

The growth of knowledge and inequality in New Zealand society

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Increasing inequalities are occurring in New Zealand society. In that they have uncritically responded to the marketplace demands of sophisticated technology and educated elites, librarians have some responsibility for the development of these inequalities. Librarians should respond to an "equality imperative" in their planning of library services, and the authors offer some specific suggestions to correct present trends.

Introduction

The editor of *New Zealand libraries* invited us to prepare an article on "implications for library planning of future New Zealand social systems and values". Though vitally interested in the future and ways of forecasting it, we are nevertheless sociologists rather than prophets. So we began in the conventional sociological manner by asking questions about what significant changes in the society are related to patterns of library development and how these would contribute to sketching some alternative futures for library planners to consider. Here is a brief over-view of our argument.

The great growth of library bookstock in New Zealand over the past 20 years or so has come about principally as a result of librarians responding to the demands of the increased use of technology in society; a technology that relies on practical and theoretical knowledge, and upon which a large part of the country's wealth is based. The

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trend is also reflected in changes in the occupational structure. These have been underway for at least all of this century so represent no new development either here or elsewhere in the industrialised capitalist countries. Thus the trends in the New Zealand social structure which we wish to identify and discuss in relation to library development are mainly some consequences of what we will call the *technological imperative*. In New Zealand it requires an integrated national library system, well-stocked with technological and other, especially theoretical, knowledge, that is designed for flexible use and is capable of achieving a rapid retrieval of information.

However the benefits accruing from the greater use of technology and knowledge have, since the 1950's, been distributed in New Zealand society with increasing inequality. The rich have got richer, and now also include among their numbers more people than before who have risen via their command of specialised knowledge. The growing gap between the wealthy and the others is partly produced by barriers to the acquisition of knowledge, particularly in the education system. But the ways in which books have been deployed through the library system as a whole, in general seem to contribute to the growing inequality.

Equality is a general value often thought to be widely held in New Zealand. It has been less vigorously put into practice in recent years. Unless particular efforts are made to implement this fundamental value, the technological imperative will be operated to increase inequality: perhaps more so in capitalist societies like New Zealand in which the profit motive and market-place decision-making prevail, but also, as we now know, in the most egalitarian socialist countries such as China. To be effective an *equality imperative* has to operate in all major institutional areas in a society, but especially should be present in the policies and priorities of central legislators and agencies of government which spend public money. As to library policies for New Zealand as a whole, our evidence suggests that in such crucial areas as book purchasing, the deployment of library resources, and in the delivery of library services, librarians have, with some exceptions, simply responded to demands, mostly from the educated elites, and in this way have buttressed inequality.

Our thoughts about alternative futures for library development arise from consideration of the trends just sketched. We agree that library planners must keep responding imaginatively and skilfully to the technological and related demands, and will draw attention to some problems in this regard. But we consider that the continued lack of central concern for the equality implications of libraries policy will contribute to a kind of New Zealand society that few of us would wish to see. We will offer some suggestions for discussion of this important issue.

What follows is in no way a finished piece, but rather a fairly brief statement of what turns out to be work in progress. Much remains to be done with respect to understanding the large-scale

social changes in New Zealand society; changes in culture, the notion of equality itself; and to the implications of these for library work. Our evidence is in some cases fairly conclusive, in others sketchy and unsatisfactory. But despite the shortcomings, it points consistently in the same direction. In addition it is suggestive of much other work that needs to be done. Though what we have written relates to the topic given us, somewhat as part does to whole, we believe that it may be interesting and useful to librarians. We must record here our debt to the editor for setting us off on such a fertile track.

There are three main sections to this report. Part I deals with structural changes in New Zealand society and provides evidence of increasing income inequality. Part II analyses an aspect of library development and gives information about patterns of use at libraries in Auckland. In both respects trends of growing inequality are shown. In a final section we outline our views on prospects for the future.

Part I: Changes in New Zealand Society

Growth of the tertiary sector

Like all other high-consumption capitalist societies, New Zealand has during this century exhibited a steady movement of the work force away from primary industries and into the tertiary sector, as Table 1 shows. In the United States a decline in the secondary sector is also now evident (1), but the trend is not so clear yet in New Zealand.

Industrial Sector	1901	1921	1951	1971
Primary	27.7	24.8	18.6	12.7
Secondary	35.0	29.4	34.3	32.6
Tertiary	35.2	42.2	46.4	53.6
Unclassifiable	2.1	3.6	0.7	1.1
Total	100.0	100.0	100.0	100.0

Note: The drop in the secondary sector in 1921 is probably accounted for by economic depression in that year.

(Source: Census of population and dwellings, 1901-1951; Monthly abstract of statistics, for 1971 data.)

Table 1: Percentage of labour force in major industrial sectors, 1901-1971.

Primary industries include agriculture, mining, hunting, and fishing. Secondary industries comprise manufacturing and construction. Thus these two groups contribute directly to productivity and the creation of capital assets. By contrast, the tertiary sector (public service, teaching, nursing, wholesale and retail, banking, insurance, finance, trans-

port and communications, and other service industries) make no direct contribution to the formation of fixed capital. At the same time, in any sophisticated economy, it facilitates such capital formation to a degree that would not otherwise be possible. The use of the table, however, is to point up three facts.

1. The largest growth in labour force distribution has been in a sector which, while it uses large amounts of capital, does not contribute to fixed capital formation. Yet it now employs more than half the labour force. Hence the proportion of employed persons in this sector is an index of a country's material prosperity (2).

