and consequences.

Table 11 presents the current and expected population composition by age. Overall population distribution was significantly affected by past high or comparatively high fertility. Consequently, children and young adults tended to outnumber older adults and the elderly, whose share among total population was comparatively quite low. Among Jews, past large-scale

immigration determined peculiar concentrations of younger adults at the time of major migration waves. These tended to move throughout the age ladder determining a unique configuration of sudden changes in the size of successive birth cohorts. The future rhythm of development of specific age-groups will continue to reflect these peculiarities and, within each 10-year time span, will tend to be quite unequal for different age-groups. Table 11, being confined to the medium projections, assumes overall stability or moderation in fertility levels, and therefore foreshadows a gradual is slow process of population aging.

TABLE 11. POPULATION OF ISRAEL AND PALESTINE, BY AGE, MAJOR ETHNORELIGIOUS ORIGINS AND TERRITORIAL DIVISIONS, 2000-2050 (MEDIUM PROJECTION, THOUSANDS)

Year and age	Jews	Non- Jewish fringe	Total enlarged Jewish	Israel Arabs	Total Israel	West Bank	Gaza		Total Palestinians	Grand Total
	(a)	(b)	(c)=(a)+(b)	(d)	(e)=(c)+(d)	(f)	(g)	(h)=(f)+(g)	(i)=(d)+(h)	(j)=(e)+(h) (j)=(c)+(i)
2000										
Total	4,969	199	5,168	1,178	6,346	1,845	1,128	2,973	4,151	9,319
0-14	1,297	52	1,349	482	1,831	799	564	1,363	1,845	3,194
15-24	840	39	879	233	1,112	386	216	602	835	1,714
25-44	1,297	67	1,364	310	1,674	425	228	653	963	2,327
45-64	949	38	987	117	1,104	166	87	253	370	1,357
65+	576	13	589	36	625	69	33	102	138	727
2010										
Total	5,689	291	5,980	1,555	7,535	2,518	1,645	4,163	5,718	11,698
0-14	1,421	68	1,489	603	2,092	1,038	771	1,809	2,412	3,901
15-24	858	42	900	297	1,197	498	344	842	1,139	2,039
25-44	1,555	97	1,652	404	2,056	641	352	993	1,397	3,049
45-64	1,213	63	1,276	193	1,469	251	127	378	571	1,847
65+	642	21	663	58	721	91	42	133	191	854
2020										
Total	6,368	329	6,697	1,976	8,673	3,338	2,342	5,680	7,656	14,353
0-14	1,521	72	1,593	682	2,275	1,298	1,042	2,340	3,022	4,615
15-24	939	44	983	386	1,369	643	470	1,113	1,499	2,482
25-44	1,710	93	1,803	518	2,321	873	553	1,426	1,944	3,747
45-64	1,303	84	1,387	298	1,685	402	214	616	914	2,301
65+	895	36	931	92	1,023	123	62	185	277	1,208
2050										
Total	8,230	550	8,780	3,121	11,901	6,414	5,146	11,560	14,681	23,461
0-14	1,819	120	1,939	852	2,791	1,877	1,639	3,516	4,368	6,307
15-24	1,177	72	1,249	528	1,777	1,141	995	2,136	2,664	3,913
25-44	1,909	132	2,041	849	2,890	1,788	1,468	3,256	4,105	6,146
45-64	1,720	119	1,839	574	2,413	1,085	770	1,855	2,429	4,268
65+	1,605	107	1,712	318	2,030	524	274	798	1,116	2,828

Source: S. DellaPergola, The Hebrew University of Jerusalem.

Table 12 shows percentages of Jews (by the mere and extended definitions) among the total population of different age groups within the state of Israel and in the grand total of Israel plus the Palestinian Territories. Reflecting the higher fertility of Palestinians, Jewish share of total population is systematically smaller at the younger than at the older end of the age distribution. In turn, percentages of Jews among the younger age groups at one date tend to anticipate their percentage among the total population at a later date. In 2000, Jews represented 71-74% of Israel's children aged 0-14, and 92-94% of the elderly aged 65 and over. Relative to the total of Israel and the Palestinian Territories, Jews represented 41-42% of children, and 79-81% of the elderly. By 2050, according to this medium projection, Jews would constitute 65-69% of the 0-14 age group, and 79-84% of the 65+ age-group in Israel. The respective percentages regarding the grand total population would be 29-31% at 0-14, and 57-61% at 65+.

