OCCUPATIONAL CHANGE IN ISRAEL: BRINGING THE LABOR MARKET BACK IN

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Research on stratification in Israel has typically focused on individual determinants of career outcomes and has ignored constraints and opportunities evolving from the transformation of labor market structure. In the present study, data from labor force surveys conducted in the period following the Six Day War are utilized to examine the relationship between the changing composition of the workforce population, and shifts in the structure of occupational labor markets. The most salient feature of occupational shifts in recent years has been the upgrading of occupations. There has been a substantial increase in the size of higher status occupations and a relative decline in lower status ones. Jewish and Arab Israeli males benefited from this process and improved their mean occupational standing. In contrast, Arabs from the Administered Territories who worked in Israel were disproportionately channelled into lower status and contracting occupations. Jewish females tended to join expanding, higher status occupations and their mean occupational ranking rose far beyond what might be attributed to structural upgrading. The significance of these changes for differential opportunity are discussed in the last section of the paper.

INTRODUCTION

Research on stratification and inequality in Israel has progressed rapidly during the last decade. The construction of detailed scales of occupational rankings for Israeli society prompted a series of studies within the status attainment framework. The tradition springing from this paradigm has concentrated on socioeconomic achievement of individuals as determined by ascriptive characteristics, family background, and educational attainment. In the present article we will briefly review this research and highlight certain limitations and neglected issues. In so doing it will be argued that knowledge of labor market structure and its change over time is necessary for a better understanding of stratification processes. Subsequently, labor force data for the years 1969 and 1982 will be utilized in order to examine the relationship between changing population composition and shifts in the structure of occupational labor markets in the post-Six Day War era. This era was characterized by considerable social, economic

and demographic changes and is an especially appropriate setting for the analysis of status attaianment and labor market structure.

Studies carried out in Israel within the status attainment paradigm revealed several conclusions: first, socioeconomic background, and ethnicity in particular, have significant effects on opportunities for educational achievement. Individuals of humble socioeconomic origins and of subordinate ethnic background are disadvantaged in obtaining higher levels of education (Yuchtman-Yaar and Samuel, 1975; Minkowich, Davis and Bashi, 1982; Nachmias, 1980; Yogev, 1981; Yogev and Ayalon, 1982; Shavit, 1984; Smooha and Kraus, 1985). Second, educational attainment is the best predictor of occupational achievement, and occupational status is the best predictor of income (Boyd et al., 1980; Rosenstein, 1981; Semyonov and Kraus, 1983; Adler and Hodge, 1983; Smooha and Kraus, forthcoming). Third, when educational attainment is controlled, socioeconomic background (father's education and occupation) has a relatively negligible effect on the socioeconomic attainment of individuals. Finally, ethnicity as well as gender exert significant effects on the socioeconomic attainment process even when education and other background attributes are taken into consideration.

The status attainment paradigm focuses exclusively on individual determinants of career outcomes. Although contributions of studies within this paradigm are substantial, the exclusive focus on individuals is somewhat unfortunate since the potential importance of labor market structure has been ignored. There have been several studies in which the effects of communities, as labor markets, on status attainment and ethnic inequalities in Israel were examined (Spilerman and Habib, 1976; Semyonov, 1981; Semyonov and Tyree, 1981; Weintraub and Kraus, 1982; Nachmias, 1979). These studies lend firm support to the notion that the social, demographic and industrial structure of communities have important effects on the attainment of individuals. They clearly demonstrate that communities should be viewed as labor markets with unique opportunity structures, as an additional dimension of the stratification system, affecting socioeconomic attainment and ethnic inequalities. In general it is evident that urban centers characterized by diversified occupational structures provide better opportunities than the small, peripheral towns characterized by limited industrial and occupational structures, and lack of public resources.

The contextual effects of Israeli communities underscore the crucial importance of labor market structure for individual achievement. Models of status attainment assume a uniform process of stratification across labor markets. It has been argued, however, that in order to adequately understand status attainment in Israeli society one must also consider situses (Samuel and Lewin-Epstein, 1979; Samuel and Yuchtman-Yaar, 1979), economic sectors (Yuchtman-Yaar, forthcoming), subsystems of stratification (Ben Raphael, 1980; Nachmias, 1977) and alternative channels of mobility (Semyonov and Yuchtman-Yaar, 1981) built into the labor market structure.

