Centre and Periphery in Higher Education: The Case of Israel

Dan Soen
College of Judea and Samaria, Ari'el, Israel; Kibbutzim School of Education, Tel-Aviv
soen@macam.ac.il

Nitza Davidovitch
College of Judea and Samaria, Ari'el, Israel *d.nitza@yosh.ac.il*

Higher education systems all over the world are currently occupied with the crucial problems of equal opportunity and accessibility in the tertiary level. The paper focuses on the perennial issue of center and periphery in higher education. It takes Israel as a case in point.

Like many other Western countries Israel is undergoing a speedy process of what is termed 'massification of the higher education system'. The inauguration of fully accredited public and private colleges as well as the academisation of the teaching profession brought about a dramatic increase in the enrolment of degree programs. During the 1980s and the 1990s the number of students in Israel tripled and the odds of attending a higher education institution grew by 50 per cent.

The paper poses several pertinent questions in this respect. a) Has the recent transformation in the Israeli higher education system really increased the odds of higher education attendance? b) Has it indeed reduced social selection processes in higher education? c) Has it really equalised opportunity to attain access to the most desirable fields of study?

The paper tries to answer these questions first by analysing available data published by the CBS (Central Bureau of Statistics) and second by analysing data pertaining to the largest public college in the country.

It arrives at a cautious conclusion that the system did increase the odds of higher education. It reduced social selection in higher education. It also enhanced opportunities to attain access to the most desirable fields of study. Peripheral populations definitely benefited from the establishment of a binary system of higher education in Israel.

Higher education, equal opportunity, peripheral populations, social selection, accessibility to tertiary education

EDUCATIONAL EXPANSION AND GRADUAL MASSIFICATION OF HIGHER EDUCATION

In spite of the fact that schools existed in ancient times in all known civilisations, schooling became universal only during the last hundred years or so. As late as 1800 the great majority of West European adults had not attended any school at all. Even a hundred years later, those whose schooling exceeded four or five years of formal education were considered a rarity (Williams, 1960). The twentieth century revolutionised education. Schooling became compulsory in Western

countries during the first half of the century. It was adopted by developing countries in the second half of the century upon attainment of independence.

Secondary education followed suit with the United States acting as a pioneer of the comprehensive public high school system (Krug, 1969). In 1910, less than 15 per cent of the 14 to 17 year-old age group in the United States were enrolled in high schools. In 1940, 75 per cent of that age group attended school. About 50 per cent of the population could realistically expect to graduate from high school (Trow, 1961). In the 1980s that rate shot up and was believed to exceed 85 per cent (Hurn, 1985, Chapter 3). Secondary schools enrolment increased by nine per cent between 1994 and 1999, while the percentage of high school dropouts shrunk dramatically between the years 1960 to 2000; the trend of decline from 27 per cent in 1960, to 15 per cent in 1970, to 14 per cent in 1980, to 12 per cent in 1990, to 11 per cent in 2000 (NCES, 2002).

The story of higher education has been somewhat different. Its expansion started as late as the second half of the twentieth century. It has been recognised that historically the main function of higher education, in most societies, was to groom an elite and provide it with both the knowledge as well as the social network needed for managing the State's affairs. This function of higher education as a grooming ground for the elites, worked properly until the post World-War II period (Morrison, 1998). Needless to say that for a long period higher education both reflected and reproduced the existing class structure of society. Thus, in the 1950s three per cent of the English-speaking people were classified as upper class, seven per cent as upper-middle class, 20 per cent as lower-middle class, 50 per cent as upper-low class and 20 per cent as lower-low class (Havighurst, 1958). On the other hand, higher education reflected very strongly the social preponderance of the upper classes at that time. The break-down of university graduates was as follows (ibid.): 15 per cent upper class, 26 per cent upper-middle class, 32 per cent lower-middle class, 21 per cent upper-low class and only six per cent lower-low class. One could definitely concur with Musgrave's conclusion, "… there is a social class bias in the proportion of those undergoing education beyond sixteen" (Musgrave, 1965, p.175).

In so far as higher education for the masses was concerned, here too the United States led the way. The rapid development of the higher education reflected the trends toward more extensive and intensive use of education (Perrucci, 1967). College and university attendance grew constantly in the 1920s and the 1930s. In 1870, 9,372 college degrees were granted in the United States. This number rose to 29,375 in 1900 and to 53,516 in 1920. It catapulted to 139,752 in 1930 (Perrucci, 1967, p.113).

The second half of the twentieth century has been characterised as a significant period of worldwide rapid educational expansion as well as improvement in educational opportunity. Once again, the United States led the way. In 1940, about 15 per cent of the 18 to 21 year-old age group attended colleges and universities there. Their rate reached 45 per cent in 1970 (Hurn, 1985). Especially in the Nordic welfare states in Europe, the educational reforms from the 1960s onwards were facilitated by the ideology of equality of educational opportunities, producing a considerable increase in the number and availability of institutions of higher education (Kivinen et al., 2001).

The rapid expansion of higher education typified many Western countries in the 1970s. Hence the talk about "massification of higher education" (Trow, 1974). By and large it could be said that higher education has been transformed from the opportunity for a privileged few to the right for all, and nowadays, even a civic obligation (Trow, 1972).

It is noteworthy that rapid expansion of higher education was not limited to Western countries. Indeed, between 1970 and 1990, the most rapid increase (in so far as the different levels of education were concerned) was that of higher education, with the number of students in the developing countries rising from 9 to 32 million. That meant an average growth of 360 per cent, with 625 per cent for the Arab states and 550 per cent for Africa.

Moreover, attention has been drawn to the fact that the context of higher education has changed recently. Some researchers maintain that the fundamental change in that context is a shift in higher education's place within modern and modernising societies and economies. Basically, the shift has been to move higher education from a peripheral status, on the margins of societal concern and importance, to a core status of central importance to societies and economies (Morrison, 1998). As reflected in Table 1, the shift of higher education from periphery to core status occurred over the last decade or so. In England, for instance, there was a huge expansion in absolute student numbers. In 1991, some 216,000 people were accepted for various programs in higher education. By 1998, this figure had risen by 53 per cent to 330,000, supplemented by another 100,000 in 2002 (Tonks, 1999). The same goes for Australia, where higher education enrolment grew from 534,500 in 1991 to 604,200 in 1995, to 726, 200 in 2001 (Australian Bureau of Statistics, 2002).

