Movement and Persistence: A Case Study of Southern Dunedin in Global Context

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1. Introduction

Thanks to the rise of "the new social history" geographical and social mobility became major areas of interest in the 1960s and 1970s. Because of the vast expense in collecting relevant data, however, early attempts to analyse the way the two forms of mobility interrelated did not survive long. Historians also abandoned their work on social mobility in response to a range of criticisms, and it fell to sociologists to develop robust methods for analysing that subject. Nobody took up the issue of spatial movement although intercontinental migration became a major field of study for historians and econometricians.[1]

Compared to social mobility, the field of geographical mobility — or spatial movement as we prefer — remained poorly theorised. Enough was learned from studies of migration to realise that direction, distance, and duration of movement had to be accommodated in any useful model. So also did such cultural or subcultural variables as propensity to migrate, individual or familial motives, and knowledge of conditions in the destination. The difficulty of collecting the individual-level data necessary to reach robust conclusions had created a lateral problem, however, in that studies invariably focused on very small communities or spatial units. The great studies of intercontinental migration can not easily be replicated in micro studies of intracontinental movement let alone the shift from one street or suburb to another.[2]

The evidence on which this paper is based was derived from the Caversham Project, the most ambitious New Zealand attempt to identify patterns and structures of social mobility, geographical movement, and the relationship between them. The study began in the late 1970s when data had to be gathered, coded, and then entered in machine-readable form, and at that time focused on Dunedin's oldest industrial suburb, then widely considered a working class area, Caversham (a borough from 1877 until 1905 when it merged with Dunedin City and became five suburbs). Twenty years later when optical character recognition procedures proved sufficiently reliable to start again, the study area was expanded to include not only the original borough of Caversham but its two neighbours to the south, South Dunedin and St Kilda. The three southern boroughs together occupied an area known then, as now, as the Flat.[3] At the same time we extended the time period from 1902–22 to 1893–1938. A database of some 11,000 persons grew to 70,000 persons. St Kilda was for most of the period one of the two most densely populated boroughs in New Zealand and Kensington, an industrial suburb within Caversham Borough, was the most densely settled urban area in New Zealand.[4]

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1 Grusky and Fukumoto (1989).

2 Heenan (2003). See also Petersen (1969:289–300); Cohen (ed.) (1996); Nam (ed.) (1968); Roseman (1972); Zelinsky (1971); Zelinsky (1983); and Zelinsky (1993).

3 The fullest account of the area's urban structure and growth remains Stedman (1966).

4 For the shift to an optical character recognition programme see James (1998:57–71) and Olssen and Hickey (2005:ch.1).

2. The larger Context and the Discursive Framework

Since the agricultural revolution allowed some human beings to become sedentary, those who remained nomadic have enjoyed a poor press. The notion that movers generate social problems, and are feckless and improvident to boot, has a long if not distinguished pedigree.[5] The unification of the British Isles as one kingdom, and subsequently one economy, facilitated higher levels of spatial and social mobility than was common in most of Europe without disrupting the social order. Britain's life-and-death struggle with Napoleonic France, which saw the mobilisation of the male citizenry on an unprecedented scale, accelerated the movement of people. So too did the accelerated process of enclosure, central to the new scientific agriculture, and the Industrial Revolution. During the nineteenth century industrialisation brought in its train an unprecedented level of urbanisation, another societal process that contributed to the spatial movement of unprecedented numbers of people.[6]

The American Revolution and the successful establishment of a stable Republican system of government, saw freedom to move and freedom to pursue happiness articulated as universal human rights. "When Alexis de Tocqueville visited the U.S.A. in 1835 he was surprised by the extent to which people moved in both the spatial and the social sense. To his European eyes the whole society seemed constantly on the move from city to city and state to state. Travel on foot, in covered wagons, sailing ships, paddle steamers and trains appeared to enable people to make extraordinary advances up the social ladder within a lifetime. The whole social structure impressed him as very fluid in comparison with its old world counterpart".[7] Britain, of course, was more like the United States than any other nation in Europe. As change occurred in the nineteenth century complaints about atomisation became something of a mantra, although the trend was underway, probably on a global basis, well before the Industrial Revolution. Besides which migration to the United States, which has dominated studies of transcontinental migration, was but the most significant flow in what was a veritable torrent which settled most of Latin America, Canada, Australia and New Zealand, and South Africa. That said, however, of the 54 million people who emigrated from Europe between 1815 and 1930 some 32.6 million (or just over 60 percent) went to the United States.[8]

Although Marx knew about de Tocqueville's analysis, he scorned the Frenchman's enthusiasm for American democracy, insisting that new rigidities would soon emerge as control of wealth and power fell into fewer and fewer hands and increasing population exhausted the New World's abundance of resources, especially land.[9] As Brooking and his collaborators pointed out in an early report from the Caversham Project, this view remained dominant in Europe and powerful even in the United States

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[5] Brooking et al. (1999:6).

[6] A small library exists on these topics but see especially Colley (1992); Jones (1974); Saville (1957) and Lampard (1973).

[7] Brooking et al. (1999:55).

[8] For the global character of these trends see Bayly (2004). For migration from Europe see Baines (1991) and for its impact on the several societies of the New World see Belich (forthcoming 2009). For emigration from Britain see Richards (2004).