Furthermore, the status attainment model cannot, nor does it intend to, take account of changes in labor market structure over time. The occupational structure of developed societies generally shifts from agricultural and manual work to a dominance of skilled and professional employment (Bell, 1973; Robinson, 1984). Thus, a discrepancy emerges between the marginal distributions of occupations at two points in time. The constraints imposed and the mobility generated by such structural

transformation tend to be overlooked in status attainment models. Consequently, the individual level analysis of status attainment and human capital paradigms draws attention away from the significance of labor market structure.

We do not intend to convey the impression that such issues have been totally ignored by Israeli sociologists. Indeed, Eisenstadt in his classic book, *Israeli Society* (1967), discussed the issue of structural change and its relation to population groups at great length. Furthermore, Lissak (1969), as well as Bernstein and Swirsky (1982) and Ben-Porath (1973), presented data regarding the relationship between changing occupational structure and ethnic background in Israel. The implications of these studies for Israeli society, however, have not been fully pursued in subsequent stratification research. In the present paper we intend to examine systematically change in the structure and composition of occupations in order to highlight the significance of labor market structure for the study of social stratification in Israel.

OCCUPATIONAL STRUCTURE AND LABOR FORCE COMPOSITION

A comprehensive interpretation of stratification and mobility in Israel requires an understanding of the labor market structure and its change over time. Since the establishment of the state, and even prior to that time, the economy of Israel has been characterized by a large service sector and small agriculture and manufacturing industries as compared with nations of equal, or more advanced, economic development (Ofer, 1976; Ginor, 1979). This unique structure was brought about by a combination of factors. The fact that most of the Jewish population were new arrivals meant the lack of traditional patterns of attachment to land and agriculture. Historical patterns of centralized goal-setting and control necessitated large bureaucracies; and continuous external financial support, received mostly by the public sector, increased the resources available to Israeli society without need of equal increases in the production of exchangeable goods and services (Ofer, 1976). In addition, many immigrant Jews brought with them the occupational skills and inclinations they had acquired in the societies from whence they migrated.

These unique features notwithstanding, the occupational structure has been further transformed in recent decades in much the same way as other economies that went through similar processes of industrialization and post-industrialization (Singlemann, 1978; Bell, 1973). The overall change in the process of advanced industrialization is from production of goods to services. Blue collar employment steadily declines while white-collar positions mushroom. "The central occupational category in the society today" noted Daniel Bell (1973), "is the professional and technical. Growth in this category has outdistanced all other major groups in recent decades" (p. 136). This is true of industrial societies in general and of Israel in particular.

In comparing the distribution of major occupational categories in Israel between 1955 and 1980 (Table 1) we find that remarkable shifts took place within the period of one quarter of a century. The proportion of persons employed in professional and technical occupations more than doubled during the period. At present they comprise over one-fifth of the entire workforce. Administrative and clerical occupations have also grown, albeit at a slower rate. This category represented 16 percent of all workers in 1955, and 22 percent of the workforce in 1980. These patterns of growth were accompanied by a dramatic decline in agricultural employment. Workers in agricultural occupations comprised 17 percent of the workforce in 1955, but only 6 percent of all

workers were employed in the same occupations in 1980. Employment in trade and sales occupations similarly decreased. The proportion of workers' holding these occupations was reduced by approximately one-third. Further decline is evidenced in production-related jobs. Workers in these occupations comprised 30 percent of the Israeli workforce in 1980; down from 35 percent during the first decade of Israel's independence. Finally, the only occupational category that remained fairly stable in relative size was service occupations – mostly personal services – whose proportion fluctuated between 10.5 and 12.5 percent throughout the period. All in all, then, white collar employment rose from 26 percent in 1955 to 45 percent in 1980, a trend which is continuing into the 1980s.

TABLE 1

Percentage Distribution of Israeli Workers Among Occupational Categories During the Years 1955-1980

Year	Total	Professional and technical	Administrative and clerical	Trade and sales	Service workers	Skilled and other labor	Agricultural workers
1955	100.0	10.4	15.8	11.3	10.4	35.0	17.1
1960	100.0	11.3	14.1	9.1	12.5	35.9	17.1
1965	100.0	13.0	16.7	8.0	11.4	38.4	12.5
1970	100.0	15.5	17.4	7.7	12.5	37.7	9.2
1973	100.0	17.0	19.6	7.8	12.5	36.0	7.0
1975	100.0	19.3	20.5	7.9	11.7	34.4	6.2
1980	100.0	22.6	22.4	7.6	11.0	29.7	5.9

Source: Statistical Abstract of Israel, Vol. 22 (1971), Table XI/14; Vol. 34 (1983), Table XII/16.