The latter would be the last remnant of a Jewish majority among any age group within the grand total population of Israel plus the Palestinian Territories.

Age compositional changes, in both absolute and relative terms, bear significant effects for the different types of services and public interventions functionally related to different lifecycle stages (see below). One particular aspect immediately relevant to an assessment of the Israeli-Palestinian conflict concerns the absolute size of the cohorts of young adults that currently confront each other, either as part of the Palestinian upraise or as members of Israel's armed forces. It is perhaps surprising to note that in 2000 the number of Jews and Palestinians aged 15-24 was quite similar. Both ethnoreligious groups can dispose of 800-900,000 young men and women of that age (whether or not actively involved). This observation does not imply an equivalence of forces and means between the two contending groups. Demography nevertheless provides a visual angle that may result of some interest in the assessment of the current confrontation - if not at the strategic - at least at the tactical level.

TABLE 12. PERCENT OF JEWS AMONG TOTAL POPULATION, BY AGE GROUPS (MEDIUM PROJECTION)

Year and age		of Israel		nd total
	% Jewish	% enlarged J.	% Jewish	% enlarged J.
2000				
Total	78.3	81.4	53.3	55.5
0-14	70.8	73.7	40.6	42.2
15-24	75.5	79.0	49.0	51.3
25-44	77.5	81.5	55.7	58.6
45-64	86.0	89.4	69.9	72.7
65+	92.2	94.2	79.2	81.0
2010				
Total	75.5	79.4	48.6	51.1
0-14	67.9	71.2	36.4	38.2
15-24	71.7	75.2	42.1	44.1
25-44	75.6	80.4	51.0	54.2
45-64	82.6	86.9	65.7	69.1
65+	89.0	92.0	75.2	77.6
2020				
Total	73.4	77.2	44.4	46.7
0-14	66.9	70.0	33.0	34.5
15-24	68.6	71.8	37.8	39.6
25-44	73.7	77.7	45.6	48.1
45-64	77.3	82.3	56.6	60.3
65+	87.5	91.0	74.1	77.1
2050				
Total	69.2	73.8	35.1	37.4
0-14	65.2	69.5	28.8	30.7
15-24	66.2	70.3	30.1	31.9
25-44	66.1	70.6	31.1	33.2
45-64	71.3	76.2	40.3	43.1
65+	79.1	84.3	56.8	60.5

Source: S. DellaPergola, The Hebrew University of Jerusalem

Socioeconomic effects

A final main issue stemming from expected population growth and changing age composition relates to the distribution of population increments by age. Changing cohort sizes imply public and private investments focused on each functional age group: the student population and educational facilities; the labor force, employment and socioeconomic development; the retired and the third age generally, and related social services. The rhythm of variation over time within specific age groups is significantly higher and less regular than

among population on the whole. Figures 5 and 6 provide an illustration of some of the issues involved by showing prospective changes in the size of relevant age groups in the shorter term of the next ten years (2000-2010).

In the grand total population aggregate of the state of Israel plus the Palestinian Territories, the two fastest growing sections of population will be the 25-44 age group, typically demanding for employment, closely followed by the 0-14 age group, typically demanding for education. An increase of about 700,000 (an average of 70,000 a year) is expected for each age group. Over 60% of the necessary investments in educational facilities and nearly one half of the new openings in the labor market will be needed in the Palestinian Territories. On the other hand, close to 60% of the increase in the older segment of the labor force aged 45-64, and among the elderly aged 65+ are expected to occur among the Jewish population of Israel. The Palestinian Territories are also expected to absorb nearly 75% of the total growth in the number of younger adults aged 15-24 whose critical role in political and security developments we already noted above. Within the latter age group, the expected growth among Israeli Arabs is three times as many than among Israeli Jews.