[9] Rubel and Manale (1975:30) and Giddens, (1973:97–98).

where several sociologists and social historians concluded that widespread geographical (or spatial) mobility reflected the failure of other forms of mobility (whether measured in terms of income, wealth, property or occupation). Even in the 1970s, when historical studies of spatial mobility still flourished, spatial movement, described invariably as transience, was considered dysfunctional for the individuals and families involved no less than for the communities they left and the wider society.[10] Only when Chudacoff wrote his innovative study of the relationship between social and spatial mobility in Omaha, the largest city in Nebraska, did anyone systematically show that people moved to meet the needs of growing families, to improve their houses and neighbourhoods, to access urban amenities, in short to pursue the American dream.[11]

Since then studies have been few and far between, but enough has been done to prove that New Zealanders are as mobile as Americans. Pearson's innovative analysis of transience (as well as social mobility) in Johnsonville sparked several other investigations which took distinct towns as their units of analysis and found comparable rates of transience.[12] Fairburn went further and made transience central to his analysis of colonial society's pathologies. Few have accepted Fairburn's conclusions.[13] Interestingly enough high rates of spatial movement appear to have characterised Māori society even before the arrival of Europeans. Not only had their ancestors migrated from East Polynesia, but the Polynesians themselves had entered the Pacific only around 3,000 years earlier. On arrival in New Zealand they quickly explored not only the main islands but several outlying clusters, including the Sub-Antarctic and Chatham Islands.[14] Although we lack evidence to determine the propensity to movement before the arrival of Europeans, Cook's three lengthy visits to the Marlborough Sounds have allowed Barber to demonstrate a remarkable level of movement in this area at least.[15]

Europeans, who began arriving in the 1790s, were also highly mobile geographically or spatially. Until the 1890s almost all adults had crossed the oceans from the other side of the world, but sizeable numbers had been mobile within Britain prior to that. Indeed some areas within Britain, according to historians of migration, had developed a high propensity to migrate, and contributed a sizeable proportion of those who came to New Zealand.[16] Not that all stayed. Although we lack figures for return migration from New Zealand, the North American data suggest that some 40 percent of all English, Welsh and Scottish emigrants returned; only the Irish left with the intention of never returning. Given New Zealand's distance, and the consequential cost in forfeited earnings, we can assume that considerably less than 40 percent of all migrants returned to Britain. In some decades around that proportion left for the

[10] For instance see Thernstrom and Knights (1970); Knights (1971:ch.6); Thernstrom, (1973:ch. 3) and Katz (1975:ch. 3).
[11] Chudacoff (1972).
[12] Apart from Pearson (1979:ch. 6), see the results of various theses summarised in Brooking et al. (1999:63–4).
[13] Fairburn (1988). For critiques and criticisms see the special issue of the *New Zealand Journal of History* (1991) and Belich (1996:412–50).
[14] Anderson (2006).
[15] Barber (1994).
[16] For areas with a high propensity to emigrate, such as Ireland, and areas with a high propensity to emigrate to New Zealand, such as Scotland, see Richards (2004), passim and Phillips and Hearn (2008).

Australian colonies, however. People may have referred to the Tasman Sea as "the ditch" but it was actually a highway.[17]

Once in New Zealand people remained on the move. The extractive and pastoral industries that dominated the colonial economy — shearing, sawmilling, flax-milling, gold and coal mining — generated high levels of spatial mobility. Shearing, mining, and shipping were Australasian industries, of course. Many of the navvies who built the infrastructure — roads, railways, bridges, tunnels — also followed their work wherever it led. The sailors and seamen who sustained the shipping industry, central to transport within New Zealand and between New Zealand and its trading world, around four percent of all immigrants (although by 1901 only one percent of the male workforce), were also men on the move.[18] The mobile young men who dominated these itinerant workforces were notorious for their brawling, whoring, gambling, and drinking. Because of a general shortage of women a proportion of these men never married. Many of these occupations were seasonal, of course, and in winter the men drifted into the towns in search of labouring jobs or charitable aid (as it was known). These men confirmed the poor reputation of the world's nomads. Indeed they were often known as nomads. Young single women were less mobile before the 1860s but some became notorious for their unsettled wild ways.[19] However, except for the 1860s and the 1900s families dominated the migrant flows to New Zealand, many of them with one or two children if not an aunt, uncle, parent or even grandparent.[20] The itinerants merely reinforced the traditional Eurasian dislike for nomads.

3. Southern Dunedin as a Case Study: Sources and Methods

Any attempt to study spatial movement within a society more carefully, however, quickly confronts several complex methodological problems. It would be tedious to recite the history of the Caversham Project's relationship to these problems, but southern Dunedin, which included two of the oldest industrial suburbs, one of the largest industrial establishments, and two of the most densely populated areas in New Zealand, lent itself to the study of both social mobility and spatial movement. In the Project's first phase, when we focused on Caversham Borough alone, in order to measure the level of transience, as we still called it, we constructed a database consisting of everyone who was recorded on one of seven electoral rolls between 1902 and 1922 as living in the old borough but who was not listed in the subsequent electoral roll.[21] We then searched the death registers to determine whether mortality rather than mobility was the issue, before systematically searching John Stone's annual directories for the three years following the election for which they had registered in order to identify where they had gone. Because of our need to rely on electoral rolls, however, arguably the most mobile population, those younger than 21 years old, escaped our

[17] Phillips and Hearn (2008:25, 34, 44–5) and Arnold (1987).
[18] See Phillips and Hearn, (2008:Table 10, 81) for the proportion of seamen.
[19] The key source remains Phillips (1996). See also Lee (1989); McKay (1992) and McKay (1991).
[20] Phillips and Hearn, (2008:129), report that 87 percent of all New Zealand Company immigrants arrived as members of family parties.
[21] E.g. 1902–5, 1905–11, 1911–14, 1914–19, 1919–22. We could find no copy of the 1908 electoral roll.

attention.[22] Apart from those who proceeded to a secondary school, most of whom stayed only two years — around 10 percent in 1881–1902 and 74 percent in 1919–28 — from 1901 everyone entered the workforce or began assisting their parents when they left primary school at the age of 14 years old.[23]

After much work we realised that the definition of the boundaries, and thus of what constitutes a movement event, is critical. We also came to realise that the time period selected to determine whether the movement event is caught on camera, as it were, was equally critical. This is a particular problem with historical studies that depend upon a source that was produced at intervals.[24] Different distances and intervals generated different definitions of a movement event. The school child going to school, or the father going to work, or one of his children or his wife heading off to work or shop or play, move, or to be more precise generate movement events. After considerable discussion we decided that if the coming and going happened within a day we would refer to that as diurnal movement, and its extent and frequency are important although we will not discuss that further in this paper. If the movement event involved a stay away from home we would refer to it as circulatory movement, although we realise that in this period a man — it was almost always a man — might leave town to work, or look for work, intending to return but in the end fail to do so. In that case he (or she) became a migratory mover.[25] Migratory moves — i.e. a permanent change of address — were what we wanted to study.