While major shifts were taking place in the occupational structure, a number of important changes developed in the constitution of the workforce. The total participation rate of the population in the labor force (that is the proportion of the population 14 years of age or older who were either employed or unemployed) steadily declined from approximately 53 percent in the 1950s to 49 percent in the 1970s, and edged further downward during the first part of the present decade. The aging of the population, growing enrollment in educational institutions, and the general rise in economic well-being, all contributed to this decline in participation. The figures for the total population, however, obscure the fact that the trend over time was very different for men and women. Indeed, decrease in participation took place exclusively among male workers, whereas female participation actually increased over the years. Of the 584,000 women who were 14 years of age or older in 1955, one hundred and fifty five thousand were in the labor force representing a participation rate of 26.5%. The female labor force participation rate rose steadily in subsequent years, reaching 35.0% by 1980. The magnitude of change that took place in the sex composition of the labor force is more fully appreciated when we note the relative proportions of men and women who made up the labor force. In 1955, women comprised only 25 percent of the total labor force. By 1980, however, their portion of

the labor force rose to 36 percent. Over the years, then, female participation has become more central to labor market activities. It is our intention to examine in what ways these changing patterns were related to developments in the structure of occupations.

During the years prior to the establishment of the State of Israel, the Jewish population was comprised of an overwhelming majority of Jews of European (and American) origin, and a minority of Jews of Asian or African origin. This changed dramatically in the first few years of Israel's independence with the arrival of large waves of Middle Eastern and North African immigrants. In 1962, approximately 35 percent of the labor force was of Asian or African background. As a result of the higher birth rate among members of this group their share in the labor force has steadily increased. By the early 1980s, some 45 percent of the Jewish workforce were identified as Asian/African, as compared with 50 percent European/American, and approximately 5 percent listed as being of "Israeli" background.

A second, more central, dimension, of the changing ethnic composition of the labor force in the past 15-20 years has been the increase in participation of non-Jewish workers, both citizens and non-citizens, in the Israeli labor market. Since 1948, the percentage of non-Jewish citizens of Israel, the majority of whom are Arabs, has ranged between 11 and 17 percent of the overall population. Throughout this period extreme residential segregation has been maintained. Nevertheless, Arab participation in the Israeli labor force has persisted. While their proportion in the workforce was 7.5 percent in the mid-1950s, they accounted for almost 11 percent of all workers less than three decades later. On the basis of daily commuting patterns it is estimated that over one half of the Arab workforce is currently employed outside the traditional village economy (Rosenfeld, 1964; Schmelz, 1981).

Since 1967 an additional, non-citizen, Arab population has joined the Israeli labor force. Over one-third of the workforce residing in the West Bank and Gaza Strip territories are currently employed in Israel, mostly by Jewish employers. Non-citizen Arabs comprised only one percent of the total Israeli labor force in 1969, but their numbers rapidly rose during the 1970s, and at present over 80,000 are employed in Israel (Ministry of Labor and Social Affairs, 1985), accounting for an estimated seven percent of the workforce. This new group, which so recently joined the Israeli economy, has penetrated large parts of the labor market, with significant consequences for the social organization of occupational labor markets.

A final area in which the labor force has experienced major changes is the distribution of educational attainment. Extensive participation in educational institutions and the absorption of highly-educated immigrants during the 1970s brought about a considerable increase in the level of education. Among Jews, 20 percent of the adult population reported four years of schooling or less, in 1961. This figure was almost halved during the following 20 years (Central Bureau of Statistics, 1982 – Table XXII/1). The parallel figures for the non-Jewish population were 63 and 27 percent, in 1961 and 1981 respectively (Central Bureau of Statistics, 1982 – Table XXII/2). At the other end of the educational scale, precisely the opposite change took place. The proportion of Jews with post-secondary education doubled from approximately 10 to 20 percent during the same period. By 1981, over six percent of non-Jews had attained post-secondary schooling. Thus, the labor force, whether male or female, Jewish or non-Jewish, or a sub group within the Jewish population, has

become considerably more educated and hence both more suitable for – and more demanding of – higher-status, more rewarding occupations.