2. The reduction in labour force in the primary sector is accompanied by increasing national wealth a fact that needs some explanation. Since increasing labour input is ruled out, the only other possibilities are rising amounts of capital input, plant and equipment, i.e., a move from labour-intensive to capital intensive industries, and increasing *quality* of labour. All of these things have in fact occurred and it has been shown that they are jointly necessary to account for the actual increases that have occurred in the Gross National Product (G.N.P.) (3).

3. A moment's reflection suggests that a very large part of economic growth must therefore rest upon technological growth, and indeed, some economists have held that technical change and improvement in labour force quality have accounted for about 90 percent of increased economic growth in recent decades, while increases in the quality of school leavers alone have explained nearly 40 percent of growth in G.N.P. (4).

These considerations indicate plainly that increases in the G.N.P. have been marked by the growing use of knowledge and information more than any other single factor. It is true that not all (though a majority) of those who have the knowledge and information required by the economy are in the tertiary sector. But it is also true that the latter sector is largely responsible for what knowledge and information is available, since all the educational, training, and library institutions are in that sector. Hence, directly and indirectly the increasing demand of the economy for information and educated manpower explains and is explained by the rapid growth of the tertiary sector.

As in other similar countries, New Zealand has benefited from this interaction of economic and knowledge growth, not least in terms of a higher standard of living—though we see increasing indications that our gains are the losses of other, Third World, countries. But it begins to look as if, even in New Zealand where we profess to be more egalitarian than most other countries, the gains are being distributed in a more and more unequal way. Thus two related trends demand consideration: the increasing consumption of knowledge, and the growth of inequality. We shall now discuss these.

Knowledge and inequality

In the labour force as a whole, the occupations which depend most on knowledge are those in the professional-technical and administrative-executive groups. These have been growing faster than the others, as Table 2 indicates. (This table may be taken only as an indication of the trend that has occurred. All changes in the different ways jobs were classified in the two censuses have not been taken into account.)

Occupation Group	1951	1966
	%	%
1. Professional, technical and related workers	7.1	10.1
2. Administrative, executive, senior officials, and proprietors	2.2	5.9
3. Clerical and sales	22.4	22.0
4. Transport and communications	5.6	5.9
5. Craftsmen, process workers, and labourers	34.6	34.7
6. Service workers	7.0	6.3
7. Other (including all workers in rurally-based occupations)	21.1	15.1
Total actively engaged	100.0	100.0

(Source: *Census of population and dwellings, 1951 and 1966.*)

Table 2: Changes in the occupational distribution of the labour force, 1951 and 1966.

The main point to be noted is the growth of the first two occupational groups which are also the greatest users of higher education. Table 3 gives the details. It shows that the proportion of those in the

Occupation Group	Income Category (%)				Number with degrees or diplomas	% with degrees or diplomas in the total group
	> \$1,000	\$1,000—\$2,999	\$3,000—\$5,999	\$6,000 and over		
Administrative, executive, directors, managers n.e.c. — — — — —	0.4	4.9	32.9	61.8	2,550	6.7
Employers and own account (other than professionals) — — — — —	4.0	40.1	35.4	20.5	1,148	0.9
Professional, technical and related — — — — —	4.7	29.7	45.8	19.8	20,624	19.9
Farm managers and workers — — — — —	9.0	62.7	25.6	2.7	687	1.2
Clerical and Sales — — — — —	7.2	50.3	38.9	3.6	2,378	1.1
Other (including transport, crafts, labourers service workers, and armed forces, — — — — —	14.0	35.4	45.4	5.2	658	0.1
Total labour force — — — — —	16.7	67.4	12.7	3.2	28,045	2.8

(Source: *Census of New Zealand Population and Dwellings, 1966, Vols. 5 and 6.*)

Table 3: Economic classification of labour force with university degree or diploma, 1966.

administrative-executive group with a degree or university diploma, is two and a half times that for the labour force as a whole, and nearly six times that for farm managers and workers (the next highest users). Professional-technical workers with degrees, etc., outnumber the labour force in general more than seven times.

As one would expect on the basis of the preceding discussion, the highly educated have been the substantial beneficiaries in New Zealand's growth. Reference to Table 3 shows that in the administrative-executive group, 61.8 percent of those with university qualifications earned \$6,000 or more in 1966. This is more than nine times their representation in the group as a whole. In each group, the proportion with university qualifications which earned \$6,000 or more is greater than its representation in the particular group, with the single exception of the professional-technical workers, an exception explained by the fact that the group includes virtually *all* those who *must* have such a qualification to practise their profession. A further illustration of the extent to which the highly educated have profited is to be found in Table 4, which we can compare directly with Table 3.

Occupation Group (a)	Total no. in group	Those earning \$6,000 or more		Group median income (\$)
		Number	%	
Administrative-executive	39,249	6,829	17.4	3,120
Employers and own account	132,135	18,122	13.7	2,888
Professional-technical	101,513	6,156	6.1	2,210
Farm managers and workers	56,759	512	1.0	2,190
Clerical and Sales	209,712	969	0.5	1,634
Other	453,660	781	0.2	1,882

(a) See Table 3 for fuller details of group composition.

(Source: *New Zealand Census of Population and Dwellings, 1966, Vol. 5.*)

Table 4: Number and percent of labour force earning \$6,000 or more, 1966, by occupation group.