FIGURE 5. PROJECTED POPULATION INCREMENTS IN ISRAEL/PALESTINE, BY AGE, 2000-2010 (MEDIUM PROJECTION)

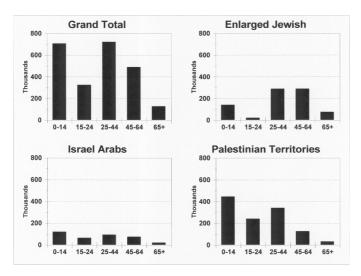
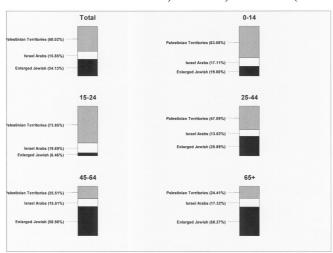


FIGURE 6. ETHNIC AND TERRITORIAL COMPOSITION OF PROJECTED POPULATION INCREMENTS IN ISRAEL/PALESTINE, BY AGE, 2000-2010 (MEDIUM PROJECTION)

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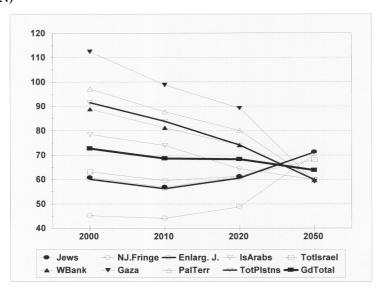


A synthetic measure of the age distribution may provide a final outlook on expected trends in the allocation of socioeconomic burdens across the different ethnoreligious and territorial subpopulations considered here. Table 13 and Figure 7 illustrate the possible development of dependency ratios in the longer run according to the medium projection. In 2000 the Palestinian Territories featured a dependency ratio of 97 (88 in the West Bank and 112 in Gaza) - one of the world's highest (United Nations, 2001), mostly as a result of the already noted combination of very high fertility and quite low infant mortality. Israel's dependency ratio was 63 (60 for the enlarged Jewish population and 79 for Israeli Arabs). High dependency ratios - even if heavily skewed reflecting high percentages of children in the population - obviously underlie a general condition of socioeconomic underdevelopment. According to the medium projection, assuming stable or declining fertility rates, a process of gradual convergence might be expected between the very high dependency ratios of Palestinians and the lower ones of Jews. In 2050 the situation might even be reversed, with ratios of 71 for the enlarged Jewish population and 60 for the total of Palestinians, reflecting a much higher proportion of elderly among the Jewish than among the Palestinian population.

TABLE 13. DEPENDENCY RATIOS AMONG THE POPULATION OF ISRAEL/PALESTINE, BY MAJOR ETHNORELIGIOUS ORIGINS AND TERRITORIAL DIVISIONS, 2000-2050 (MEDIUM PROJECTION)

Year	Jews	Non- Jewish fringe	Total Enlarged Jewish	Israel Arabs	Total Israel	West Bank	Gaza	Total Palestinian Territories	Total Palestinians	Grand Total
	(a)	(b)	(c)=(a)+(b)	(d)	(e)=(c)+(d)	(f)	(g)	$(\mathbf{h}) = (\mathbf{f}) + (\mathbf{g})$	(i)=(d)+(h)	$(\mathbf{j})=(\mathbf{e})+(\mathbf{h})$
										(j)=(c)+(i)
2000	60.7	45.1	60.0	78.5	63.1	88.8	112.4	97.1	91.5	72.6
2010	56.9	44.1	56.2	73.9	59.6	81.2	98.8	87.8	83.8	68.6
2020	61.1	48.9	60.5	64.4	61.4	74.1	89.2	80.0	75.7	68.3
2050	71.2	70.3	71.2	60.0	68.1	59.8	59.2	59.5	59.6	63.8

FIGURE 7. DEPENDENCY RATIOS AMONG DIFFERENT ETHNORELIGIOUS GROUPS AND TERRITORIAL DIVISIONS IN ISRAEL/PALESTINE, 2000-2050 (MEDIUM PROJECTION)



¹⁹In spite of its shortcomings, a conventional dependency ratio is computed here as the ratio of the sum of age groups 0-14 and 65+ divided by age group 15-64.

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Higher fertility levels, as hypothesized in the high projections would obviously produce much higher and problematic dependency ratios, as the main difference between projections - at least in the medium term - obtains in the number of children born and in their percent of the total population.

Discussion: Painful Transitions

General policy assumptions

Systematic appraisal of demographic trends is essential in a reflection about causes and issues in the Israeli-Palestinian conflict, but also about societal changes that might lead to its peaceful solution. Ideally, observation of demographic facts should have an impact on the elaboration of policy programs aimed at promoting transition to a strategy for peace.