Table 1. Trends in educational attainment at tertiary level in OECD countries, 1991-2001 (percentage of the population of 25-34 year olds that attained tertiary education)

Country	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
Australia	23	m	23	24	25	25	26	28	29	31	34
Austria	8	8	m	9	9	9	12	13	13	15	14
Belgium	27	27	29	30	30	32	33	34	34	36	38
Canada	32	33	35	38	40	42	44	45	47	48	51
Czech Republic	m	m	m	12	12	11	11	10	11	11	11
Denmark	m	m	m	m	m	m	m	27	29	29	29
Finland	33	33	m	34	35	35	36	36	37	38	38
France	20	22	23	24	25	26	28	30	31	32	34
Germany	21	20	m	20	21	20	21	22	22	22	22
Greece	m	m	m	25	26	28	22	24	25	24	24
Hungary	m	m	m	m	m	14	12	14	14	15	15
Iceland	m	m	m	m	m	24	23	24	28	28	26
Ireland	20	21	m	24	27	31	33	29	41	47	48
Italy	7	7	m	8	8	8	m	9	10	10	12
Japan	m	m	m	m	m	m	45	45	45	47	48
Korea	m	m	m	m	29	30	m	34	35	37	40
Luxemburg	m	m	m	m	m	m	m	m	21	23	23
Mexico	m	m	m	m	m	m	17	17	16	17	18
Netherlands	22	24	m	24	25	25	m	27	25	27	27
New Zealand	23	23	m	21	24	m	25	26	26	27	29
Norway	27	28	m	31	32	30	30	33	35	35	38
Poland	m	m	m	m	10	m	10	12	12	14	15
Portugal	9	m	m	13	14	14	m	11	11	12	14
Slovak Republic	m	m	m	13	12	12	10	11	11	11	12
Spain	16	22	m	25	27	29	30	32	33	34	36
Sweden	27	27	m	27	29	28	29	31	32	34	37
Switzerland	21	21	m	22	22	23	25	25	26	26	26
Turkey	6	6	m	7	8	m	7	8	8	9	10
United Kingdom	19	21	m	23	23	24	25	26	27	29	29
United States	30	30	m	32	34	35	36	36	37	38	39
Country mean									**26**	**27**	**28**

Source: OECD, 2003, Table A2.4

In this context it should be mentioned that this shift in higher education's place within modern societies is also reflected in direct public expenditure on higher education institutions. In most West European countries there has been a growth of direct public expenditure on higher education despite budget cuts and second thoughts about the limits of the social welfare policy. Thus, in France, Germany, Sweden, the Netherlands and Austria this growth had been modest in the 1990s. Yet, it was consistent. In the United Kingdom and Denmark the growth was strong. In Finland and Belgium it was moderate but clearly discernible (Cheps, 2001).

All in all, it is now taken for granted that a college diploma is rightly becoming as much the norm in this century as a high school diploma was during the twentieth century (Allen and Allen, 2003). The era of higher education as a domain of elites is apparently over. The challenges of higher education now is planning, designing, managing and funding an all-encompassing system. The current talk is about a shift in demand for improving access to higher education as a matter of social justice. In the words of the English Robbins Report (1963), "Higher education should be available for all those qualified by ability and attainment to pursue it" (Tonks, 1999).

Not less important in this respect, in fact, some would say more important, is the recognition that higher education contributes to economic growth and therefore access to it should be improved by all means. Economists maintain that education creates human capital, which directly affects knowledge accumulation and therefore productivity growth. There again, education is important for successful research activities, which are, in turn, important for productivity growth (Gemmell, 1997, Section 4). The empirical growth literature draws attention to the following conclusions bearing on the economic importance of higher education on the national level:

- Countries with higher average years of education of their labour forces tend to grow faster, other things being equal.
- Other things being equal, OECD countries that expanded their higher education more rapidly since 1960 experienced faster economic growth.
- There is some evidence that education affects physical capital investment in the economy as a whole, which in turn, raises income growth rates.
- It has been proven both conceptually and empirically that more education may raise a country's income level permanently above what it would have been with less education (Gemmell, 1997, ibid).

CREDENTIALS INFLATION AND INEQUALITY IN HIGHER EDUCATION

The so-called massification of higher education has been accompanied by advocacy of the transformation of this system from class mirror to mobility gateway, with a high premium placed, as already mentioned, on improving access to higher education. Even those clinging to the concept of 'where there is a will there is a way' had to recognise that in the human-capital economy that dominates the world nowadays, honesty and hard work alone are insufficient for success. Both individual as well as social welfare are increasingly determined by formal education. There is no simpler, more direct, or more important determinant of human welfare today than educational attainment. On average, more education leads consistently to more income and to higher living standards to which most people aspire (Mortenson, 2000). This tie between education and income grew stronger from the early 1970s. Due to the growing link between education and income, the least educated would seem to be living increasingly desperate and hopeless lives.

This shift in demand for improving access to higher education raised in its turn the question what were the repercussions of higher education expansion. In simple words, 'who studies where' in so far as the socio-economic background of the students as well as the history of their former studies are concerned. A pitched battle is now being waged between two schools of thought, the so-called **diversity approach**, which represents the 'functional' paradigm in sociology, and the **stratification approach**, representing the 'conflict' paradigm in sociology.

The diversity approach regards the massification of higher education as a process contributing to educational and social equality through the development of a wide gamut of higher education institutions, operating alongside of the classical research universities, and catering to different and specific sectors of students. The stratification approach, on the other hand, regards the

massification of higher education as nothing more than a competition between different institutions supplying different standards of education and reflecting the existing order, serving as a class mirror.