Thus (from Table 4) 17.4 percent of the administrative-executive group earned \$6,000 or more compared with 61.8 percent (Table 3) of those in the group with a university qualification. Similarly, only 6.1 percent of the professional-technical group earned these high incomes, though more than three times as many did so if they had a university qualification. Such disparities are to be found over the entire occupational range, though the two tables taken together show that, while the highly educated have certainly profited, the entrepreneurial group (employers and those working on their own account) continues to contribute the largest numbers of prime beneficiaries, whether or not highly educated.

We should note at this point that our article has limited purposes, primarily concerned with the growth of knowledge and inequality in relation to overall economic growth; and the role of libraries in all this. Thus we are not now concerned with the role of power elites in New Zealand nor to consider possible consequences of the trends we identify for the operation of power, even though such work needs to be done and is indeed overdue. In any event the census information on income does not allow discussion of the very rich.

Inequality, Sex, Ethnicity

So far we have tried to show how the increased demand for knowledge and information has financially benefited those with the greatest access to it. Thus we have demonstrated a relationship between education and inequality. We now turn to those forms of income inequality which depend upon whether one is man, woman, Maori, or non-Maori. Of course, these are also inter-related both within and between groups. Thus, there are more highly educated men than women, non-Maoris than Maoris in the labour force. Further, the relationship already exhibited for the total labour force among education, occupation, and income exists also for these sexual and ethnic sub-groups, though it is strongest for non-Maori males. (Both points may be demonstrated by comparing relative proportions within education and income groups from volumes five and seven of the *Census*, a task which for reasons of space we do not undertake here.)

	1951 (\$)	1956 (\$)	1961 (\$)	1966 (\$)	1971 (\$)
For every \$1,000 earned by Maori men, non-Maori men earned ...	1,383	1,399	1,359	1,361	1,346
For every \$1,000 earned by Maori women, non-Maori women earned ...	1,260	1,202	1,189	1,117	1,166
For every \$1,000 earned by non-Maori women, non-Maori men earned ...	1,860	2,045	2,068	2,058	2,049
For every \$1,000 earned by Maori women, Maori men earned ...	1,695	1,758	1,809	1,780	1,775

(Source: Mr J. T. Macrae, Department of Economics, University of Auckland.)

Table 5: Mean income ratios of labour force by ethnic group and sex, 1951-1971.

All of these relationships are shown clearly by Table 5, which allows us to say the following.

1. The income inequalities of Maori *vis-à-vis* non-Maori males have lessened slightly over the period (though the differential is still great). Some of this improvement may, however, be accounted for by the substantially younger mean age of the Maori work force, by which we mean that more of them, having left school earlier, are earning high incomes in low-status occupations at younger ages than non-Maoris. (Suggested by Mr J. T. Macrae.)

2. The smallest differential is encountered in the case of Maori and non-Maori women, though inequality increased significantly during the inter-censal period 1966-1971.

3. Differentials between men and women have worsened over the 20 years covered by the table, though over the decade 1961-1971 they have been improving slightly. The increase in inequality and the slow improvement are somewhat surprising, since during much of this period there has been equal pay within the largest employing bodies, viz.; teaching and the public service. Though in both these areas women have had increasingly less access to top jobs (5). Any suggestion that the increase in inequality is related to a growth in employment of women in part-time jobs may be dismissed by the reflections that there has been no disproportionate growth in intercensal periods, and that the growth in share of income has occurred only within the top 50 percent of income earners (i.e., those who almost certainly are employed fulltime).

Interpretation of Tables 2 and 5 has allowed us to reach some conclusions about income differences among occupational, educational sex, and ethnic groups. Table 6 while it does show mean income differences between men and women, Maori and non-Maori, demon-

Ethnic Groups, sex, and census year	Proportion of Labour Force				Gini Coefficient	Mean income \$
	Bottom 20% Earned (%)	Next 30% Earned (%)	Next 40% Earned (%)	Top 10% Earned (%)		
Non-Maori Males						
1951	9.45	25.74	49.53	15.28	0.207	982
1956	8.97	24.19	47.07	19.77	0.247	1,593
1961	8.99	23.95	46.18	20.88	0.252	2,016
1966	8.61	22.81	44.74	23.84	0.284	2,575
1971	8.15	22.75	44.86	24.24	0.293	3,668
Non-Maori Females						
1951	7.92	23.43	47.34	21.31	0.281	528
1956	7.81	23.03	47.54	21.62	0.290	779
1961	6.56	23.79	48.02	21.63	0.289	975
1966	7.33	22.94	47.70	22.03	0.295	1,251
1971	5.66	21.95	49.25	23.14	0.325	1,790
Maori Males						
1951	8.01	24.99	48.66	18.34	0.247	710
1956	8.24	25.03	46.62	20.11	0.251	1,139
1961	8.84	25.93	46.83	18.40	0.225	1,483
1966	9.14	26.45	45.60	19.62	0.218	1,892
1971	8.33	24.68	47.00	19.99	0.249	2,725
Maori Females						
1951	6.39	22.74	50.48	20.39	0.286	419
1956	7.61	20.76	49.86	21.77	0.288	648
1961	6.88	25.00	48.07	20.05	0.277	820
1966	6.00	23.37	50.08	20.55	0.288	1,063
1971	4.71	21.73	51.05	22.51	0.335	1,535

(Source: Mr J. T. Macrae, Department of Economics, University of Auckland.)