The Israeli-Palestinian conflict heavily draws on ethnoreligious differences. Ethnicity can heighten the importance of numbers in the conduct of conflict (Choukri, 1983). Five basic approaches deserve attention regarding the conflict's fundamental essence and its possible solution:

- 1. <u>Historical rights</u>. Each party claims legitimate and exclusive rights over the whole contested territory from time immemorial, or at least since the 20th century. Each party can bring conspicuous evidence supporting the argument of having been the earlier, more permanent, or more relevant settler over the disputed land. These claims intimately relate to the primordial roots of each party's historical experience and religiocultural identity. Since ancient rights of precedence cannot be ranked, conflict will never be solved by the sole use of historical argumentation.
- 2. <u>Prevalence of force</u>. Each party may try to overcome the other through the use of force, military or otherwise, with or without the help of external powers. Over the last several decades, the Israeli side more often than not prevailed over its opponents in strictly military terms. However, while one party may claim victory or prevalence over its rival, the other party may never acknowledge defeat or ever give up. Conflict cannot be permanently solved by the sole use of force.
- 3. <u>Colonization by third party</u>. Political and cultural hegemony may be imposed from the outside, substituting the now prevailing Jewish-Israeli and Arab-Muslim-Palestinian frames of reference and thus making the Israeli-Palestinian conflict obsolete or irrelevant. One example would be conquest or colonization by a third power. The main such experience during the 20th century the British Mandate over Palestine between 1922 to 1948 clearly points to the failure of such third party rule or interference to solve the conflict.
- 4. <u>End of identities</u>. Several scenarios may be elaborated based on one or both parties giving up on their own unique religious, ethnic and cultural identities. Hypothetical examples would include ethnoreligious merger through frequent intermarriage; or one particular social class establishing full hegemony overcoming ethnic differences; or local or imported cultural influences instating an entirely new societal paradigm. Considering the recent revival in the societal role of ethnoreligious identifications globally and particularly in the Middle East and the prevailing patterns of ethnoreligious segregation, these scenarios for conflict resolution appear to be most unlikely, at least in the short run.
- 5. <u>Compromise</u>. Compromise may be reached among the contending Jewish and Arab parties by acknowledging a legitimate contemporaneous presence of the other party on the contested land of Palestine. Such compromise may be achieved either (a) through territorial partition and the creation there of two separate sovereign frameworks; or (b) through functional partition within one joint sovereign political framework inclusive of both parties. The obvious precondition for compromise is an explicit decision to put an end to conflict and a formal acceptance of the main solution modalities by both relevant parties.

Assuming that the preferred line of thought should aim at the conflict's solution rather than at its endless perpetuation - an assumption that under present circumstances cannot be universally taken for granted - of the two mentioned alternatives for compromise the first appears to be the more realistic. Indeed, transition from conflict to fully integrated cooperation

and division of labor would be far more complex and less likely than mere partition that might be followed later by some coordination between the parties.

Our basic assumption is that ethnic and religious identities are in the Middle East to stay. Beyond recent scholarly critiques of the nature of nationhood, nationalism and national states (see e.g. Anderson, 1991), ethnoreligious identities in the Israeli-Palestinian case are rooted in a powerful complex of historical and contemporary factors that cannot be reasonably neutralized in the foreseeable future. Even if these specific identities do include a certain amount of imaginary elements, their cumulated strength in the light of real experiences - namely those conflict-related - is such that it amounts to cogent empirical reality for the vast majority of concerned populations. The argument may also be put forward that national-religious identities constitute a useful tool in the search for peace insofar as they translate into a dynamic and positive popular force in the building of a new society, and provided their more extremist and destructive fringes can be kept under control.

In the ethnocentric experience of most European nation states the prevailing societal model clearly implies domination of one ethnoreligious group over others. Such pattern generated either endless internal ethnic conflicts, or the suppression of cultural minorities. The more recent historical experience - particularly since the end of the Soviet block at the beginning of the 1990s - clearly exposed the crisis and sudden or gradual obsolescence of the model of one ethnoreligious group dominating over others through occupation and/or through applying majority rule to standard legislation. The alternative option of a truly multicultural society has so far represented more a declarative model than political reality in the international community of nations.

One main implication of the failure of these different societal models or of their non-applicability in the Israel-Palestine context is that political stability and equity require a symmetric situation among the parties at stake. This cannot happen without Palestine reaching the status of an equal partner, i.e. long overdue statehood.