It initially seemed self-evident that movement entailed a shift from one location to another. Only slowly did it transpire that the process of selecting the boundary that was used to determine whether a movement event had occurred had never been analysed. This meant that people who changed their permanent address within a particular area did not count as movers. In terms of earlier studies such individuals were persistent, i.e. they remained within the boundaries assigned by the investigator, even though they actually changed their residential address (and the pattern of their diurnal or circulatory movements). In the first phase of our project, which focused on the people living on the streets contained within the old Borough of Caversham, we only tracked those who left the borough. Once we scanned the electoral rolls, however, it became possible to trace all moves. As the old Borough of Caversham comprised six modern suburbs we began by analysing movement between those suburbs. Of the 17,022 individuals in our database only 11 percent were not recorded in our sources as movers. Of the 89 percent who changed address, almost 90 percent of those left the study area but never moved, as far as our sources say, within it. Those who left the study area we refer to as long-distance movers or migrants; those who moved within the study area we refer to as local migrants. If we extended the boundaries of our study area to include Dunedin city,

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[22] For a fuller account of Stone's directories see Hamblyn (2001). In the first instance we searched John Stone's *Directory for Otago and Southland* and then Henry Wise's *New Zealand Post Office Directory*.

[23] For a fuller discussion see Page et al. (2003:104–5).

[24] In New Zealand the enumerators' returns for the census are destroyed, so that the interval between each census, usually five years, is not available (unlike in most societies where, because the census is most exhaustive, it is commonly used). In New Zealand scholars have used either a directory, most of which were published annually, or electoral rolls, the latter being considerably more inclusive but less frequent.

[25] Brian Heenan and Robin Law were central to these discussions. For Heenan's work see the following note and for Law see Law (1999); (2002) and (2003).

or the greater urban area, then movement events would decline in number. We will come back to that.[26]

Although contemporary analyses of spatial movement, like contemporary analyses of occupational mobility, rely on surveys for data, in most instances historians have to rely on other sources. In most countries they can use the periodic census, which records a wide range of information about every person who fills in the form. Because these forms, known as enumerators' forms, are systematically destroyed in New Zealand, historians have to rely on some other source. Many use directories, not least because a directory covers distinct communities, but electoral rolls, while organised by electorates, which often cut across communities, are much more comprehensive. Although they exclude anyone younger than 21 years old, they include a much higher proportion of women than directories; they are less likely to include people who died since the previous canvass, and more likely to include the residentially mobile; and they are much less likely to miss the least skilled and those without homes of their own, whether rented or owned. The cumulative effect of these defects is considerable. Only 58 percent of the males and 17 percent of the women found in the electoral rolls for Caversham Borough appeared in Stone's directories. According to Lipson, electoral rolls during the period 1902–1922 record between 75 and 81 percent of the adult population. Our own estimate is considerably higher, although enrolments began to decline in the 1920s, especially among the young, and most especially among young women.[27]

The other data source used to understand movement was the New Zealand Society of Genealogists' schools database, constructed from schools' Admissions and Withdrawals Registers (see section 9).

4. "To and From" in Caversham Borough 1902–22

The problematic nature of what constitutes a boundary relevant to the measurement of long-distance spatial movement emerged as soon as we enlarged the database to include the three southern boroughs and not just Caversham. When we studied Caversham Borough alone we found remarkably high levels of long-distance spatial movement with as many as two thirds or more of the residents leaving the Borough in any decade. Because North American studies used decades[28] to measure movement we followed suit but no other study in either North America or New Zealand had identified rates as high as Caversham Borough's. When we enlarged the boundaries of our study area to include the three southern Boroughs, however, we reduced the level of long-distance spatial movement and problematised our earlier decision to invest a Borough's boundaries with ecological significance. By the same token we increased the level of local spatial movement and brought it within our scholarly gaze. Because of the discursive framework that privileged long-distance movement, especially constant

[26] Some of these results are reported in Heenan and Johnsen (2003). See also various working papers: Heenan et al., CWP2000–9; Heenan et al., CWP2000–4. See also the earlier papers: Heenan et al., CWP1999-2, CWP1998-1 and CWP1998-3.

[27] Lipson (1948:172). For our estimate see Hood (2000:237–9).

[28] Because of the availability of a regular national census taken every ten years the decade seemed appropriate. By aggregating interelection periods we could approximate a decade with either nine or in two instances eleven year periods.

long-distance movement as a source of social pathology, local movement, like diurnal and circulatory movement, had been ignored as an irrelevance. That is certainly erroneous. Regardless of this issue, however, it remained possible to measure whether our data could help explain the propensity to local or long-distance movement.[29]

The North American studies of the 1970s concluded that neither occupation nor class had been an especially important determinant of persistence or long-distance movement. Two New Zealand studies suggested otherwise, however, and as our data included information on men's occupations we tested the importance of both occupation and class.[30] Our findings showed that class played a part, but in subtle rather than overt ways. The two strata or classes that stayed longest in Taradale, the focus of one of the two New Zealand studies, large scale employers and petty proprietors, also stayed longest in Caversham.[31] In Caversham some of the large-scale employers, such as brewers and manufacturers, had locked capital into the suburb and found moving more difficult than those earning salaries or wages. Managers and businessmen who worked in the city rather than the suburb seem to have been more inclined to leave. No clear patterns emerged amongst the petty proprietors (smaller employers and self-employed), the largest of whom often earned only slightly more modest incomes than the large employers and managers. One group of men involved in retailing food seemed to have made a commitment to the suburb, staying as long as 40 years and even leaving the business to their sons, but an equally big group of food retailers left. Family businesses such as corner dairies and stores take time to win clientele but also seem difficult to sustain for more than a decade.