Put in a nutshell, the diversity approach has a positive view of the variety and diversity of the wide gamut of institutions of higher education. The proponents of this approach maintain that this institutional diversity contributed to major changes in the composition of the student population. It enabled a sharp increase in participation by those aged over 25 years as well as greater representation by those from minority ethnic groups and other under-represented sectors (Dey and Hurtado, 1999). Various representatives of this school of thought have maintained time and again that different institutions cater to different sectors of clients. The diversity of institutions is said to be 'horizontal', not necessarily 'vertical'. Hence, the system of higher education is neither stratified nor hierarchical by nature (Meek et. al., 1996; Goedegebuure et. al., 1993), in spite of the fact that the diversified institutions cater to and also reflect different socio-economic backgrounds.

The stratification approach has a different view altogether of the massification of higher education. Its general viewpoint is that higher education reproduces and reinforces class inequalities (Archer et al., 2003). It maintains that a strong correlation exists between the socio-economic profile of the students and the types of the institutions in which they study (Dougherty, 1994). The British system is cited as an example. There is a wide consensus that the British higher education system is highly stratified (Scott, 2002). The shift in the demand for general access to higher education transformed the face of higher education institutions there. On one side is found the old universities that were previously meant to serve the indigenous elites but later-on focused on excellence in research (Farnum, 1990; Jones 1988). On the other side is found a rather diversified assortment of institutions of higher education. Thus England can be found side by side with the traditional elite universities other kinds of higher education institutions, such as the civic universities, which came into being in the late Victorian era to provide local professional and commercial elites with alternatives to the old universities and to represent the growing power of industrial England; or the so-called 'Redbricks Universities' established in the wake of World War I; or the younger universities founded later on by successive governments longing to establish world-class science and technology universities (Scott, 1995). Thus, the colleges of advanced technology, now known as the technological universities came into being. Last but not least, in the 1960s the polytechnics were established. They were hailed as 'people's universities' (Scott, 2002).

This stratification is magnified by the Higher Education Council for England (HECE), which budgets the higher education institutions according to their achievements in research and teaching (Watson, 1999). Research carried out in England, Australia, Japan, France and the Netherlands led to the conclusion that in all these countries the higher education system is highly stratified in one way or another (Teichler, 1988).

As mentioned above, the British system is cited as an example. The British higher education system has undergone a period of considerable growth and expansion in recent decades. Yet, participation among non-traditional social groups remains persistently low in the United Kingdom (Archer, 2000). As is well known, this phenomenon is also echoed throughout many other industrialised countries (Goldthorpe, 1996; Hatcher, 1998; Scheuze and Wolter, 2000).

A survey carried out in England recently (Archer, 2000) found out that the majority of respondents claimed that only less prestigious universities are in fact accessible for working class students. Access to the so-called 'dream' high-status universities, was considered the domain of middle-class students, who had the necessary money and status, and whose families were able to plan ahead. Working class respondents, in comparison, recognised that a mixture of both social and

financial factors necessitate attending a local second-rate university. No wonder, then, that another recent research study revealed that while the two upper socio-economic groups in England account for about 39 per cent of all 18 year olds, some 70 per cent of acceptances to the older and more prestigious universities belonged to these two groups. They were clearly dominant in the high-status universities (Halsey, 1992).

The same holds apparently for the United States. Some claim that the prestigious public and private four-year colleges and universities have become more academically selective over the past 20 years or so. Consequently, the United States is fast retreating from affirmative action on behalf of the under-represented groups in higher education. The social policy tools supporting inclusiveness in the high status institutions of higher education have been eroded over the past two decades (Mortenson, 2000).

All in all, therefore, the mere massification of higher education did not open the gate to real equal opportunity in education (Bok, 1998). Rather, it exacerbated a situation that could be judged as problematic to begin with.

Indeed, in this context attention has been drawn to the view (Brown, 1997), that in an elite system of higher education, the possession of higher qualifications is conducive to gaining access to the coveted professional and managerial occupations. On one hand, the growing competition for academic credentials is an uncontested social reality in the context of thorough scrutiny of employers, due to heavy rush for graduate education. On the other hand, the over-supply of graduates – the natural outcome of higher education massification – has accelerated a new problem: that of so-called 'credentials inflation' (Dore, 1976).

Credentials inflation in its turn contributed again to inequality in education. It has intensified competition for credentials from elite and most prestigious higher education institutions, since degree holders stand relative to each other in a hierarchy of both academic and social worth. The market naturally gives priority to status credentials. Hence, access to opportunities is influenced by the status of the diploma gained, while the latter is directly influenced by the status of the institution granting the diploma. There is no equal access to the prestigious and most sought after institutions. Therefore, the higher education system has not turned to be the 'big equaliser'. Rather the opposite, it fulfils the task of the 'gate-keeper'.

In any case, nobody contests the fact that massification of higher education was intended to implement a policy termed in Australia as *"Knowledge Nation"* (Breen, 2002, p.18), and has been defined elsewhere as a governmental commitment "to the principle that anyone who has the ability to benefit from further and higher education should have the opportunity to do so" (The Scottish Office, 1998, Section 6.19) or as an intent meant at "widening of access to higher education by under-represented groups as one of the key challenges facing the sector" (SHEFC, 1999).

EXPANSION OF THE HIGHER EDUCATION SYSTEM IN ISRAEL

Israel is a good case in point in this respect. Its system of higher education has undergone vast expansion and major changes since the early 1990s.

The foundations of the higher education system in Israel were laid in the 1920s when the Technion (Israel Institute of Technology) and the Hebrew University were opened in 1924 and 1925 respectively. When the State of Israel was established in 1948 these were the only two institutions of higher education in the country. The increase in population, as well as economic and social developments, led to a demand for higher education and, in response, five new universities were established during the 1950s and 1960s: Bar-Ilan University, Tel-Aviv

University, the University of Haifa, Ben-Gurion University of the Negev, and the Weizmann Institute of Science (CHE, 2003).

From the mid 1970s there was an additional stage of development and diversification in the higher education system in Israel. The Open University began to operate and its operation soon extended to all parts of the country. At the end of the 1970s teacher training in Israel also underwent a process of academisation. The formerly post-secondary teacher training seminaries turned into teacher colleges – institutions of higher education granting B.Ed. diplomas to their graduates.