That the state of Israel should provide a solution to the historical problems of the Jewish people has constituted one of the main tenets of Zionism - the Jews' national liberation movement - hence Israel's very *raison d'être*. A natural correlate of these assumptions is that the state of Israel should be politically and culturally configured so to express primarily the multiform interests and values of a Jewish constituency. At the same time, since its 1948 Declaration of Independence Israel has stated its commitment to a democratic regime ensuring full equality to its citizens regardless of religion and ethnic origin, among other things. While Israel's Judiciary, Ombudsman, and other agencies of law enforcement established tested standards of fairness, the inherent conflict of interests between being a *Jewish* and a *democratic* state unavoidably entangles the question of ethnoreligious population composition.

By converse, the aspiration of Palestinians to sovereign nationhood - regardless of the assumptions and tools by which it came into being - has achieved irreversible momentum. The standard assumption is that the primary goal of an independent Palestine will be to satisfy the needs of the Palestinians' liberation movement to establish a full-scale national infrastructure and to gain international recognition. Concerns about the state's democratic framework, pluralism, or the rights and equality of religious and ethnic minorities, while not neglected, have not constituted the main theme in recent public discourse.

The Israeli-Jewish interest to maintain a society founded on recognizable Jewish cultural patterns, hence based on a permanent Jewish majority, implies giving up on claims over the whole territory of Palestine and withdrawal to boundaries essentially similar to those of 1967. To contribute to the creation of a stable regional political system, parity between an Israeli and a Palestinian state should be founded on a clear ethnic, religious and cultural definition of each. The same issue is among the more salient determinants of ethnic unrest among an Arab minority in Israel that feels it has been discriminated by the Jewish majority. A similar, if not worst, situation would probably emerge in a Palestinian state hosting a substantial minority of Jewish inhabitants. Nor does the formula sound plausible of partition between an Israeli multi-ethnic and multi-cultural state alongside a mono-ethnic (Arab) mono-religious

(Muslim) Palestinian state.

Under the present circumstances, the solution of maximum possible ethnoreligious division and diversity between the contending political societies seems the more likely to optimize benefits and minimize liabilities. The fundamental objective to preserve a clearly distinguished and recognizable ethnocultural personality has an obvious political price attached for both parties concerned. The plausible terms of trade for a feasible compromise are the pre-1967 boundaries. Some territorial exchanges might be negotiated between Israel and the future Palestinian state. Minor portions of the Palestinian Territories now hosting the denser urban concentrations of Jews next to Jerusalem and to Greater Tel Aviv might be exchanged for some of the areas within the current pre-1967 Israeli boundaries now hosting a predominantly Arab population. All the sparser and smaller Israeli settlements in the Palestinian Territories, not immediately relayed physically to the state of Israel, should be withdrawn and their inhabitants transferred to Israel. The sparser Arab settlements in Israel's northern and southern areas would remain within the framework of the state of Israel. All interested Israeli Arabs would be granted Palestinian citizenship with provisions granting their cultural autonomy in Israel and political rights in Palestine. Those uninterested would be fully submitted to Israeli rights and duties (including military service from which they are now exempt).

These exchanges of *land, population, and civil rights for peace* would implement a well-known model for the solution of international conflicts with an ethnoreligious component.²⁰ In the present case, though, only relatively few - nearly all of them Jewish settlers of the Palestinian Territories - would have to relocate and the main changes would derive from redrawing of borders and shifts of citizenship and other related civil rights. As to the status of Jerusalem, a conventional solution would be partition with allocation of the Jewish sections to the Israeli state and of the Arab sections to the Palestinian state. A better solution - if only feasible - would be the creation of a Greater Jerusalem Authority with local autonomies for Jewish and Palestinian neighborhoods, and a joint Israeli-Palestinian Authority for the governance of the Holy sites, primarily Mount of Jewish Temple/Muslim Mosques, or even of Jerusalem's whole walled Old City.²¹

We illustrated above the powerful momentum of population trends in Israel/Palestine, and their explicit or at least implicit relevance for the future of the conflict. Several inescapable paradoxes stress again the intertwined sociodemographic relationship between Jews and Palestinians. From the Palestinian point of view, the establishment of the state of Israel, large-scale Jewish immigration, and large-scale Palestinian emigration may have constituted undue disruption of the natural social order. On the other hand, were it not for Israel and the health, fertility, education, employment, and non-emigration conditions it allowed, the Palestinian population would be conspicuously smaller, less healthy, less educated - and less focused in its own national identity. In the future, demography through differential population growth can turn into a most disruptive political force for the multiethnic societal complex of Israel/Palestine. Enhancing maximum ethnoreligious homogeneity within, and maximum diversity between, each of Palestine's future sovereign territorial entities - an *Arab state* and a *Jewish state* in the spirit of U.N. resolution 181 - would at least partially defuse the disrupting effect of prospective demographic trends.