The small groups of semi-professionals and petty officials easily showed the most movement (see Tables 1 and 2). Semi-professionals were such a small group that relatively modest levels of movement noticeably affected the level of persistence. Even so it is quite clear that they left in relatively large numbers because engineers, then as now, were a highly mobile group making up over half of the leavers in the first period. In the second period engineers constituted nearly half the leavers (20 out of 53) but they were joined by accountants (14 out of 53) who left as the local economy began to decline.[32] In some instances, however, occupation was more useful than class in identifying propensity to long-distance movement. Two groups of public servants, teachers and policemen, moved more than any other occupational groups, presumably in pursuit of promotion. Publicans and plumbers also seem to have been relatively transient as they moved in search of opportunity. Detailed analysis of each occupation would be required to explain their propensity to long-distance moves at this time.

[29] The following is from Brooking et al. (1999:65–7).

[30] We used a nine strata model of the stratification system which could easily be collapsed into either a three or a five class model comparable to those usually used by sociologists. For a brief summary see Appendix I and for a full account of the scheme see Olssen and Hickey (2005:chs. 3 and 5).

[31] Daley (1991:135–38).

[32] For a discussion of the criteria used to distinguish professionals and semi-professionals see Olssen and Hickey (2005:74–8, 128–9).

Table 1: Persistence rates (% by occupational group) 1902–11

Occupational group	Leavers	Persisters	Died	Persistence rate	Death rate
Employers & managerial	21	25	6	48	12
Professionals	26	15	5	33	11
Semi-professionals	15	4	1	20	5
Petty proprietors	60	57	20	43	15
Petty officials	25	10	4	26	10
White collar	114	74	7	38	4
Skilled	259	161	56	34	12
Semi-skilled	49	26	4	33	5
Unskilled	145	89	26	34	10

Table 2: Persistence rates (% by occupational group), 1911–22

Occupational group	Leavers	Persisters	Died	Persistence rate	Death rate
Employers & managerial	44	31	6	38	7
Professionals	49	25	6	31	8
Semi-professionals	18	5	1	21	4
Petty proprietors	100	81	18	41	9
Petty officials	60	9	5	12	7
White collar	171	76	16	29	6
Skilled	357	199	26	34	4
Semi-skilled	76	44	6	35	5
Unskilled	290	119	27	27	6

Between 1902–11 the skilled and to a slightly lesser extent the unskilled were relatively persistent. The growth of new suburbs in southern Dunedin, especially St Kilda but also Kew, provided plenty of opportunities for the men of the building trades (about 10 percent of the male workforce) and the expansion of the Hillside Railway Workshops in this period made it buoyant for the men of the metal trades (about 12 percent of the male workforce). In these years city and government also invested heavily in new infrastructure, providing navvies and labourers more generally with excellent work opportunities. During the next period, 1911–19, which included World War I, the skilled remained as unlikely to leave the area as they had been in the previous decade but the unskilled, by contrast, became much more likely to leave. The cessation of major public works within southern Dunedin and the city more generally probably forced many to move elsewhere. Although the skilled men of southern Dunedin bowed to nobody in their patriotism, economic necessity may have made the Army more attractive to the unskilled at the start of the War. After the introduction of conscription in 1916 the fact that many of the skilled were employed in reserved occupations contributed to their overall persistence. It seems likely that those younger than 21 years old, and henceforth absent from the electoral rolls, would have been even more likely to enlist or undertake long-distance movements.

These findings show that applying European models to New Zealand is fraught with problems. For example, British arguments concerning the difference between the skilled, still frequently referred to as an "aristocracy of labour" by British scholars, and the rest of the working class, were pretty much irrelevant in Caversham.[33] Class was only one of several factors determining the propensity to undertake long-distance movements.

5. Expanding the Unit of Analysis: Southern Dunedin 1902–38

The expansion of the study area to include South Dunedin and St. Kilda meant that a high proportion of those defined as long-distance movers when we analysed only Caversham Borough became persistent because they had only moved to another borough on the Flat. (The Flat is the colloquial name given to the area occupied by the three southern boroughs.) Had we been able to include Mornington, the suburb immediately to the north, the propensity to undertake long-distance movements would undoubtedly have declined still further. Enlarging the study area — the unit of analysis — did not increase the explanatory power of class or occupation, however.

From 1902–1911, the rate of persistence for Caversham Borough alone was 35 percent of adult male residents, but an additional 11 percent simply moved to South Dunedin or St. Kilda, making a combined rate for the Flat of 46 percent. From 1911–1919, the rate for Caversham was 32 percent, but the rate for the Flat as a whole again was 46 percent. The new figure placed southern Dunedin well within the range of long-distance movements found by American historians, being a little higher than for the city of Omaha, Nebraska (44 percent between 1900 and 1910), and Boston (41 percent between 1910 and 1920) and a little less than for Los Angeles (49 percent between 1910 and 1920). The Great Depression appears to have had less impact in southern

[33] See Olssen (1995:47–69) and Ryan (1997).