Table 6: Shares of total earned income of labour force, 1951-71, by ethnic group and sex.

strates most effectively the increasing income inequality *within* these groups. That is, it indicates that whatever group—Maori male or female, non-Maori male or female—one belongs to, the income gap has increased over the period 1951-71 between those at the top and those further down the income scale. In short, there has been an increase in inequality of income across the whole labour force, which is not reduced by changing the proportions of labour force shown in the table. Although the bottom 20 percent of income earners shows the same distribution as in the other tables (i.e., a gradient through non-Maori males, Maori males, non-Maori females to Maori females), it seems reasonable to leave this group out of account, since it includes large numbers of part-time, seasonal, and casual workers.

But, this done, we still find increasing inequality. Thus, that part of the non-Maori male labour force which, income-wise, constitutes 21-50 percent of it earned nearly 26 percent of total income in 1951 and under 23 percent in 1971. Even the group more highly-paid, that which in terms of income earned more than its numbers and equity would justify (i.e., 40 percent of the labour force should in equity earn 40 percent of the total income), dropped its share from 49.53 percent to 44.86 percent. During the same period, the top 10 percent of earners increased their share of total income from 15.28 percent in 1951 to a startling 24.24 percent in 1971. (And, it should be emphasised, we are here dealing with the actively employed population and not at all with those who live, without jobs, on dividend and similar kinds of income. Nor have we been able to assess non-money income such as cars, insurance premiums, houses, and other perquisites "given" by firms.)

Only the non-Maori male group has been analysed above. But reference to the table will show that the pattern discussed obtains for whichever group is looked at. In this respect, the Gini coefficient proves to be a very valuable statistical tool. This coefficient operates as an index of relative equality. That is, where the Gini coefficient is zero, it indicates that, say, 10 percent of the labour force gets 10 percent of the total income. On the other hand, where it equals 1.0 the total income is in the hands of the top 10 percent of earners. Thus, the coefficient increases at an exponential rate such that even very small increases are statistically significant.

Hence, if one looks at the Gini coefficient for each of the groups portrayed, it becomes plain that the increases in inequality show a pattern which can be equated to that demonstrated in Table 6, viz., non-Maori males show the greatest amount of increase in inequality, followed by Maori females, non-Maori females, and Maori males.

Thus we have shown a rough consonance within the labour force of educational, occupational, and income levels; and though this obtains also for sex and ethnic groups there is a layering effect such that males do better than females, non-Maoris than Maoris.

Education appears crucial for all those not included in what we have called the entrepreneurial group. On the face of it, therefore,

Year	School Attainment (%)			Total
	University Entrance or better (a)	School Certificate or better (b)	Other	
1963	14.6	18.6	66.8	100.0
1965	17.2	20.5	62.3	100.0
1967	21.4	22.5	56.1	100.0
1969	22.0	21.5	56.5	100.0
1971	25.0	22.0	53.0	100.0

Notes: (a) All pupils in this category are qualified to enter the university.

(b) Includes those with the Lower Sixth Certificate (instituted in 1969) and Endorsed School Certificate (now discontinued).

(Source: *Education Statistics of New Zealand, Part II, 1972.*)

Table 7: Attainments of pupils leaving state and private secondary schools, 1963-71.

New Zealand appears as increasingly a "credential" society in which the race goes more and more to the consumers of education, whether or not that education is really necessary for the jobs they go on to perform. (There is some evidence that education is not as necessary as employer demand would have us believe. (6).) Table 7 shows the growth in consumption of secondary school education between 1963 and 1971. Perhaps it too indicates that the rewards of education are considerable, the demand is high, and it constitutes an important pathway to social and financial success.

Our particular point is the very great increase in those qualified to enter university, much greater than those in the sub-university group. But as pupils stay on at school they are exposed to a greater range and depth of knowledge and other experiences whose substance and consequences in terms of occupational and social power are likely to be denied forever to the earlier-leaving pupils. Thus the gap in knowledge power tends to produce an increasing gap in these consequences. So much is provided for those who stay on in education and so little is available outside of the educational institutions for those who do not, library services as we shall see, being among them.

Furthermore there is a spiral of inequality in the education system in which children from the richer homes begin with advantages that tend to be cumulative (17). In New Zealand at present it is likely they also enjoy most of the pre-school opportunities.

There are other signs of growing inequality in New Zealand society which, in the interests of space, we will not discuss here. They include: the delivery of health care, access to public recreation facilities, housing, the growth of non-money income, taxation, and even the operation of the welfare system (7).

Part II: The development, deployment and use of library services

We set out to discover the trends in library services in terms similar to those we have observed for other sectors of society. The evidence assembled so far is that these services also have grown to favour the educated elites, no doubt in response to demands for increasing amounts of specialised knowledge. Bookstocks have grown in all kinds of libraries faster than population so that more books are now available to the public at large. But the highly educated and well-to-do have most access to books in the specialised libraries and are also the largest users of the public libraries. The pattern of highest usage by these groups, begins during the school years by children in the wealthiest residential areas; making most use of public libraries; having more books available to them in the schools they attend; and staying on longer at school. This vicious circle of advantage has been countered to a limited extent only, by Education Department policies and by some librarians, but a clear trend is underway which can only be mitigated, as we believe it should be, by new policies and determined practices.

The national deployment pattern

In 1938 perhaps twice as many books were held in public libraries as in the national, special, and university collections, and the growth of the former at least, did not keep up with population increases during the next decade. Figure 1 shows further, after 1949, public library bookstock grew at a faster rate than the population. By 1969 with over 3.5 million books in the public libraries, the bookstock per capita was double the figure of 30 years before. At the same time these were years when public libraries became mostly free to borrowers. These facts represent laudable achievements by librarians.