During the 1990s the higher education system underwent further expansion, when the tenth amendment to the Council for Higher Education Law made possible the launching of various academic colleges: general colleges, technological colleges and colleges specialising in one particular profession or discipline. In 2002, the higher education system in Israel comprised eight universities, 24 fully accredited academic colleges, 26 academic teachers colleges and 12 academic programs at regional colleges for which universities were academically responsible (CHE, 2003).

When the State of Israel was established in 1948 there were about 1,600 students in the two institutions of higher education, and by the end of the first decade of statehood the number of students had increased to about 9,000. During the 1960s there was a rapid growth (about 14 per cent per year) in the number of students, and in 1970 there were more than 35,000 students in the higher education system. This rapid growth of student numbers continued during the 1970s and by 1980 reached 56,000. During the 1980s growth tapered off to about 2.5 per cent per year and in 1990 there were 76,000 students in the higher education system (CHE, 2003).

Since 1990 the institutions of higher education have expanded their activities significantly. The number of students, at all degree levels (bachelor, master and doctorate) increased from 76,000 in 1990 to 180,229 (not including Open University students) in 2002.

The most significant phenomenon is that commencing from the 2002/03 academic year, the number of undergraduate students in the colleges is greater than that in the universities. This is considered a tangible expression of greater access to higher education for wider segments of the population (Brodet, 2003). It ostensibly facilitates a process that opens the gates of higher education to students previously excluded from academic tertiary education. The most significant fact in this respect is that the rate of rejected student applications dropped from 30 to 34 per cent in the 1990s to a mere 19 per cent in 2000 (Kimmerling, 2000). This is exactly what the Council for Higher Education had in mind when it allowed a whole array of colleges in the early 1990s to grant academic diplomas. That decision was accompanied by an explanation (PBC, 1997) to the effect that the Israeli higher education system would henceforth comprise **'**two tiers'. The first tier includes the universities. It was meant to concentrate on research advanced degrees. The second tier includes the colleges. It was meant to help actively in the implementation of the principles of social justice and equality by enhancing the enrolment rates of various peripheral social groups or categories within the society as already mentioned. As succinctly summed up by the Regional Colleges Association in 1992:

> Currently, the number of potential students refused admission by the universities is estimated at 25,000. This intolerable situation has led the regional colleges to a decision to invest additional resources in order to absorb another 15,000 students by the end of the decade, thus participating in the national effort to solve serious problem of lack of space for undergraduate students. (The Association of Regional Colleges, 1997)

On the whole, then, the Israeli higher education is defined as a dichotomous or binary system (Guri-Rosenblit, 1996, Guri-Rosenblit, 1999). The universities mainly pursue the so-called

'autonomous functions' (Trow, 1970): inculcation of high culture, facilitation of science through research, and moulding and granting credentials to elite groups. The colleges mainly pursue the so-called 'popular functions' (Trow, 1970). These include exposure of new sectors of the population to the contents of high culture, granting diplomas necessary for securing a decent job, supplying practical services based on knowledge and information to the community.

It is precisely this dichotomy that gave rise to a heated debate. Some researchers claim, as mentioned, that the binary system is conducive to enhancing equal opportunity in higher education (Guri-Rosenblitt, 1996, Guri-Rosenblitt, 1999). Others state that there is no real equal opportunity in the higher education system as of now. The centre's chances to avail itself of the new opportunities are much bigger than those of the periphery. Students originating from higher-status families, members of the privileged ethnic groups, and graduates of the academic track have better odds of tertiary education (Ayalon and Addi-Raccah, 2003). Moreover, colleges indeed provide the lower educational strata with an alternative to the selective universities. However, only the affluent classes can use them to attend highly desirable fields of study (Shavit et al., 2003). The private colleges marketing these desirable fields of study are not subsidised by the government. Hence, tuition is much too expensive for the rank and file to attend them. Still others maintain that the colleges are bound to grant second-class higher education to peripheral groups in the Israeli society (Swirski and Swirski, 1998).

THE IMPACT OF THE TRANSFORMATION ON THE ISRAELI DISADVANTAGED POPULATION

In the wake of the debate mentioned above several questions ought to be asked:

1. Has the recent transformation in the Israeli higher education system increased the odds of higher education attendance?
2. Has it indeed reduced social selection in higher education?
3. Has the transformation really equalised opportunity to attain access to the most desirable fields of study, or have opportunities primarily been expanded in the least selective fields?
4. Last but not least, is the opportunity supplied by the new colleges' tier inferior to that supplied by the veteran universities?

Official data published by the CBS (Central Bureau of Statistics) show that in 1989/90 the number of students studying for the first degree in universities was five times higher than in other institutions for higher education. In 1994/95 the ratio was 3:4. In 2000/01 it dropped to 1:3 (CBS, 2002, 4, XIII). As mentioned, in 2002/03 the number of undergraduate students in the colleges surpassed that in the universities (Brodet, 2003). On the whole, it should be recognised that during the 1980s and 1990s Israeli higher education changed dramatically. The number of students tripled and the odds of attending higher education grew by 50 per cent (Shavit et al., 2003). It should be noted that the veteran universities were hardly affected by this change. They grew just enough to accommodate demographic growth. The added increase in attendance was taken up by the new second-tier system of public and private colleges. From 1989/90 to 2000/01, enrolment in first degree programs at the colleges increased by an average of 19.2 per cent per year, whereas enrolment in first degree programs at universities increased by a mere 3.6 per cent per year, as presented in Table 2. Between 1991 and 2001 the number of undergraduate students in the colleges grew more than ten times. In three popular subjects, business administration, law and applied art, the number of undergraduate students in the colleges is now greater than in the universities (CBS, 23.2.2003). In other words, the growth rate of the colleges was 5.3 times that of the universities (CBS, 2002, 4, XIII). In the 1999/2000 academic year, colleges existed in 15 localities that were spread over six Districts, compared with nine localities spread over three Districts (Central, Tel-Aviv and Jerusalem) in 1989/90 (CBS, 2002, 19, XV).