Dunedin, however, for whereas persistence in Boston reached a high of 59 percent, persistence on the Flat remained at 46 percent between 1928 and 1938.[34]

Since persistence within an urban region is partly a function of the geographic scope of the investigation, persistence rates would rise even further if the rest of the city of Dunedin along with its outlying northern and western suburbs were included, especially Mornington to the north, Musselburgh and Tainui to the east, and Burnside, Green Island and Abbotsford to the west. It is now clear that the expanded study area, the geographically bounded Flat, effectively comprises the locality for investigation of population stability and long-distance movement. Whatever the psychological and other attachments to the Flat's separate political units before their amalgamation with the city of Dunedin, the Flat as a whole practically comprised the world of their acquaintance. How one determines the boundaries to an ecologically robust area, at least for demographic purposes, is not easily settled.

6. Local Movements within the Flat 1893–1938

As we established earlier, not all movements involve long-distance shifts. A high proportion of total movement events involved shifts within the study area. Once we had used optical character recognition to scan all the electoral rolls for the three southern boroughs it became possible to analyse local movements systematically. It also became possible to analyse the local migration patterns of women as well as men. When we tried to trace in Stone's directories the long-distance migration of women who were present in one electoral roll but absent from the next we had almost no success at all because directories ignored women who did not run businesses. A year's work yielded around a 65 percent success rate with men and a grand total of four women.

After identifying the broad pattern of local migration between the three southern boroughs we focused our most thorough analysis on the original study area, Caversham Borough, because we had established, at considerable expense, who had died rather than moved. Pilot studies of the larger area for the later period indicated that no significant differences existed in the explanatory weight of our measurable variables.

Local movers shifted back and forth between the three southern boroughs: South Dunedin, St Kilda (which was sparsely settled in 1893 but became the most densely settled borough in the country by 1928), and Caversham itself, a topographically diverse mosaic of five subareas each with its own socioeconomic profile (St Clair, Kew-Corstorphine, Caversham township, Rockyside, and Kensington). Caversham township, centred on small-scale workshops and stores, was by far and away the most popular destination, interestingly, in part because of infill in older areas and the new subdivisions opened up on the hill overlooking the township between 1914 and 1928. Only Kew-Corstorphine, a fast-growing residential suburb on the hill to the west, had more people arriving than leaving, all the older areas losing population. We also established that single women who were registered to vote, as most of them were, were never as prone to move as men over the period 1893–1938. Across the period women living alone became much more likely to move alone, however.[35]

[34] Thernstrom (1973:222).
[35] This has been more fully analysed in Heenan and Johnsen (2003:231–42).

Across the period the electoral rolls yielded a total of 6,297 local moves, representing three of every ten persons alive at the start of the study period. Although the proportion of local migrants was also a minority of the study area's total population at the start of each decade, their importance varied considerably from a low point of 21.8 percent in 1893–1902 to double this in 1902–11.[36] Around another 10 percent of the electoral roll population also moved from one street to another without leaving their subarea or suburb, meaning that in some decades over half the electoral roll population changed house. As can be seen in Table 3, an analysis of persistence and spatial movement reveals considerable variations between the different subareas and the different decades.

[36] Heenan and Johnsen (2003:232–3).

Table 3. Persistence rates for St Kilda, South Dunedin and Caversham's subareas[37] (electoral roll population)

Subarea year	Remaining in subarea (%)	Remaining on the Flat (%)
Caversham		
1902–11[38]	20	44
1911–19	37	50
1919–28	27	42
1928–38	39	49
Kensington		
1902–11	26	49
1911–19	33	52
1919–28	22	43
1928–38	27	43
Rockyside		
1902–11	21	46
1911–19	32	46
1919–28	32	54
1928–38	30	46
St Clair		
1902–11	21	43
1911–19	32	50
1919–28	23	41
1928–38	32	44
South Dunedin		
1902–11	28	48
1911–19	29	43
1919–28	25	40
1928–38	31	46
St Kilda		
1902–11	27	48
1911–19	33	45
1919–28	26	38
1928–38	33	43
Kew		
1902–11	33	45
1911–19	35	51
1919–28	24	41
1928–38	39	52

[37] I am grateful to Emeritus Professor Clyde Griffen, the Project's American collaborator, for having prepared this table in preparation for an Appendix to Brooking et al (1999).

[38] Each time period refers to the proportion remaining in the same place over the period; e.g. the proportion living in the area in 1902 who were still living in the area in 1911.

If we extend our focus beyond our data there appears to have been a constant flow of families from rental housing in the poorer districts of Kensington and South Dunedin to the new frontiers of suburban home ownership in St Kilda and to a lesser extent Kew. In the 1920s the flow continued east of St Kilda to Musselburgh, Tainui, Anderson's Bay and even Waverley. Another but smaller flow settled in Caversham Borough and Mornington.

The proportion of Catholics at different times is indicative. In 1901 Catholics comprised almost 19 percent of South Dunedin's, 17 percent of St Kilda's (then small) population, and 8 percent of Caversham's; 30 years later the proportion in South Dunedin had fallen to about 14 percent and in St Kilda the proportion had plummeted to less than 5 percent. Although we do not have denominational figures for any suburbs it is noteworthy that Catholic churches were established in Mornington (1926), Anderson's Bay (1938), Forbury Corner in Caversham township (1939), and eventually even in Waverley (1960). These are still the only Catholic suburban churches in the Dunedin urban area.