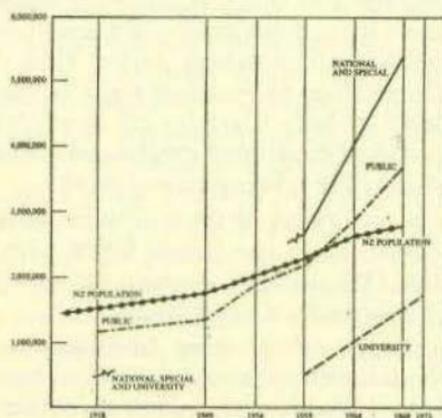


Figure 1: Growth of bookstock at public, national, special and University libraries in relation to New Zealand population.

However the more esoteric collections were expanded at a much faster rate. In 1959 the total collection of the National, university and special libraries was one third greater than the bookstock of all the public libraries; 10 years later it was twice as large. (The Country Library Service collections have not been included.)

With the decision to promote local research in New Zealand, university libraries began a growth spurt after 1959. But surprisingly the rate of growth was less than that of the other two library types between 1959 and 1971. However scholars have access to the other collections and in fact are the biggest users of the interlibrary loan service (8), and make extensive use of public libraries as we shall see later in this report.

Thus by 1969 the situation prevailing in 1938 had been reversed. At the later date twice as many books were held in the National, special, and university collections as in the public libraries. The National collection is for lending only to other libraries. No comprehensive survey of use patterns has so far been conducted but it is surely overdue. The special libraries are located mainly in government departments and some of the larger firms, and thus, like the university collections, have restricted access. We would guess that the greatest use of these library resources, which are twice as large as those in the widely available public libraries, is made by what might be called educated elites. The material benefits which they have no doubt produced for the country as a whole, as we noted earlier, are distributed in New Zealand with increasing inequality. Are there other kinds of benefits resulting from this pattern of deployment of New Zealand's library resources that have been shared more equitably?

Availability and use of Public libraries in Auckland

In the absence of national data on library users we decided to concentrate on just one New Zealand city, the largest, Auckland. Fortunately the Auckland Public Library conducted a user survey in September 1973, and the results were made available to us.

There is no such survey material for the other libraries in the Auckland urban region, so we have employed the notion of social area. Essentially this is a classification, of areas in which libraries are located, according to socio-economic level. We are thus able to examine the relationship between these levels and library use patterns. We do not have precise measures of income and social status and were guided by the more refined work of Duncan Timms who used 1966 census information to create a five-point scale (9). But because of new housing built since then, and because Timms' areas were not always the same as the library districts, we have classified each of the latter into one of just three social areas, using our own judgment in the final analysis. The assumption is that Area 1 districts have a higher mean income than those of Area 2 which are on average richer than the districts coded as Area 3.

The library information derives from material prepared for the national census of libraries. Bookstock size and the number of books borrowed in 1974 were used in conjunction with population size in the areas served, to calculate ratios.

These figures can be deceptive. The size of a library collection is affected by the length of time a library has been in operation. Libraries are not as easy to move as people; once established they tend to stay put. Thus a library built up originally in a densely populated area comes to have a very high ratio of books to population when the people move out and their houses are replaced by offices, factories, or the like. Grafton where there is a branch of the Auckland Public Library, is such an area. Conversely, a new library in a rapidly-growing area, for example East Coast Bays, will have a low ratio of books to people during this transitional phase.

Yet another problem which we did not satisfactorily resolve is the exact population size in the catchment areas of various libraries. We used 1974 information provided by the librarians in relation to 1971 census material, but could not measure the extent of population changes over the three year period.

With these caveats it may seem that our results regarding the district libraries are dubious indeed. We consider them worth reporting because they are consistent with our general argument, and also to indicate a kind of library research that needs to be undertaken more widely. Here, at least, some beginnings are reported. We should add here also that all the information contained in the tables that follow is not fully commented on. In general we have remarked on just that material which pertains to the central argument.

Table 8 is particularly subject to the limitations arising from demographic changes, just mentioned. Thus at best we can say that book-

Social Area	Books per Population*		Books per Member	
	13 libraries	Manukau	13 libraries	Manukau
1	1.4	1.2	2.6	1.9
2	1.9	1.1	3.2	2.1
3	1.8	1.8	3.0	1.8

* In the case of the 13 libraries, 1974 bookstock is related to 1971 population figures from the New Zealand census.

Note: The 13 district libraries were classified as follows: Takapuna and East Coast Bays, Titirangi, Pakuranga (Area 1), Devonport, New Lynn, Northcote, Papatoetoe, Te Atatu, Manurewa (Area 2), and Henderson, Onehunga, and Otara (Area 3). The three branches of the Manukau Public Library are Pakuranga (Area 1), Manurewa (Area 2) and Otara (Area 3). The latter are reported separately as well, because the social areas are probably more distinctive there than elsewhere, and also population data are likely to be more exact.

Table 8: Bookstock at Auckland district libraries per member and population served, by social area.

stock is deployed in these Auckland district libraries without favouring one social area over another.

What Table 8 does not tell us is how well all the people in the Auckland region are served by library location and the size of collections easily available to them. We have looked at this problem via a social area map of Auckland, and taken into account local government decisions that will result in the opening of more libraries in the near future. Our cautious opinion would be that libraries in Auckland are distributed over the region only somewhat in favour of the well-to-do.

Whatever the situation actually is with respect to population size and the location of public library collections, people in the low-ranked areas make strikingly less use of the present library resources. Table 9 gives results based on book issues and library membership size for both Auckland Public Library branches and the district libraries.