We now turn to a very brief discussion of some environmental, socioeconomic, and

²⁰ E.g., since 1947 an estimated 16 to 17 million people crossed between India and Pakistan as a result of the partition of the subcontinent and the violence associated with it. In 1922-1923 some 1.2 million Greeks from Anatolia fled to Greece. About one million Turks were repatriated from the Balkans between

the two world wars. See Winer (1971).

²¹ For an Israeli perspective on the future of Jerusalem, see Herskovitz et al. (forthcoming). For a Palestinian perspective see al-Qaq (1997).

²² A full-scale higher education system was allowed in the West Bank and Gaza only after Israel's occupation in 1967.

²³ The Palestinian Territories currently have the highest rate of natual increase in the world. See Pison (2001).

demographic policy implications.

Environmental policies

The preceding section assumes some shared responsibility and agreed division of labor between Jews/Israelis and Arabs/Palestinians in the handling of human and other resources over Palestine's whole territory. Taking for granted these general political assumptions, several major policy implications of demographic scenarios follow.

A first concern relates to the consequences of rapid population growth for future population densities. The changing equilibrium between population and the physical environment touches on issues of common interest and requires strict coordination and agreed allocation of resources among the Israeli and the Palestinian parties. In particular, scarce resources like drinkable water, arable land, or even sand, call for urgent regulation to prevent that excessive or inefficient consumption will lead to scarcity and crisis. Similar problems exist with other types of resource, like air, that require constant monitoring to prevent degradation. Common initiatives are required to locate unexploited sources, or develop new renewable or non-renewable resources locally, or import them where feasible. Such crucially urgent initiatives require long-term planning and allocation of massive investments.

A further area of concern is the future of physical planning for residential uses and even more significantly for the development of adequate transportation and other types of infrastructure such as sewage in a highly and increasingly dense environment. A common Israeli/Palestinian approach to environmental resources urgently needs to be developed as one of the immediate consequences of the sustained pace of population growth. This is especially true in the case of large metropolitan areas such as Jerusalm, which in any future political scenario will continue to include substantial Jewish and Palestinian populations and economic infrastructures.

Socioeconomic policies

One most unfortunate aspect of the Israeli-Palestinian conflict is the focusing of public debate on a narrow range of mostly political and security-oriented issues, while ignoring other routine issues. The existence of a civil society behind and beyond war and peace has not received its adequate share of attention, resulting in a dearth of awareness, plans and tools to face future societal needs. Perhaps the most significant aspect of the population scenarios presented above is their implications for future manpower size and composition.

The huge socioeconomic investments needed in developing educational networks and employment opportunities cannot reasonably occur unless substantial budgetary resources are diverted from the current military and defense uses to civilian uses. A major problem in the socioeconomic structure of the Palestinian population is the dearth of a middle class whose role cannot be undervalued in leading economic development in a modernizing society. The problem is sharpened by the hiatus between a comparatively well educated Palestinian population and the limited occupational opportunities that exist at adequate professional level. A growing central administrative bureaucracy of Palestinians - whose lack is at least partly explained by the predominance of Israeli civil and military administrators in front of the populations concerned is presumably bound to develop once statehood is achieved. The sharp increase in younger Palestinian labor force projected for the 2000-2010 decade needs to be absorbed within an expanding economic and administrative system, or will otherwise put additional strain on existing political tensions. Failure of the Palestinian Authority to comply with primordial social needs such as education and employment will be easily exploited by other centers of power, e.g. in the form of the package of educational and other social services provided by the *Hamas* movement together with fundamentalist instruction.