Although we lack occupational information about most women, the electoral rolls enable us to track the spatial movements of women within the study area.[39] This is particularly useful with regard to unmarried women older than 21 years old, an increasing proportion of the population. As Heenan and Johnsen reported, women were much less likely to move than men and rarely moved more than once. "Nevertheless, over the quarter-century or so between 1911–19 and 1928–38, male dominance among local migrants across the whole study area weakened progressively". Towards the end of the period — especially in "posh St Clair and working-class Kensington, as well as mixed St Kilda" — local migration among unmarried women increased markedly. Supplementing this analysis of *inter*-subarea movement events with a more finely-grained analysis of *intra*-subarea street movement events, Heenan and Johnsen found that the gender difference virtually disappeared. More striking still, however, the street analysis showed that unmarried women became more likely to change residential address over time until in 1919–28 they were more likely to do so than single men. Although no simple or obvious explanations exist to explain the gender differences, let alone their spatial and temporal characteristics, it is clear that gender carries more explanatory power than class.[40]

7. Class, Gender, and Local Movement

By and large the same variables seem to explain long-distance as well as local movements. Whether or not you owned property and whether or not you were married both proved as useful as class or occupation — except in a handful of instances (discussed above) — in explaining the propensity to move.[41] Few (7.1 percent) of households shifted from one suburb to another when the man changed job and few men changed job if the household shifted. Of the men in Caversham Borough who moved from one street to another street, 23 percent changed occupational class, however, and

[39] See Olssen and Hickey (2005:95–7, 122–23) and Olssen (2003:69–85).
[40] Heenan and Johnsen (2003:233–35).
[41] Brooking et al. (1999:68–72) and Heenan and Johnsen (2003:239).

48 percent of those who changed occupational class moved to a different street. As Heenan and Johnsen reported, "Although 21 percent of those men who did not change occupational class also moved street, there was a clear tendency for shifts in occupational class to coincide with shifting house and street." As they showed, however, local movers were often newly-wed couples setting up their home or widowed women with dependent children remarrying, growing families that needed a larger house, or renters who were in a position to buy their own home. Renters, of course, constitute an important subset of local movers with their own distinctive reasons for moving.[42]

Whether renting or owning a lot of families moved within the southern suburbs to take up better housing opportunities.[43] Kensington and eastern South Dunedin boasted a high proportion of rental properties during the early twentieth century. The 1937 national Housing Survey found that just over 40 percent of all the houses in South Dunedin, Kensington and lower Caversham were rental.[44] For a long time we were puzzled to find that hardly any men living in South Dunedin who registered to vote in a given year remained in the suburb a decade later, whereas both Caversham and St Kilda had high persistence rates. The explanation was simple: they were leaving for the new suburban frontiers of home ownership, Kew, St Kilda and the new suburbs to the northeast and the southwest.

The data on local movements also makes it possible to investigate whether any relationship existed between men's propensity to move and their upwards or downwards social mobility.[45] Let us first discuss the propensity of men changing occupational class to move spatially. (For this analysis we use a three-class model of social structure.) The upwardly mobile were most likely to shift from one suburb to another; downwardly mobile men were next most prone to move; and those who were least likely to move were those who did not change class. In most decades, of course, over 90 percent of the male population remained in the same class (1919–28 being the only exception when the overall class-persistence rate fell to 85 percent). This indicates that propensity to change houses and suburbs was positively related to occupational mobility (conceptualised in terms of immobility for those who did not change class but in terms of a trajectory for those who did change class). This was particularly true of men.

The overwhelming majority of those classified as occupationally stable or immobile remained in the same suburb. Similarly, most of those who changed class also stayed in the same suburb (c.80 percent). Despite the overwhelming dominance of spatial immobility, there is little doubt that those changing class were much more likely to move spatially than any other group in the population. Those descending from the middle to the manual working class were the least spatially mobile. Those entering the upper-middle class, regardless of whether it was from the middle or the manual working class, were most likely to move from one suburb to another. (Our upper-

[42] Heenan and Johnsen (2003:238–9) and for the quote, p.238.
[43] Heenan and Johnsen (2003:235).
[44] Heenan and Johnsen (2003:237).
[45] It proved impossible to build a large enough database of employed women to warrant this sort of analysis. With regard to men, following claims in some of the literature, we spent a lot of time testing the hypothesis that long-distance movers were socially upwardly mobile but concluded that no relationship existed, at least as far we could ascertain, on the basis of our data.

middle class is too small to allow us to further break down the group by gender or occupation.)

Certain conclusions are noteworthy. First, the highest rate of spatial movement was found among men moving upwards in terms of occupational mobility. That said, however, people did move even when they did not change occupational class, and it is easy enough to imagine reasons. Except (presumably) among the small proportion of women who never married, occupational mobility was less significant for women than marital mobility, and for both men and women marriage itself often precipitated a move by both the husband and the wife.[46] So did remarriage in the case of widowed or divorced women; the growing or shrinking size of a family, a function of familial life cycle, could precipitate a move; others might simply want a better location, greater proximity to shops or other amenities, or access to another kindergarten or school (discussed further in Section 9).[47]

Because we lack robust age data it proved impossible to analyse systematically the relevance of either individual or familial life cycles, but our work on housing — based on the 1937 Housing Survey that included South Dunedin and the poorer parts of Caversham township — found that many of the worst houses were inhabited by old people who had lived there for most of their adult lives.[48]

8. Class, Occupation and Long-distance Movement

Spatial mobility away from the study area proved to be unrelated or only weakly related to occupational mobility for men older than 21 years. Those who left a suburb generally had less property and less valuable property and were less likely to be married. Most likely they were younger.[49] Our lack of age data on the entire workforce makes it impossible to determine the frequency of spatial mobility of men in different age groups, and our sources elide those younger than 21 years old, possibly the most mobile cohorts. The strong tendency of sons to move out of their suburb of origin, however, agrees with the tendency elsewhere for young single men to be the most mobile.