DATA AND VARIABLES

Data collected over the years by the Israel Central Bureau of Statistics were utilized to study: (a) the occupational structure and (b) the composition of the labor force, and (c) their interrelationship. Labor force surveys were conducted separately for the population of Israel and for the Administered Territories. In Israel a sample of households is drawn quarterly since 1958, and members 14 years of age or older are interviewed extensively regarding demographic and labor force characteristics. In the years 1969-1973 each panel included 6,000 households, and in 1974 the figure was raised to approximately 10,000 households. Similar interviews were conducted with residents of the Administered Territories. Between 1968 and 1973 a sample of 4,500 households was drawn in Judea, Samaria and Gaza District, and as of 1974 the sample includes 6,500 households in which all persons 14 years or older are interviewed.

Since our theoretical concern focuses on the social organization of the occupational structure, the units of analysis are occupations defined at the two-digit classification level. Eighty-three occupational categories were identified and matched for the years 1969 and 1982.[2] The incorporation of Arabs from the Administered Territories into the Israeli economy seems to us one of the major dimensions of recent changes in the social organization of occupational labor markets in Israel. Hence our interest in capturing fully the change that has taken place from initial contact to the present. The year 1969 was the first full year in which Arabs from the Administered Territories worked in Israel and were surveyed systematically. The year 1982 is the last for which we were able to obtain comprehensive and detailed occupational information.

Central characteristics for each occupation were derived from individual level files of all economically-active persons. The attributes included were: relative size of the occupational category, percentage of non-citizen Arabs employed in the occupation, percentage of Israeli Arabs, percentage of Asian/African Jews in the occupation, and proportion of females in the occupation. In addition, each occupation was given a socioeconomic score according to Tyree's (1981) 100-point socioeconomic index for Israeli society.[3] This score represents the relative hierarchical standing of each occupational category based on requirements (education) and rewards (income) associated with it. This measure is highly correlated with prestige ratings of occupations, but is better suited for comparison over time (Duncan, Featherman and Duncan, 1972). This indicator of vertical dimension will enable us to examine how the different population groups are positioned vis-à-vis each other in the occupational structure and whether the change in occupational structure as well as ethnic composition of specific occupations was related to the social and economic standing of these occupations.

DYNAMICS OF THE OCCUPATIONAL STRUCTURE, 1969-1982

The distribution of ethnic and gender groups across five categories of occupational status in 1969 and 1982, and the mean status score for each of the population groups, are displayed in Table 2. The ethnic structure of the Israeli labor market is clearly

reflected in the figures. In 1969, Jews of American or European origin, male and female, were overrepresented in all higher-status occupations in comparison to the percentage of the population as a whole in these occupations (which was 13.8 percent). European/American males were noticeably absent from the lowest-status occupations in which 3.2 percent of the group were employed as compared with 11.5 percent of the population as a whole. The distribution of male Jews of Asian or African origin was quite different from that of European/American males[4] and more closely resembled that of Israeli Arabs. Both groups were heavily concentrated on the lowest rungs of the occupational hierarchy (over 40 percent of Asian/African Jews and over 50 percent of Israeli Arabs were in occupations with status scores lower than 30). Nonetheless, Israeli Arabs were twice as likely to be in the lowest-status occupations. Less than 10 percent of both groups were employed in occupations of moderately high, or high status (above a score of 40). The position of non-citizen Arabs was least favorable, as 70 percent of the group were in the lowest-status occupations.[5] Although the mean status score of Jewish females was similar to the average status scores of the male subgroup of similar origin, it is noteworthy that their distribution among occupations was quite different.[6] Women of both European/American origin and Asian/African background were more likely to be in the lowest-status category as compared with males of similar background (11.6 percent vs. 3.2 percent in the case of European/Americans, and 26.3 percent vs. 11.9 percent in the case of Asian/African Jews). Differences between the two female groups resembled somewhat the differences found between the two groups of Jewish men. A larger portion of European/American female workers were in the top two categories and the opposite is true for the two lowest categories, and the difference in the mean status score of the two groups was just under ten points. These differences remained in 1982 though the occupational gap between the two female groups declined somewhat. Furthermore, the mean status score of women rose to equal that of males from the same ethnic background.