Social Area	Auckland Public Library		District Libraries	
	Central	Branches	13 libraries	Manukau
1		39.0	26.0	32.8
2		33.0	24.4	21.4
3	21.8	32.3	21.0	18.3

Note: Of the Auckland Public Library branches, four were classified Area 1 (Epsom, Parnell, Remuera, St. Heliers); there were three in Area 2 (Grafton, Grey Lynn, Point Chevalier), and three in Area 3 (Avondale, Glen Innes, and Leys Institute).

Table 9: Book issues per member at public libraries in Auckland by social area.

There is a systematic relationship between library use and the social rank of an area: the higher the rank the more books are issued per member. The relationship shows up most vividly in the case of Manukau, where the three areas in which branch libraries are located are so distinctly different—probably more so than elsewhere in Auckland.

Mr S. J. Cauchi, the City Librarian of the Manukau City Council, has kindly made available to us information collected at two branches on books issued during two weeks in 1974. Table 10 contrasts book use at Otara, classified social area 3, with Pakuranga located in a social area 1. This is a particularly good example for our purposes because Mr Cauchi and his staff have "somewhat modified traditional library practice to meet the demands of the local community" in Otara (10). The differences between the two areas reported here are likely to be greater in other places where no special efforts are made by the library staff.

Proportions each branch	Otara		Pakuranga	
	Total	%	%	
Fiction—Total	12,076	43	57	100%
General	3,507	38	62	
Light	2,993	47	53	
Paperback	5,576	44	56	
Non-fiction—Total	5,263	36	64	100%
Community	716	36	64	
Home Life	944	34	66	
Recreation	1,189	36	64	
Fine arts	387	34	66	
Technical	495	31	69	
Science	423	32	68	
Biography, etc	958	33	67	
N.Z. & Pacific	393	38	62	
Children's Books	15,092	33	67	100%
Total	32,431	37	63	100%
PROPORTIONS, MAJOR CATEGORIES				
Fiction		44	34	
Non-Fiction		15	16	
Children's Books		41	50	
		100	100	
Total Numbers		12,040	20,391	

Source: Mr S. J. Cauchi, City Librarian, Manukau.

Table 10: Books issued from two branches of the Manukau Public Library, 26 April to 13 May, 1974.

Table 10 shows that overall, Otara residents borrowed slightly less than half the number of items by the people of Pakuranga. The Otara adults did somewhat better than this, and more of their reading was fiction, but their children borrowed less. Of the total children's books issued from the two libraries, more than two-thirds went to the Pakuranga children. However, it may be noted that while the people from the lower-ranked social area borrowed fewer books, they did make use of the entire range of book-types in the non-fiction section. Relatively, they made more use of the New Zealand and Pacific sections—the area contains many Polynesians—but less of the technical, science, and biography materials.

For the Otara people, the Manukau Public Library is likely to be their major library resource. Many more people in Pakuranga are professionals, executives, and wealthy businessmen who would have access to special libraries and other sources of book knowledge through their work. Further, as Table 11 shows, these occupational groups, though not necessarily the same people, are the large users of the Auckland Public Library.

Branches by social area	Professional Technical %	Managers %	Clerical sales %	Crafts Labourers %	Others in work-force %	Retired %	Housewife %	Student %	No
1 (4 Branches)	14	5	5	4	4	13	32	24	31.38
2 (3 Branches)	10	4	7	10	5	15	22	27	10.10
3 (3 Branches)	12	4	6	8	5	11	28	26	15.60
Auckland Central	25	5	12	12	5	5	5	31	34.21
Mobile Libraries	4	1	3	3	3	31	45	10	2.97
Newsroom	31	11	10	16	6	7	5	14	4.09
By phone	31	11	19	4	5	4	22	4	1.22
Total	18	5	8	8	5	10	20	26	100
Number	1,751	499	777	823	461	1,023	2,051	2,572	99.57

Note: The information was kindly supplied by Mr W. Colgan of the Auckland Public Library. The survey was conducted in September 1973. 80 percent of the 10,247 respondents were members of the libraries they visited. Most of the non-member respondents visited Auckland Central. The member respondents represented 11 percent of the total membership of the Auckland Public Library system. Not all gave useable information about their occupation.

Table 11: Occupations of users of Auckland Public Library (in percent of occupation group).

Table 11 indicates that highly educated people (professional-technical, managers, and students) and those still in the process of being educated make up 49 percent of the users at the public library. Housewives and retired people add a further 31 percent. There are 4,304 users who were in the work force at the time of the survey—44

percent of the total group contacted. Forty-one percent of these were in the professional-technical group, and a further 12 percent are listed as managers. Whereas these two groups constitute just 16 percent of the New Zealand labour force (see Table 2 above) they were 53 percent of the employed users of the Auckland Public Library. By contrast, all other members of the work force, 84 percent in the country as a whole, including agricultural workers not likely to be much involved with a city library, provided 47 percent of the visitors to the Auckland Public Library.

To be fair, these figures should be compared with the occupational composition of the population living in the area served by the Auckland Public Library and not with the whole society. That area does contain a larger proportion of people of high socio-economic status. But while the figures given may not be exact it is very clear that educated elites are disproportionately large users of the library. Further nearly one-third of all those contacted, 3,131 people, made use of the branch libraries located in districts classified as social area 1.