Over 83 percent of those who married gave their normal address as outside the study area, indicating a marked tendency to leave home before marrying. On average men married at 27 and women at 25 and these averages did not move across the entire period although the proportion waiting until their late 20s or early 30s increased while those marrying before their 21st birthday declined sharply.[50] Before marriage men and increasingly women often moved to develop their skills and to try out possible long-term employments, as clerks and apprentices often did. Marriage generally became the

[46] The interrelationships between the different forms of mobility are more fully discussed in Olssen and Griffen (with Jones) (forthcoming 2009), especially ch. 8.
[47] For a comparable finding of the frequency of short-distance movements in an urban region, see Pooley (1977).
[48] See Isaac and Olssen (2000:120–21).
[49] Brooking et al. (1999:72–3).
[50] Olssen, (2005:78–84, 97).

occasion for settling down and, like home ownership, increased the propensity to stay put.[51]

Large employers and petty proprietors were the most stable, but even the Flat's ordinary labourers were not usually interested in long-distance movement. Although the unskilled were more likely to rent than those in other classes, they were no less likely to marry or own their own home. Although the unskilled became more likely to leave the area once the Flat's major public works projects were finished, the buoyant local economy allowed most labourers on the Flat to pick up work as helpers or assistants to skilled men, "skilled labourers" as they were known.[52]

9. Children, Schooling and Movement

The availability of a database constructed from the Admissions and Withdrawals Registers for four primary schools on the Flat allows us to further explore other aspects of spatial movement.[53] Unlike the electoral rolls and directories, which mainly name only adults involved in the labour market or managing households, the schools' database provides a child-centred approach to spatial movement.

Of the 4,584 children in the schools' database the great majority remained in the school they first attended. However, almost 10 percent (449 children) appeared more than once. Of those, 393 appeared twice, 53 of them three times, seven of them four times, and one five times.

It is important to note that in those cases where a child withdrew from school on more than one occasion a different reason was almost always given for each separate withdrawal. This group of children contains four quite distinct categories: those who withdrew because of illness, those taken out to work, those withdrawn because their family had moved to another district, and those who changed school although the family did not move.

The most common reason for children appearing in the database more than once, was because they moved between schools (99 children). In 92 instances they left the district and then returned a year or two later; these were members of families engaged in short-term movements that escaped our electoral roll method for identifying them.[54]

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[51] Our evidence suggests that trading in houses became common at some point in the period, most families moving once or twice in pursuit of a better home. On the importance of home ownership as a dimension of the stratification order see also Pearson (1980:110–17) and Pearson and Thorns (1983:67–70). See too Connell and Irving (1980:65–84, 188–91) and Frost (1991:123–26).

[52] Olssen (1995:65–7). As Brooking et al. (1999:66) established, public servants, especially teachers and policemen, were among the most prone to long-distance movements. All public servants, including manual workers in the Public Works, Railways and Post & Telegraph departments, were subject to transfer.

[53] The schools' database was created by a member of the New Zealand Society of Genealogists and consists of the admissions and withdrawals records of 4,854 children attending the following primary schools: Caversham, Musselburgh, Forbury and St Clair. No registers from this period have survived for Kensington, Macandrew Rd or College St schools, although class lists exist for these and all other schools in the archives of the Otago Education Board. To the best of our knowledge no records survive for the only Roman Catholic primary school in the study area, St Patrick's. The database is available either at www.caversham.otago.ac.nz or the Otago Settlers' Museum, Dunedin.

[54] I use family to denote the household to which the child was attached without implying that it was necessarily the child's birth family.

In other instances the children changed school although their families did not move. Some 87 were taken out of school because of illness and readmitted when they got better. A handful of children received permission to stay out of school to assist one or other of their parents and were then readmitted later. In one instance a child was expelled. In 161 cases no reason was provided for leaving school and no destination was given. In some instances a number was entered in this column, presumably a code. Its meaning remains unclear although one suspects that in most instances the child's family simply left the Flat and our study area without informing the school (which would give an annual long-distance movement rate of almost 52 percent). It is worth reiterating that if we ignore those classified as "Unknown", the single largest category was "Moving School" within southern Dunedin.

Some 68 children changed from one of the four state primary schools in the database to another although their family did not change address. (Given that we have no data for three state primary schools and the only Catholic primary school one suspects that the proportions would not change greatly if we had perfect data.) Interestingly enough there is no evidence that class or occupation explains the propensity to change school any more than it explained spatial movement more generally, although professionals were slightly more likely than other strata to shift a child from one school to another.[55]

Patterns of movement

By using a measure of over and under representation in Table 4 it can be seen that professionals, and to a lesser extent small employers and semi-professionals, were likely to move their children (a score of 1 means that children in that stratum were neither over nor under represented, a score of 2 means that they were present in twice the numbers one would expect, and a score of zero means that they were absent).[56] If we overlook the retired, the smallest stratum, the unskilled and especially the semi-skilled were the least likely to move their children from one school to another, although a small stratum, large employers, had the same score as the unskilled. What is most evident, however, is that the range of scores is narrow. Only the professionals seem to have been active in moving their children, no doubt because they realised better than most the importance of success in primary school to the educational futures of their children.

[55] For further discussion see Olssen and De Zoysa,(forthcoming 2009) www.caversham.otago.ac.nz.
[56] The index was invented by Rogoff (1953).

Table 4: Index of over representation for male parents/guardians and all males[57]

Occupational category	Male parent/guardian in schools' database		Male parent/guardian of transient children in schools' database		Index of over representation
	Number	Percentage	Number	Percentage	
Large employer	73	1.7	10	1.5	0.9
Professional	87	2.0	21	3.1	1.6
Semi-professional	107	2.5	20	3.0	1.2
Small employer	620	14.4	127	18.8	1.3
Petty official	229	5.4	40	5.9	1.1
White collar	600	14.1	101	15.0	1.1
Skilled	1,407	33.0	211	31.3	1.0
Semi-skilled	245	5.7	19	2.8	0.5
Unskilled	872	20.5	122	18.1	0.9
Retired	24	0.6	4	0.5	0.8
TOTAL	4,264		675		

At the aggregate level there is a contrast between the propensity of children to change school and that of their parents to change residence. Heenan and Johnsen reported in "To and From, There and Back", that members of the upper-middle and middle classes were less likely to move, while members of the manual classes were most likely to shift from one suburb to another within southern Dunedin.[58] Upper-middle and middle class parents may have been less likely to move but they were more likely to move their children from one school to another. The fact that semi-skilled and unskilled, while highly mobile as adults, tended to keep their children in the same school that they first entered, suggests that attitudes towards education and familial obligation may be used to explain the tendency to withdraw from school in the same year that you had been admitted.