In Israel, too, the question of economic absorption of a growing labor force cannot be severed from considering the interrelation between the economy, security and peace. As a modern market, strongly connected internationally, Israel's economic growth significantly depends on foreign investments - including tourism. As clearly demonstrated by the financial

and economic upturns and downturns of the 1990s and early 2000s, the international economic community is extremely sensitive to the longer term prospects for peace. Only an optimistic attitude fueled by advances in the political process toward peace will allow for renewal of the quick rhythm of economic growth that prevailed in Israel over most of the 1990s. Failure to develop the economy at a rhythm at least equal to that of sustained population growth will entail growing unemployment at the end of which one clearly detects the prospect of growing emigration - hence a further worsening of Israel's demographic standing on the whole of Palestine. Given the complementarity that, in spite of all, still exists between the Israeli and Palestinian economies, economic decline in Israel would necessarily produce negative consequences for Palestine. Moreover, in the light of projected demographic changes in Israel, large part of the necessary educational and manpower investments will have to go to the Israeli Arab sector - proportionally and even absolutely more than to the Jewish majority. The alternative is that Israeli society meets sharpened social unrest by those who feel they have been allocated far less than their just share.

The common vested interest of Israelis and Palestinians in sustained economic growth sufficient at least to absorb the expected population growth and the ensuing increasing demand for employment, should powerfully motivate the two sides in a quest for political solutions.

Demographic policies

Demographic trends reflect cultural and socioeconomic factors, as well as policy interventions. Some control over population size and distribution may be achieved, at least in theory, by manipulating the various operative variables responsible for demographic change as well as through administrative policy-making instruments. International migration balances and fertility levels are highly sensitive to life quality opportunities. Policies affecting employment, housing, physical environment, public services, and personal and collective security may have significant effects on in-migration and out-migration propensities. Fertility levels and differentials may also be expected to respond to these various intervening factors. Causal mechanisms linking life quality opportunities and demographic response affecting population size and composition are easily specified and understood, although no full control exists over the amount and direction of actual response. In principle, under the conditions of Israel/Palestine, a more attractive, peaceful and economically developed society will more likely attract more immigration and produce less emigration. In a social environment still densely imbued with traditional values, social stability and growth do not stand against the natural course of family values in promoting marriage and planned fertility.

Policy interventions more specifically tied to demographic trends have been the subject of much debating in Israel. Without entering here in a review of rationale and main arguments, the general stance taken here is that over the years policies have directly or indirectly effected population trends (DellaPergola, Cohen, 1992). Admittedly, whatever the goals, even the most successful policies can only expect to partial and mixed results in the demographic development of a heterogeneous population such as in Israel/Palestine. The major challenge lies in the relationship between demographic behaviors and the deeper roots of existing conflicts in the regional context. Defusing of political and cultural tensions may be the more fundamental prerequisite for a cooling down of demographic trends, particularly with regard to fertility levels.

Normalization involves, in the first place, mutual agreement on a regional peace framework covering the multiple facets of the Israeli-Palestinian conflict - and crucially, as already noted, a clear definition of national boundaries between Israel and the Palestinian Authority. A further policy goal lies in the harmonization between different antagonist religiocultural sectors within each of the two major Jewish and Arab parties. The main cleavage in the Jewish camp is between the *Haredi* minority²⁴ versus the moderately religious, traditionalist, or

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²⁴From the Hebrew *hared*, a term used to describe the more religious section of Jewish population estimated in Israel at about 7% around 2000.

secular majority of population. In the Palestinian camp, cleavages exist between the Muslim majority and the Christian minority, and between the different Christian denominations. The idea of new "social contract" has been advocated aimed at establishing more mutually respectful rules of political discourse between these different groups and their representatives. This would facilitate agreements or non-interference on topics of potential conflict.

The key goal of interventions concerning fertility should be a reduction in present intergroup and intra-group fertility gaps, rather than targeting a specific family size. In the analysis of family and fertility in both Jewish and Palestinian contexts, conventional socioeconomic explanations are not sufficient, while the impact of ideational determinants should be more carefully evaluated. An intriguing point is what the demographic effects of continuing security escalation could be, particularly concerning marriage - a significant intervening determinant of fertility levels. Among the Palestinians, economic crisis might lead to a reduction in the price of brides, hence to more feasible and younger marriages. Excessive deterioration of economic resources, though, might lead to the opposite effect of unfeasible and delayed marriages. Among the Jews, continuing crisis would more likely erode marriage propensities. Some downward effects of continuing insecurity on fertility may ensue, through the mediating influence of standard of living and marriage. Peace and prosperity, as already noted, might generate opposite effects.