The most striking feature of the figures is the dramatic change that took place over the thirteen-year period. Among Israeli citizens, male and female alike, employment in "high status" occupations increased sharply, accompanied by a decline in lower-status categories. In each of the male groups, the average occupational status increased by three to five points, representing an improvement of approximately ten percent of their mean status at the initial point in time. The only exception to this trend was the group of non-citizen Arabs from the Administered Territories whose position in the occupational structure actually worsened, in both relative and absolute terms. Females, in contrast, experienced the greatest change. Their proportion in the highest-status category tripled in the case of Asian/African women from 7.1 percent in 1969 to 19.4 percent in 1982. On average, they gained 7-8 status points, a gain greater than that experienced by any male group. It is unclear whether these changes reflect upgrading of the occupational structure or some form of circulatory mobility. This issue will be more directly addressed in the proceeding analysis.

Intercorrelations, means, and standard deviations of occupational attributes in the two periods are presented in Table 3. The figures above the diagonal are for 1969 and figures below the diagonal are for 1982. The reader is reminded that the analysis was performed on 83 occupational categories, each viewed as a labor market.

TABLE 2

Percentage Distribution of Population Groups Among Occupational Status Categories, and Mean Status Scores, 1969 and 1982

	Jewish Females		Males			
Occupational status	European/American	Asian/African	European/American Jews	Asian/African Jews	Israeli Arabs	Noncitizen Arabs
1969						
0 - 20	11.6	26.3	3.2	11.9	22.0	42.1
21 - 30	20.4	31.5	19.7	30.2	31.3	28.9
31 - 40	35.8	30.8	48.4	48.5	41.9	26.8
41 - 60	9.5	4.3	8.4	4.1	1.1	1.0
61 - 90	22.7	7.1	20.3	5.3	4.3	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean status	39.2	29.9	41.0	32.5	29.5	25.1
(Estimated N)[a]	(174,348)	(102,329)	(340,728)	(254,775)	(81,752)	(9,376)
1982						
0 - 20	6.4	19.2	2.2	5.8	9.5	37.6
21 - 30	11.4	14.5	12.4	19.8	30.4	38.2
31 - 40	26.9	32.9	38.7	54.6	46.0	23.1
41 - 60	17.5	14.0	10.8	6.7	2.6	0.3
61 - 90	37.8	19.4	35.9	13.1	11.5	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean status	46.3	38.0	46.6	37.5	33.2	24.5
(Estimated N)	(271,973)	(185,649)	(375,077)	(320,799)	(117,111)	(76,274)

[a] Based on the weighted sample distribution

TABLE 3

Correlations, Means and Standard Deviations of Occupational Attributes (83 occupational categories) in 1969 (above the diagnonal) and 1982 (below the diagonal)

	1	2	3	4	5	Mean 1969	S.D. 1969
Occupational							
1. Status	–	–.082	–.512*	–.419*	–.264*	37.8	15.3
2. Percent female	.063	–	.120	.211**	–.193**	21.6	26.6
3. Percent Asian/African	–.334*	–.165***	–	.060	.095	36.7	17.6
4. Percent Israeli Arabs	–.369*	–.094	–.075	–	.548*	9.3	10.0
5. Percent non-citizen Arabs	–.511*	–.118	–.272*	.200**	–	0.9	2.0
Mean 1982	37.8	24.1	39.2	11.0	8.0		
S.D.	15.3	26.5	14.5	8.9	13.8		

* $p < .01$
** $p < .05$
*** $p < .10$

Examination of the mean values clearly reveals, from a different vantage point, that both gender and ethnic composition of occupations changed over the thirteen-year period under study. On average, the percentage of females, as well as the proportion of subordinate ethnic minorities, rose considerably across occupations. In 1969 the average percentage of females in an occupation was 21.6. In 1982, this figure reached 24 percent. Similarly, the proportion of Jews of Asian/African origin increased from an average of 36 to 39 percent, the proportion of Israeli Arabs increased from 9 to 11 percent, and the proportion of non-citizen Arabs from the Administered Territories rose from less than one percent in 1969 to eight percent in 1982.

The correlation matrix demonstrates that variations in occupational attributes were systematically interrelated. Socioeconomic rank of an occupation was strongly related to its ethnic composition, and less so to gender composition. The lower the socioeconomic score, the higher the proportion of Asian/African Jews, Israeli Arabs, and non-citizen Arabs. The proportion of Israeli Arabs was positively related to that of non-citizen Arabs. Apparently, the two groups tended to cluster in the same occupational niches.

The correlations below the diagonal (1982) are consistent with those displayed above the diagnonal (1969). Nevertheless, it seems that a number of meaningful changes took place during the period. For example, the magnitude of correlations between both percentage of Israeli Arabs and percentage of Asian/African Jews, and occupational status, decreased, while the correlation between status and the proportion of non-citizen Arabs increased dramatically. Furthermore, the correlation between gender composition of the occupation and occupational status, though not significant, changed from negative to positive.