Table 2. Students enrolled in the first degree programmes by type of institution, during 1989/90 to 2000/01 academic years

Year	Total No.	Universities %	Colleges %	Open University %
1989/90	68,253	68.8	12.1	19.1
1990/91	74,070	65.8	12.9	21.3
1991/92	84,190	64.1	14.6	21.3
1992/93	91,657	64.0	15.3	20.7
1993/94	99,775	63.3	16.9	19.8
1994/95	109,778	60.8	17.7	21.5
1995/96	120,039	57.4	19.8	22.8
1996/97	130,394	53.9	24.2	21.8
1997/98	144,121	50.3	28.5	21.2
1998/99	153,591	48.1	30.9	21.0
1999/2000	159,867	46.4	33.3	20.3
2000/01	165,980	44.6	34.4	20.9
% Annual change	**7.9**	**3.6**	**19.2**	**9.3**

Source: CBS, 2002, 4, XIII

The crucial question is whether there is any difference in the profile of the undergraduate students attending the two different tiers. The CBS data indicate that the profile is indeed somewhat different. The first difference is in the students' age composition. The median age of the colleges' students is higher than the universities' students (26 versus 24 years). The frequency group of the colleges' students in 2000/01 was the 25 to 29 year-old age group. It constituted 44 per cent of the whole student body. Yet, this very age group constituted a mere 25 per cent of the universities' students (CBS, 2002, 19, 16). What is more, the rate of the relatively elderly students (30 plus year-old age group) at the colleges is almost twice that at the universities (14% versus 7.5%) [ibid]. It is the other way round in so far as the youngest age group of students (19 to 24 years) is concerned. Its weight at the universities (67%) is very much higher than at the colleges (38%) [ibid].

It can therefore be deduced that the colleges offered a so-called 'second opportunity' to a significant number of their students to gain access to higher education after having missed it before. The relative weight of those who got that opportunity at the universities is much smaller. This is due to the fact that enrolment is much less selective at the colleges. It is also due to the fact that the colleges reach out to these so-called 'ripe' age groups, offering them special programs.

The second significant difference is in the students' ethnic profile. In many societies ethnicity plays an important role in stratification. Most Israeli sociologists have taken the ethnic cleavage to be one of the main axes of stratification in Israel. On the whole, it is acknowledged that the Western segment of the Jewish population occupies more desirable social positions than the Orientals. The latter constitute the majority among those regarded as the social periphery (Yaish, 2001; Ben-Refael and Sharot, 1991; Smooha and Kraus, 1985). The CBS data draw attention to several interesting points in this respect. First, there is no significant difference in the 'Sabras' (students born in Israel) rate in the two tiers. Second, the rate of Oriental students (those who trace their origins to Middle Eastern and North African countries) studying at the colleges is higher than that of the Western students (those who trace their origins to Euro-America). Thus, in 2000/01 32 per cent of the Oriental undergraduates studied at the colleges, as against a mere 25 per cent of the Western students who studied there. In simple words that means that a third of all undergraduate Oriental students were enrolled in the colleges as against a quarter of the Western undergraduates (CBS, 2002, 19, 17). This means, once again, that the colleges offered the peripheral group an easier access to higher education. It certainly used that so-called 'opportunity window' to its advantage.

In a recent study a team of Israeli researchers, who looked at the effects of the expansion of Israeli higher education on ethnic inequalities in attendance rates, reached an interesting conclusion. It

found that as the system expanded all ethnic groups increased their enrolment rates. However, increases were most pronounced among the more privileged ones (Bolotin-Chachashvili et al., 2003). Yet, the CBS figures reveal, as already mentioned, an important fact, about two thirds of the students attending the colleges are enrolled in the highly coveted subjects of engineering and architecture, law and business administration. About 64 per cent of the Oriental students enrolled in the colleges in 2001 studied these popular subjects (CBS, 2002, 19, 17). It can be concluded, therefore, that a large proportion of the peripheral group gained an opportunity to earn a degree in a prestigious subject previously effectively closed to them.

The third difference is in the geographical profile of the students. There are six districts in Israel. Geographically seen, the two peripheral districts in the country are the Northern District (with 17% of the Israeli population in 2002) and the Southern District (with 14% of the population) [CBS, 2003]. Altogether, 31 per cent of the population might be defined as geographically peripheral therefore. It should be noted, though, that these two districts are concurrently defined as socio-economically peripheral as well. The CBS arrived at an aggregate ranking of local authorities in Israel, based on a complex list of socio-economic indicators. All the local authorities in the country were consequently divided into ten clusters according to their ranking order. Cluster 10 includes the highest-ranking local authorities. Cluster 1 incorporates the lowest ranking authorities (CBS, 2002).

The two peripheral districts turned out to be the most disadvantaged. More than 65 per cent of the local authorities in the Southern District are to be found in the three lowest clusters. A mere 13 per cent are to be found in the two uppermost clusters. Almost 60 per cent of the local authorities of the Northern District were likewise to be found in the three lowest clusters. Barely 10 per cent were to be found in the two highest clusters (CBS, 4.3.2002). No other district comes close to that disadvantaged profile.

The question that ought to be posed here, is to what extent have the new colleges benefited the peripheral districts by improving the chances of their residents gaining access to higher education. The answer seems to be clear: a rapid development of publicly funded colleges occurred from the early 1990s within the framework of a declared policy to transfer educational resources from the centrally located districts to the periphery, namely, the Northern and Southern Districts. Establishing colleges in the peripheral regions was specifically designed to enable these population groups to obtain academic education at a lower cost per student (CBS, 2002, 19, XIV). Data indicate that the overall number of students whose domicile was in the Northern and Southern Districts amounted to 26,621 in the academic year 2000/01. Out of these, 6,650 (25 %) studied at the colleges (CBS, 19, 19). Moreover, between 1995/6 and 2000/01 the rate of the peripheral students studying at the colleges doubled. It stood at 11 per cent in 1995/96, it was 22 per cent in 2000/01 (CBS, 2002, 19, 18). Last but not least, as it turns out, 5,024 students residing in the Northern and Southern Districts attended local colleges in the academic year 2000/01 (CBS, 19, 37). They comprised the great majority of the students enrolled in these colleges. Hence, it seems safe to surmise that the availability of local colleges greatly enhanced the access to higher education. Bearing in mind the socio-economic profile of the population in the two outlying districts, the local colleges certainly facilitated enrolment of students who would have otherwise missed the opportunity of higher education.