What in any case is called for is a policy of fertility regulation, with an emphasis on the reproductive health of women. A similar process is clearly under way in the majority of Muslim countries, including some of the religiously more rigorous. Given the persistent propensity to medium size nuclear families in Israel/Palestine, social policies on both sides directly addressing fertility might choose to strongly incentivate the 3rd-4th child, with minor support for the 2nd and 5th, while clearly discouraging births of a higher order. Moreover, it is imperative that gaps still prevailing across different subpopulations in the role of women in society and community be closed. Equal access should be granted to Palestinian as to Israeli women to the same whole complex of human development, health, education, training and employment facilities and rights. In turn, the available package should be expanded allowing fuller participation of women of all groups in economic life.

Turning to international migration, the Jewish diaspora's demographic perspectives indicate a drying-up of the traditional emigration basins and a likely diminution in the volume of migration to Israel over the next decades. The alternative would require an unlikely scenario of significant political and economic disruption of major western societies that now host the largest Jewish communities worldwide. A slowdown is implicit in future Jewish population growth in Israel. In prospective some restrictive revision concerning the currently very liberal definition of people eligible for the Law of Return is plausible.

On the Palestinian side, current growth rates reflecting high fertility, if unchecked, lead to surrealist results - 11 million people in Gaza by 2050 by the high scenario - and in any case to the impossibility to absorb population growth in a viable economic framework. A spiral would follow of impoverishment and political instability within the future Palestinian state. The call to return and absorption an unlimited number of Palestinian refugees and their second and third generation descendants is a populist statement not grounded in a realistic vision of future population and social developments within the Palestinian state - whatever its final boundaries. Nor is the realization of such immigration postulate tenable within the state of Israel, as it would imply a drastic change in Israel's cultural profile that would be tantamount to termination of the Jewish state. The implausibility of planning on Israel society's suicide implies moderation in the Palestinian rhetoric of the right to return. At the same time, a plan of action aimed at solving the housing and other socioeconomic problems of Palestinian refugee camps cannot be further procrastinated.

On these latter issues, the international community would play a positive role, if it could educate to promote these policy transitions, provide serious financial support to make them possible, and refrain from the scholastic or punitive attitudes it has often expressed in the past.

Conclusion

Several of those outlined above are indeed painful transitions for the parties at stake. The much hoped for transition toward terminating conflict in Israel/Palestine has to deal - among many other things - with a nearly insurmountable circular argument. In order to defuse demographic mechanisms of excessive and unbalanced population growth, solution or at least toning down of the conflict would be a necessary prerequisite. On the other hand, defusing disruptive demographic mechanisms would help to solve the conflict. Given this background, attentive reading of demographic trends and perspectives may stimulate the elaboration of social policy solutions not necessarily in accordance with the declared political programs or predominant popular ideologies.

Even assuming that people who prefer reasonable and honorable solutions of compromise will predominate over the strategists of permanent tension and continuous struggle, clearly the two sides in the conflict have different goals and may prefer different strategies. Looking at the present in historical perspective, certain trends that appear with some regularity since the beginning of the Israeli-Arab conflict should teach us the limits of feasible change. In particular, the role of political, cultural, national and religious values as determinants of population trends cannot be undervalued. Not everything can be explained trough the logic of rational choice in the Middle East. Values, passions, contradictions, and paradoxes play a central role in the Israeli-Palestinian demographic equation. More broadly, as in any conflict, there often are two truths. The truth of Israeli repression of normal civil life and stringent limitations to free circulation of people and goods on the Palestinian Territories is counteracted by the truth of Palestinian terrorism against Israeli civilians. One cannot ignore these contradictions and their effects on the psychology of the actors in a broad assessment of the future of population and society.

The Israeli interest is to preserve itself as a democratic state, which it is, with a predominance of Jewish contents and values, to which it aspires. The Palestinian interest is to reach statehood as soon as possible, give expression to national aspirations, and start implementing there the people's long frustrated hope for normal civil life. Both interests imply clear territorial and political separation between the two entities. Population-wise, separate growth would at least reduce the impact of demography as a further element enhancing conflict. Coordination between the two parties, crucially needed to solve the most urgent environmental and socioeconomic problems stemming from rapid population growth, might develop over time if a sense of mutual respect, tolerance and multiculturalism can gradually emerge.

What is still unclear at the time of this writing is whether enough goodwill will emerge to make possible the transition out of conflict - hence the difference between disaster and vision for the intertwined populations and societies of Israel/Palestine.

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