The changing relationships, minor as they appear at first glance, may actually reflect meaningful changes in the social organization of occupational labor markets. Such changes, however, cannot be captured fully by means of these over time comparisons. In the analysis that follows we explore the relationship between changing occupational structure and population composition of occupations. Specifically, we examine the extent to which upgrading of the occupational system was related to differential placement of population groups across the occupational ladder.

In order to examine the dynamics of labor market organization during the years 1969 and 1982, we first derived estimates of change in the relative size and population composition of occupations. The procedure was complicated by the fact that occupational labor markets tend to maintain their basic characteristics, especially over short periods of time (the 1969 and 1982 distributions of attributes were highly correlated). Thus, it was necessary to overcome the problem of autocorrelation. Change scores were therefore estimated as residuals – deviations from the regression line (Bornstedt, 1969). In other words, change scores were calculated as the difference between the 1982 values and those predicted on the basis of the 1969 distributions. Such estimates provided indicators of the extent to which occupations grew more (or less) than predicted, regarding: (1) sex composition; (2) percentage of Asian/African Jews; (3) percentage of Israeli Arabs; (4) percentage of non-citizen Arabs, and (5) their relative size.

The change scores were correlated with socioeconomic status (Column 1 of Table 4) and with change in the relative size of occupational categories (Column 2 of Table 4). The former set of correlations provides evidence of the extent to which population groups shifted with respect to occupational status. The latter set of correlations relates population changes to the transformation of the occupational structure.

TABLE 4

Correlations Between Occupational Status, and Change in Size and Population Composition of Occupations, 1969 - 1982

	Occupational status	Change in size of occupation
Occupational status	–	.505*
Females	.277*	.241**
Asian/African Jews	–.005	–.004
Israeli Arabs	–.161***	.047
Non-citizen Arabs	–.439*	–.238**

* $p < .01$
** $p < .05$
*** $p < .10$

The results reported in Table 4 indicate that changes in gender composition and in the percentage of non-citizen Arabs in the occupation were significantly related to occupational status. Women were recruited in disproportionate numbers into

higher-status occupations. Non-citizen Arabs, in contrast, were disproportionately channelled toward lower-status positions. Occupational status, however, was not related to changing ethnic composition of Israeli males (Jewish sub-groups as well as the Jewish/Arab distinction). Apparently, change in the mean occupational status of indigenous ethnic groups observed in Table 2 reflected the upgrading of the occupational structure whereby these groups were uniformly redistributed across the occupational ladder. In contrast to these latter findings it should be re-emphasized that women's upgrading, and non-citizen Arabs' deteriorating position with respect to status, were not accounted for by overall shifts, and represent real changes in these groups' positions *vis-à-vis* other population groups.

Changes in the occupational structure, as indicated by relative growth, were highly related to socio-economic status. The occupational categories that gained disproportionate numbers of workers were those of higher status. It might also be noted that change in the size of occupations was significantly and positively related (r=0.23) to change in mean level of education. Occupations which expanded most rapidly were those requiring higher educational credentials. Females increased their participation in expanding occupations while non-citizen Arabs found employment in declining occupational categories. These correlations, then, capture the interrelationships between changing occupational structure and the redistribution of population groups. The causal order of change, however, is not clear and will be addressed in the concluding section.

DISCUSSION AND CONCLUSIONS

The data presented in this paper underscore two dimensions of change: shifts in occupational structure, and change in the composition of the labor force. The most salient feature of occupational shifts was the upgrading of the occupational structure. The upgrading was a direct consequence of the dramatic increase in the size of higher-status occupations and the relative decline of lower-status occupations. Concomitant with these structural shifts, significant changes in the composition of the labor force took place. First, women joined the economically-active workforce in ever growing numbers. Second, the proportion of non-Jewish workers increased considerably. Finally the share of Jews of Asian/African origin in the Jewish workforce rose.