Another point suggested by Table 11 is that libraries are most used when they are located near places of work. Sixty percent of the users at Auckland Central are members of the work force. A further 31 percent are students, no doubt comprising many from the university and technical institutes located nearby. The newsroom and telephone services are also much used by these groups. By contrast, housewives make most use of the branch and mobile libraries. Retired people are also high users of these services.

The generalisations about library usage and library location near work-places are supported by information contained in Table 12.

Branches by Social Area	Age			Sex	
	Under 19	19-64	Over 64	Female	Male
1	29	54	17	70	30
2	33	49	18	57	43
3	33	54	13	60	40
Auckland Central	24	70	6	38	62
Mobile Libraries	18	45	38	81	19
Newsroom	5	89	7	15	85
Telephone	5	87	8	63	37
Totals	27%	60%	13%	53%	47%
Numbers	2,698	6,127	1,305	5,463	4,784

Note: Fewer respondents gave information about their age, 10,130 compared with 10,247, in the total group contacted.

Table 12: Age and Sex of users of the Auckland Public Library, 1974 (in percent of library type).

The table shows that men of working age comprised the largest group of users at Auckland Central, including the newsroom. Elsewhere more users were female.

The analysis of library development so far has indicated a trend of increasing inequality in the availability of New Zealand's library resources. Over the past 30 years two-thirds of the bookstock has become available mostly to the highly educated. In the Auckland area which encompasses 25 percent of the national population, the same kind of people, and the well-to-do, predominate among the users of the remaining one-third of the nation's bookstock.

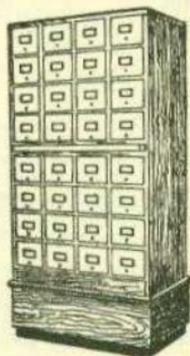
Evidence from one Auckland district suggests that this library use pattern is established among children. Earlier in this report we suggested that with the prolonging of school attendance for some there is a growing gap between the early leavers and those who stay on at school with respect to educational opportunities and other supportive and career-enhancing experiences. Now we will discuss differential access to books in secondary schools in this regard.

Access to books in Auckland secondary schools

It has already been noted in the discussion of public libraries that a books per capita ratio can be a weak indicator of the strength of a library when recent or current demographic changes cannot be taken into account. Such changes had most effect on the area 1 and area 3

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state schools in Table 13. More area 1 schools are less than 10 years old and still in a growth phase. On the other hand, two large longer-established area 3 schools have experienced declining school roles in recent years. Thus the picture for state schools presented in the first column of Table 13, dealing with books per pupil, is not likely to reflect the situation in just a few years hence. Because demographic change in the districts will favourably affect more area 1 schools, their *books: pupils* ratio will go further ahead of the others. Even so, the differences between per capita bookstock ratios of the state schools in different social areas does not greatly favour those of higher socio-economic level.

State schools by social area	Books per pupil	Book purchases per pupil (\$)	Forms 6, 7 as percentage of forms 3, 4
1 (9 schools)	8.8	1.63	42.7
2 (12 schools)	7.4	1.37	24.8
3 (9 schools)	8.7	1.41	19.7
Private schools (In N.Z. as a whole)*			39.8
Non-Catholic (5 schools)	16.1	4.21	no data
Catholic (10 schools)	14.3	3.49	no data

* *Education statistics of New Zealand, Part 1, 1973.*

Note: Of the 50 schools to which questionnaires were sent, 5 state schools did not reply, 3 from social area 1, and 2 from social area 2. All private schools responded.

Table 13: Bookstock, book purchases and ratio of senior to junior pupils in Auckland secondary schools, 1973.

Table 13 shows that the private schools have nearly twice as many books per pupil as the state schools. Most of the former are smaller than the latter, and overall, have been more stable in terms of size. Yet two private non-catholic school libraries are very large and include the largest in our sample of all schools. Furthermore, the non-catholic private schools spend nearly three times the money per student on book purchasing than the state schools. The catholic private schools on the other hand, while providing and purchasing significantly more books per pupil than the state schools, are still disadvantaged in other respects—most notably in having fewer teachers per pupil (11).

Table 13 also indicates the extent to which book purchasing practices contribute to the gap between earlier leavers and those who stay on in school. More money per pupil is spent on books in the area

1 schools which have the highest proportion of senior students. The rate of spending for the area 3 state schools has been enhanced by an Education Department policy whereby additional grants were made to schools with high percentages of Polynesian students, a policy which is to be dropped in 1975. It may be noted also that library work in secondary schools is not taken seriously by the authorities. The people in charge of the book collections are rarely qualified librarians and are paid at clerical rates.

The information in this section suggests that in the main, the situation regarding books in secondary schools is likely to reinforce the pattern of increasing inequality found in other parts of the library system.

A note on rapid information retrieval equipment.

The foregoing analysis is based on past trends. Now, in concluding Part II we will comment briefly on a development in library work which is, so to speak, just round the corner: the computerised information retrieval systems.

These are costly services which are nevertheless proving valuable in sectors of the society which specially depend on fast-changing technological knowledge. But their potential use is much wider than this. Two kinds of rapid retrieval systems have been installed in New Zealand. The most elaborate is the computerised library operated by U.E.B. Industries Limited, and which has been described elsewhere (12). The other is a telecopier retrieval system for which equipment is being installed in the several organisations participating in the Auckland Commercial and Technical Information Service which has its headquarters in the Auckland Public Library. At the end of 1974 telecopier installations were in the University of Auckland's Engineering Library and in the firms of Kingston, Reynolds, Thom and Alladice Limited, and U.E.B. Industries Limited (13).