Bearing in mind that educational opportunities were broadened and educational attainment rates among the disadvantaged groups (working-class and minority students) have also been raised, attention should be now drawn to the reduction in inequalities. A recent hypothesis, known as MMI (Maximum Maintained Inequality), was developed in the early 1990s (Raftery and Hout, 1993). It strongly negates the assumption that the expansion of educational systems decreases social gaps *per se*. Indeed, the MMI hypothesis claims that new educational opportunities tend to

be exploited first and foremost by less able students from privileged groups rather than by members of peripheral strata. The first, who possess more material (and perhaps also cultural as well as cognitive) resources are able to take better advantage of the new educational opportunities. Social background advantages seem to work effectively and continuously for the children of advantage, to secure advantaged locations of their own (Lucas, 2001). According to Raftery and Hout (1993), the advantage of the dominant, centre groups in enrolment is retained until the participation of its members reaches the point of saturation. Only at that point will an additional expansion of the education system contribute to the decrease of social inequality in enrolment. The MMI hypothesis gained support from numerous studies (for example, Mare, 1981; Smith and Cheung, 1986; Shavit and Blossfeld, 1993; Gerber, 2000). They all showed that educational inequalities tend to persist in spite of the expansion of educational systems. The MMI hypothesis may be particularly relevant to higher education, where students and parents of different social strata vary in their familiarity with the system. Consequently, members of the privileged groups are considerably better at manipulating the system to meet their goals (McDonough, 1997).

CBS data lead to four important conclusions in this respect. First, the rate of the two lowest socio-economic clusters among college students in Israel is negligible. They constituted a minuscule 1.7 per cent in 2000/01. Second, the four uppermost clusters constituted a massive majority of 60 per cent in that year (CBS, 2002, 19, 34). Third, data indicate that colleges are dominated by the middle class. The four middle-class clusters, 5 to 8 constituted a 69 per cent majority in 2000/01. Fourth, the socio-economic constitution of the colleges' students has changed over time. The rate of the lower strata (clusters 1 to 4) rose from 5.4 per cent in 1995/6 to 13 per cent in 2000/01; a 230 per cent growth over a five year period. The rate of the top two clusters (9 and 10) declined over the same period from 23 per cent to 19 per cent. Also the middle class declined, from 72 per cent to 69 per cent. Succinctly put, it seems that as the rate of the privileged groups declines over time, the underprivileged peripheral groups gain weight over time.

However, as mentioned above, this is not the whole picture. Whereas colleges do provide the lower educational strata an alternative to the selective universities, the affluent classes have a much better advantage to use them to attend highly desirable fields of study. Since the private colleges marketing these desirable fields of study (law, business and behavioural sciences) are not subsidised by the government, tuition there is much too high for working class students.

No wonder that the socio-economic profile of the students in the private colleges (who made up 40% of all college students in 2001/02 (CBS, 23.2.2003)) reflects the well-to-do population segment. The four top socio-economic clusters (7 to 10) constituted 67 per cent of their students in 2000/01. In the public colleges their rate was much smaller, at 52 per cent. On the other hand, the two lowest clusters (1 and 2) accounted for a negligible 0.8 per cent in the private colleges as against 2.5 per cent in the public colleges. The rate of the two top clusters (9 and 10) was 23 per cent in the private colleges as against 15 per cent in the public colleges (CBS, 2002, 19, 34). In view of these data, no wonder some reached the conclusion that the privatisation of higher education through the formation and rapid expansion of private colleges has so far increased inequality between economic strata in access to higher education, exactly in line with the MMI hypothesis. Perhaps more importantly, it increased inequality in access to the more lucrative fields of study (Shavit et al., 2003b).

THE COLLEGE, DISADVANTAGED POPULATIONS AND IMPROVED ACCESS TO HIGHER EDUCATION

In view of all this, it has been decided to examine how the educational stratification process at the tertiary level is reflected in the largest public college in the country (henceforth referred to as the College). The College was established in 1982. It is located in a small, lower middle-class town of about 20,000 inhabitants, 40 km east of Tel-Aviv. Initially it operated as a regional college – an

extension of the Bar-Ilan University. Later, autonomous departments were developed and the College was fully accredited and authorised by the Council for Higher Education to grant first-degree diplomas. The College nowadays encompasses 19 departments (13 of which are autonomous). It grants academic degrees in engineering, architecture, social sciences and humanities, natural sciences and para-medical studies. The academic enrolment numbered 3,900 students in the 2002/03 academic year and almost reached the 5,500 enrolments in the second semester of the following academic year.

The examination is based on a 2002/03 survey of a random sample of 630 freshmen (out of 1,800 freshmen, 250 of whom enrolled at the Bar-Ilan University extension operating on the campus). The students were asked to fill in questionnaires administered to them in class and the numbers are presented in Table 3. Certain figures were complemented by administrative data available at the registrar's office.

Table 3. First degree students at the College (2002/03) and in other institutions of higher education by age group (1999/00)

Age group (N=596)	The College[1] %	Universities[2] %	Accredited colleges[2] %
18-24	50.7	67.0	38.0
25-29	34.2	25.4	44.0
30-34	5.5	3.4	6.7
35+	9.5	4.1	7.3
Total	100.0	99.9	96.4
mean	26.1	23.9	26.1
Standard deviation	5.94		

Sources: [1] College survey, [2] CBS, 2002, 19, 16.

Following the analysis that dealt with the national level, an attempt is made to evaluate the age breakdown of the college students, their ethnic profile, their geographical origins, their socio-economic background, and lastly, their high school record. All these parameters should facilitate an objective evaluation of the College contribution to enhancing access of the underprivileged groups to higher education.