All population groups, with the exception of non-citizen Arabs, enjoyed an impressive improvement in their occupational standing. The mean status of Jewish males as well as Israeli Arabs rose by approximately ten percent. In contrast, the mean occupational status of non-citizen Arabs declined somewhat during the period under study. These changes in occupational status were structural, in part, and can be attributed to occupational shifts. Nonetheless the improvement in women's status cannot be explained fully by occupational upgrading. During the period under study, women were disproportionately redistributed into higher-status occupations. These findings corroborate Nundi-Israeli's (1983) findings, which showed greater occupational upgrading for females than for males. In view of the structural upgrading that took place, the observed decline in the occupational status of non-citizen Arabs did not reflect accurately the actual decline in status. Indeed, non-citizen Arabs were channelled in greater numbers than expected into lower-status and contracting occupations.

These findings lend support to the argument that labor market structure and its transformation over time have significant consequences for achievement opportunities of populations and individuals. Industrial shifts determine which occupational domains will expand and, consequently, how population groups will be affected differentially. In Israel, the rapid expansion of public health, education, and welfare services as well as the finance sector clearly created opportunities for better-educated persons and especially large numbers of females. Also, the strong position of organized labor and the coverage of collective wage agreements in Israel ensured that less-educated persons and non-Jewish minorities who entered the labor market did not undercut the dominant population groups, but rather mostly filled vacancies created by the latter's mobility into more rewarding positions.

We cannot decisively rule out, however, the alternative explanation, namely that changes in the characteristics of the work force determined the direction of occupational formation. According to this view, the rise in education and increase in the number of females searching for paid work generate greater requests and pressure for appropriate jobs. Consequently, professional and white-collar occupations, which are perceived as suitable for these groups, disproportionately expand (Polard, 1979). Students of expanding female participation in the labor force have entertained both the structural approach (Bernstein, 1981) and a modified job-fit approach (Israeli, 1979) which emphasized the fact that women are typically concentrated in occupations which involve tasks closely associated with traditional responsibilities of women. A direct attempt to disentangle the demand and supply factors associated with industrial and occupational change (Klinov, 1976) yielded mixed results, suggesting that both forces are at work, though the magnitude of their effect varied with economic sector.

It is not possible, with the data at hand, to "settle" the issue. This article suggests, however, that labor market structure and its transformation over time has significant consequences for achievement opportunities for population groups and individuals. Incorporating these structural features is necessary for a better understanding of processes of status attainment, mobility, and inequality in Israeli society.

FOOTNOTES

[1] The authors share equal responsibility for the paper and are listed in alphabetical order. Work on this paper was supported by Grant #12 from the Ford Foundation received through the Israeli Foundations Trustees. The authors wish to thank Yasmine Alkalai and Olivia Blum for their assistance in data preparation. Information on the Israeli labor force was derived from data tapes provided by the Data Archive, The Unit for Services in Empirical Work, Hebrew University of Jerusalem, who after checking and treating for possible errors arranged the data for the two time periods in similarly structured files. Data from labor surveys in Judea, Samaria, and the Gaza district were provided by the Central Bureau of Statistics in aggregate form, for each occupational category.

[2] The standard classification of all occupations was changed in 1972 so that occupational categories identified in 1982 at the two-digit level were not directly comparable with those available for 1969. Matching the old and new classifications required three-digit occupational detail. This information, unfortunately, was not recorded on the original 1969 data tape. It was therefore necessary to weight and group occupational categories available for 1982 into two-digit categories identical to those used in 1969. By these means we were able to match 83 occupational categories and to examine changes in their characteristics over time.

[3] The socio-economic score is based on the first principal component loadings of income and education and does not involve subjective perceptions of individuals as to the rankings of

occupations. The index was based on data from the 1972 census of population. Although socio-economic scores computed for the non-Jewish population differed somewhat from scores computed in the Jewish population, the correlation was high (r=0.87). Since we could not apply different scales in the same analysis (Tyree, 1981, Footnote 4) the scores calculated in the Jewish population were used to characterize the occupations.

[4] χ^2 tests for the equality of occupational distribution among all pairs of groups (including the two female categories) showed statistically significant differences with $p < .001$. This is not surprising considering that sample sizes on which calculations were based included over 30,000 persons in 1969 and 45,000 persons in 1982. This does indicate, however, that the ethnic and gender groups were in fact distributed differently across occupations.

[5] Some caution should be exercised in evaluation of the figures for non-citizen Arabs in 1969 since less than 10,000 were estimated to have been employed in Israel (and were represented by a sample of approximately 500 individuals). These workers, however, were employed in a relatively small number of occupations, so that we were able to obtain good estimates in most cases.

[6] Due to the small number of Israeli Arab women reported to be in the labor force, this group was not included in the analysis.

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