If the installation of such services is left to the marketplace in New Zealand, a new kind of inequality will grow; one that is already with us in many respects and which will be accentuated. The gap will grow between the few large organisations that can afford them and the many small ones that cannot. Also such systems will favour managers over employees, including employee organisations such as trade unions which are already disadvantaged by the ways in which their small size in many cases, and small budgets, limits their ability to use highly skilled personnel.

By way of summing up Part II, we can say:

1. In terms of access to New Zealand's library resources, the national deployment pattern has developed to greatly favour the highly educated and thus the rich and powerful who employ them. However, books are less unequally distributed in the public libraries and in the secondary schools, which contain about one-third of the national collection. Yet the deployment here is still more advantageous

to educated elites. These findings, together with information about the way in which rapid retrieval systems are being introduced, would seem to indicate that at the national level, library resources have been allowed to grow in response to demands from the powerful, a market-place situation. At the local level some efforts have been made to ensure a fairer distribution.

2. In terms of the use of library resources, restricted access limits two-thirds of the national bookstock to the highly educated. The greatest users of the remaining one-third are the most educated and affluent people. Insofar as library policies and practices affect this outcome, it can be suggested that the custodial aspect of library work, care and storage of materials, is greatly stressed over the communications aspect, actively mediating between books and people (14). Both the deployment and use patterns will result in most librarians dealing more with the educated and the well-to-do. It is likely therefore, that as a group, librarians will value and share elite outlooks (especially those of the highly educated) or that such outlooks will be held by the most powerful in the profession and thus dominate in policies, training programmes and library practices.

Part III: Alternative futures

In this report on societal changes and library development in New Zealand we have concentrated on answering one central question: who benefits? We suggested that a technological imperative contributed to many important changes in the society, most relevantly a growing demand for knowledge; more people who can utilise knowledge and more knowledge resources. These changes took place over the past 25 years in such a way as to increase income and other inequality including the deployment of the nation's library resources. In the case of libraries the critical cause of the inequalities would appear to be the manner in which the growth occurred: simply in response to demand. Such central library policy groups as existed seemingly were unaware of what was happening with, and had no strong policy in regard to, the inequalities that were developing. W. J. McEldowney, in his fine report on university libraries, indicates that little co-ordinated policy decision-making about library development was undertaken at the national level during the critical growth years. The necessary machinery was still not set up at the time he wrote his report (15).

In the New Zealand library context a central policy group has to operate in conjunction with considerable decentralisation of library decision-making. While there are many advantages in the local autonomy that exists, our research plainly indicates some of the serious costs when national co-ordination is weak.

So long as this situation remains, one alternative future can easily be envisaged. As crucial developments continue to be left to market-place decision-making, with little guiding philosophy about the society as a whole, the inequities in the present distribution of New Zealand's library resources will grow. The distribution is already unfair to the

community which pays for it. Librarians will be even more servants of the rich and the highly educated. Whatever benefits thereby accrue to the Eurocentric "high culture", to technological sophistication, or to the librarians themselves, a majority of New Zealanders will obtain few direct or indirect benefits, and in fact will be increasingly cut off from library resources of all kinds at all levels.

The existence of a strong national co-ordinating group, with some executive capability, seems to us an essential ingredient in any effort to redress the balance. But the tasks which so far have been specified for the proposed central policy group—actually a series of co-ordinated committees (16)—are unlikely to be sufficient to halt the strong tendencies towards inequality in the outcomes of library work. In paying persistent attention to an equality imperative a central policy group could:

1. provide policy guidelines for more egalitarian development at all levels;
2. ensure that while necessary improvements are made in library services for knowledge elites and large-scale economic operations, facilities to aid in the widest possible utilisation of these resources are also provided. This may include advisory services for those groups which are otherwise unable to make use of the resources;
3. establish a library research unit which will supply continuous information about overall library development and also provide assessment of special reaching-out programmes;
4. establish a new career line in library work for communication specialists, and community-oriented work in general (including particular attention to library services for children and in schools, through library education, promotional opportunities, and other devices to ensure full professional recognition for such work;
5. promote experimental efforts in library work through special development grants. Both new kinds of libraries—in terms of presentation and content of the material offered—and different locations for library buildings, need to be tried out. (With the advent of module building units libraries can be moved around more readily than in the past.) The development grants may be used to ensure that low-income new housing areas in particular, are provided with library services at an early stage.

We do not imagine that such changes at the top of the library profession are likely either to be quickly made, or will be sufficient, without strong concern emanating from librarians at all levels. We assume that the present library usage pattern, as reported here, is partly because the radical changes in the distribution of national library resources have had consequences in the orientation of librarians themselves. Thus while we recognise that there will always be unevenness in the use made of knowledge resources in the society, and that specialisation in this respect is necessary, we see nothing inevitable in the way libraries are currently being used. On the contrary they seem

to us to reflect the political advantages gained by certain groups in New Zealand during a process of more widespread social change.

Perhaps there is a need for changes in the images or definitions librarians have of themselves. Since knowledge has become so crucial in the society, the library profession controls a weapon of increasing social power. Librarians can affect the distribution and nature of both library resources and of library-using skills in the community. In short, librarians are already agents for social change. The question they face is: for whom?

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Afterword:

Since the manuscript was prepared for printing, we have become aware of certain defects in the original. A revised version has been prepared in which Tables 3 and 4 have been combined and simplified, and the argument tightened up in other ways. Copies of the revision may be obtained from the authors.

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