As far as the age composition of the College students is concerned, the survey draws attention to two interesting points. First, the frequency group at the College is the 18 to 24 year-old age group. This is similar to the university. Yet, its rate is much smaller than in the universities (51 versus 67% respectively). Second, the rate of the elderly students (30 plus year-old age group) enrolled at the college is double that in the universities (15 versus 7.5% respectively). Consequently, it can be said that in this respect the College does offer a 'second opportunity' to a large segment of its students, who might have missed higher education altogether were it not for the College.

As already mentioned, the representation of Oriental Jews in the universities falls short of their share of the relevant age group. In the academic year 1995/96 they accounted for 26 per cent of university students as against 40 per cent of the 20 to 24 year-old age cohort (Swirski and Swirski, 1998, p.17). Western Jews were 43 per cent of Jewish university students and 33 per cent of the age group. The under representation of the Oriental Jews in universities reflects the social stratification in the country. It is one of the problems meant to be rectified through the establishment of the colleges.

The ethnic profile of the College students resembles the profile of the college students nationwide. Data published by the CBS indicate that by 1992 only 30 per cent of the Oriental holders of matriculation certificates began to attend universities as against 46 per cent of their Western counterparts (Swirski and Swirski, 1998, p.17).

The survey's data, presented in Table 4, indicate that whereas in the universities there is a 14 per cent difference in the relative weight of the two ethnic groups in favour of the Westerners, this difference is minimised to a mere 2.1 per cent in the College.

Table 4. First degree students at the College (2002/03) and in other institutions of higher education (1999/00) by ethnic group

Ethnic group (N=612)	The College[1] %	Academic colleges[2] %	Universities[2] %
Israeli (2nd generation Sabras)	38.1	37.1	36.1
Orientals	29.9	30.2	24.9
Westerners	32.0	32.7	38.9
Total	100.0	100.0	99.9

Sources: [1] Survey, [2] CBS, 2002, 19, 17.

Attention should be drawn in this context to the fact that the field of study is an important factor both in terms of socialisation and the shaping of life prospects (Van de Werfhorst, 2001). The question is, therefore, to what extent has the College helped in facilitating alteration of access to different categories of fields of study. The survey's data indicate very clearly that the College has indeed opened an 'opportunity window' for Oriental students. Thus, 36 per cent of the first year students in Architecture are Orientals, as well as 36 per cent of the Economics and Business Administration students. These are two fields that are in high-demand. Their share in the College departments is much higher than in either the universities or the colleges as a whole. Data indicate that the Orientals' share in the field of Economics and Business Administration was 11 per cent in the colleges (CBS, 2002, 19, p.17) and 26 per cent in the universities (Ayalon and Yogev, 2002). The Orientals' share in the field of Architecture was 14 per cent in the universities and 24 per cent in the colleges (Ayalon and Yogev, 2002). In this sense, then, the College does help to moderate ethnic inequalities in enrolment.

As mentioned above, the College is located in the central part of the country, about 40 km. east of Tel-Aviv. No wonder, therefore, that most of the enrolments are from two adjacent Districts: Central and Tel-Aviv. Nevertheless, the available data indicate that the College serves the two peripheral districts, the Northern District and the Southern District to a much larger extent than most of the colleges located in the Tel-Aviv and Central Districts. In the academic year 1999/2000 12 per cent of the College students were residents of the two peripheral districts. Beside the College there are 12 other colleges in the two central districts. Five of these colleges accommodated a higher rate of peripheral students than the College. However, three of them are private colleges of Law, a most prestigious subject that is very popular with students who can afford the high tuition fees.

Once again, the figures presented in Table 5, point at the fact that the College is definitely instrumental in enhancing the chances of peripheral populations to gain access to higher education.

The last parameter to be tackled in this context is the socio-economic profile of the College students and is presented in Table 6. As already mentioned, data indicate that the rate of the two lowest socio-economic clusters among college students in Israel is negligible, it stood at 1.7 per cent in the 1999/2000 academic year. The same holds up for the College, where the percentage according to the survey is 1.6. Moreover, whereas the rate of the lower and lower-middle class students (clusters 1 to 6) in the colleges stood at 41 per cent in the 1999/2000 academic year (CBS, 2002, 19, 19), it was much higher at the College in the 2002/03 academic year, where it stood according to the survey at 53 per cent. These figures clearly support the hypothesis that the College contributes to the reduction of inequalities between social strata in attendance of higher education. The College is definitely attended by economically weaker strata than those attending not only the universities but also many of the colleges. It becomes much clearer when the rates of the two top socio-economic strata (clusters 9 and 10) at the College (a mere 1.3%) are compared to that in the colleges (19%) (CBS, 2002, 19, 34). In fact, the negligible rate of the two upper clusters at the College is its most outstanding feature.

Table 5. Students in colleges by institution, district of institution and district of residence, 1999/2000

Institution and District of Institution	Northern District %	Southern District %
Central district		
Netanya Academic College	11.0	3.7
Ruppin Academic Center	15.1	3.7
Sha'arei Mishpat – The Academic College of Law	9.2	6.1
Tel-Aviv district		
Tel-Aviv Academic College of Engineering	5.1	6.4
The Academic College of Law	6.2	14.7
The Academic College of Tel-Aviv-Jaffo	3.5	3.9
The College of Management – Academic studies	4.2	6.1
The Interdisciplinary Center	5.0	3.8
The Holon Academic Institute of Technology	3.6	6.9
SADNA, College of Architecture and Design	1.4	1.4
Shenkar- School of Engineering and Design	7.0	6.8
The College	5.7	6.6

Source: CBS, 2002, 19, 38.

Table 6. Students in the College (2002/03) and other colleges (1999/2000) by socio-economic cluster

Socio-economic cluster	The College[1] %	Public colleges[2] %	Private colleges[2] %
1+2	0.7	2.5	0.8
3+4	9.5	12.6	8.9
5+6	42.9	32.8	23.4
7+8	45.6	37.2	43.9
9+10	1.3	14.8	23.0
Total	100.0	99.9	100.0

Sources: [1] From raw data, Registrar's Office, [2] CBS, 2002, 19, 34.

The students' socio-economic profile is also reflected in their parents' education, as presented in Table 7. This is very significant, because the effect of parental education is positive and strong on students' educational attainment (Shavit et al., 2003; Ayalon and Shavit, 2001). Since education and socio-economic profile are very strongly correlated in Israel, parents' education assumes primary importance. In a very detailed study (Ayalon and Yogev, 2002) a strong correlation was found to exist between parental education and the type of higher-education institution attended by the students. Thus, the mean education of the father of an elite university student stood at 14.5 years, the mean education of the father of a regional college student stood at 12.4 years, the mean education of the father of a teaching-college student stood at 11.9 years (Ayalon and Yogev, 2002). A similar picture emerged from a comparative research published two years earlier (Frenkel, 2000). Our survey at the College indicates that parental education of this institution's students is lower than that found at either the university and the regional college covered by Frenkel's sample. Whereas the rate of fathers with tertiary – non-academic and academic-education stood at 70 per cent at the university and at 53 per cent at the regional college, it was a mere 41 per cent at our College.

Table 7 strongly indicate that the colleges are substantially less selective on parental education than the universities. Our College turns out to be even less selective on parental education than are the colleges on the whole. In this sense it offers a second chance to underprivileged segments of the population that had no access to higher education before.

As already noted, the expansion of higher education in Israel over the last decade has been by and large accomplished through the establishment of second tier degree-granting colleges. Being academically less demanding, at least as far as enrolment is concerned, they provide opportunity to get an academic degree, and attract less able students, lacking in cultural resources (Shavit et al., 2003; Ayalon and Yogev, 2002). The survey carried out by Ayalon and Yogev established the

fact, that while the mean matriculation mark of the elite universities students was 100, it was 98 in the ordinary research-universities, 92 in the professional private colleges, and 87 in the other colleges (Ayalon and Yogev, 2000, p.38).

Table 7. Parental education of the College students (2002/03) and two other institutions of higher education

Father's education	The College[1] %	University[2] %	Regional college[2] %
No formal education	0.0	0.8	1.1
Elementary school	9.9	5.1	14.6
Secondary school, no matriculation	28.0	11.5	14.6
Matriculation	18.9	12.6	16.9
Tertiary, non-academic	-	26.1	29.2
Tertiary- Academic	41.4*	43.8	23.7
Yeshiva	0.7	-	-
Other	1.2	-	-
Total	100.1	99.9	100.1

*This figure includes also tertiary, non-academic fathers.
[1] Survey, [2] Frenkel, 2000, 36.

Enrolment data, presented in Table 8, show that the mean matriculation mark of the College's freshmen stood at 89.9. Yet, the data also reveal that 18 per cent of the freshmen did not possess a matriculation diploma. In this respect too, the College was demonstrably much less selective than the universities, allowing access to higher education to populations who would otherwise be excluded from institutions of higher education.

Table 8. Eligibility to matriculation diploma among freshmen at the College (2002/03)

Eligibility status (N= 630)	Frequency	%	Valid %	Cumulative %
Posess matriculation diploma	507	80.5	81.8	81.8
Academic prep-course	23	3.7	3.7	85.5
Age over 30. No diploma	18	2.9	2.9	88.4
1 matriculation-mark missing	13	2.1	2.1	90.5
2 or more marks missing	6	1.0	1.0	91.5
Possess previous academic credits	27	4.3	4.4	95.8
Possess practical-engineers or technician diplomas	26	4.1	4.2	100.0
Total	620	98.4	100.0	
Missing system	10	1.6		

Mean = 89.9; Std. Deviation= 7.82; Source: Survey

Last but not least, 47 per cent of the surveyed students stated that the College was not their first choice: 59 per cent of these students explained that they enrolled there after a university had rejected them. No doubt, then, that the College offers a second choice to a large number of students, who would have no real chance to study in a university. In this respect it fulfils an important social role.

SUMMARY

Like many other Western countries Israel is undergoing a speedy process of what could be termed as massification of the higher education system. The inauguration of public and private colleges as well as the academisation of the teaching profession brought about a dramatic increase in enrolment in degree programs. During the 1980s and the 1990s the number of students tripled and the odds of attending higher education grew by 50 per cent. In 2002 the higher education system in Israel comprised eight universities, 24 fully accredited academic colleges, 26 academic teachers colleges and 12 academic programs operated by various universities at extensions in regional colleges.

Yet, like in many other countries, Israel's diverse social groups are unequally represented in the students' body, which has so far been strongly tilted in the direction of the privileged strata of

society. Clearly, the accreditation of the colleges has given the country a larger, more diverse system of higher education. It has also created scholastic opportunities for new sectors of high school graduates. The public colleges represent the 'grass roots' academia, a term coined by a well-known Israeli sociologist of education (Swirski and Swirski, 1998, p.10). They are expected to take in much of the anticipated increase in Israel's student population. The purpose of the Israeli colleges from the outset was to serve the periphery (geographical as well as social) and enhance equal opportunity to gain access to higher education. The colleges were meant to meet the needs of candidates who, "in terms of their achievements on the matriculation diploma and psychometric tests… do not meet the current admission terms of the institutions and the various faculties" (CHE, 1992, p.59).

This paper poses four pertinent questions in this respect:

1. Has the recent transformation in the Israeli higher education system increased the odds of higher education attendance?
2. Has it indeed reduced social selection in higher education?
3. Has it really equalised opportunity to attain access to the most desirable fields of study?
4. Is the new opportunity inferior to that supplied by the veteran universities?

The paper sought to answer the first three questions by analysing available data published by the CBS, and by employing additional data derived from a sample of 630 freshmen students enrolled at the largest public college in the country. The main conclusions arrived at are, that the system indeed increased the odds of participating in higher education. It clearly reduced social selection in higher education, and enhanced opportunities to attain access to the most desirable fields of study. This occurs except for the field of Law, which is taught only in the private colleges, where tuition fees are prohibitive. Consequently, in this field of study the gap between the haves and the have-nots is deepening. Peripheral populations definitely benefited from the establishment of a binary system of higher education in Israel. The last question posed is left open, since the available data published by the CBS so far do not include the necessary information needed to reach a conclusion in that respect.

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