The explanation for the children of the skilled being slightly less likely to change school than one might expect probably reflects their commitment to education. As Page, Lee and Brooking showed, the skilled and the semi-skilled were most likely to send their children, and particularly their daughters, to high school. Boys, of course, had a wider range of apprenticeships and cadetships available to them than girls, and we have no way of knowing what proportion of boys from skilled homes, or from other occupational classes, took on apprenticeships, although the analysis of inter-generational mobility indicates that over 48 percent of the sons of skilled men entered

[57] This is calculated by dividing the percentage of male parent/guardian of transient children in the schools' database by the percentage of male parent/guardian in the schools' database for the year 1911.

[58] Heenan and Johnsen (2003:239) and Brooking et al. (1999:65–72).

another trade.[59] Whatever the reason for the gendered imbalance — unusual at the time — skilled men and women may have been less confident in moving their children from one school to another or more sensitive to their children's wishes. There is some evidence to suggest that children often disliked such moves.

The impact of gender was more dramatic than that of class. In this period the relationship between poverty and the transience of school children may have been strongest in the case of women heads of household living in rental accommodation with dependant children. Widowed women were certainly very likely to remarry quickly and often then moved house as well.[60] The vulnerability of the children of those now described as solo mothers clearly emerges from the historical record. Mary Isabella Taylor's life illustrates the several meanings of transience. She was only a child when she arrived in Dunedin in 1877 from Glasgow with her parents and took up residence in the Immigration Barracks in Caversham. Over the next 20 years the family frequently moved around the Otago-Southland area, sometimes staying in one place for a year but mostly staying for only a few months. Within that itinerant pattern Mary's father often left his wife and children behind while he went "up country" in search of work. Mary's mother's alcoholism, if not the frequent eruptions of violence between the parents, help explain the family's high propensity to keep moving.[61] Her mother's constant need for help with the younger children, not to mention in managing the house, badly disrupted Mary's schooling and later destroyed any chance she had of completing an apprenticeship.[62] Mary married to escape her mother, but made a poor choice (he preferred drinking with his mates to discharging his responsibilities as husband and father). She left him and at that point she became very stable, despite having to rent her house. Her three children all attended the same school for their primary school lives. Two became delinquents, to use an anachronistic phrase, and the third settled down and ended up a shopkeeper. The delinquent daughter died young but the other delinquent became a Member of Parliament and Undersecretary for Housing in the first Labour government.[63]

There is some evidence that motives or reasons for changing schools varied and that class helps explain some aspects of the variance. Of the children who changed schools, regardless of whether their parents moved, over 70 percent shifted to St Clair school which was well known at the time for smaller classes, emphasis on team sports and music, and success in winning scholarships. The children of professionals, and to a lesser extent the self-employed/small employers, were somewhat more likely to change schools than their parents were to move. The children of the semi-skilled and unskilled, both highly mobile adult strata, were much less likely to change schools. There is also evidence that some children of upper or upper-middle class families moved around, although they were no more mobile than their parents.

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[59] As did 39 percent of the sons of semi-skilled; 28.5 percent of the sons of unskilled; and 29.4 percent of the sons of white-collar men. Roughly one fifth of the sons of the upper middle class also entered a skilled trade. These figures are derived from an analysis of a database constructed from marriage records; see Olssen and Griffen (with Jones), (forthcoming 2009:ch. 6).

[60] Hart (2001:ch. 3).

[61] Cooper and Horan (2003:223).

[62] Cooper (2005)

[63] Lee (1992).

10. Overview of Movement and Persistence

The emphasis in our earlier analysis of Caversham Borough alone on stability in a core population making for coherence in a mobile world is strongly reinforced by the increased levels of persistence in the expanded study area. The higher rates found previously for Caversham's home owners and for large and small proprietors were characteristic of the Flat as a whole, as in most urban localities throughout the English-speaking New World. Similarly, inferring from data on whether men were married or single (the average age for first marriages among men was 27 years old), workers younger than 30 years old moved in and out of the Flat more frequently than the middle-aged. Persistence levels did not vary much between the three boroughs within the Flat or Caversham Borough's subareas. Interestingly when variance occurred it contradicted stereotypical expectations. For example, industrial Kensington with its larger proportion of unskilled workers and renters had the highest rate of persistence in both 1902–11 and 1911–19 (Table 3). Another older, poor and heavily working class subarea, Rockyside on Caversham Valley's cold northern slope, had both a high rate of home ownership and high rates of persistence, which set a record for the Flat when it peaked at 54 percent between 1919 and 1928 (Table 3). No rootless proletariat there. Fashionable upper middle class St. Clair, which included an area near the beach, was a little less stable than industrial Kensington.

The new suburbs were different in some respects. Kew and Corstorphine, on the hill to the west, were just being settled during the early twentieth century. At first those who wanted large gardens were attracted, including several skilled men, and then middle class families also moved in (many of them skilled men who had become small employers). Even as the middle class presence increased the suburb's rural frontier, which kept moving up the hill, remained more socially mixed. No other subarea matched its record of two decades in which half of its residents remained. St. Kilda followed a similar trajectory. It was a marshy frontier in the 1890s and grew around three residential nodes, one to the west, adjacent to St Clair, which included a high proportion of well off households, another to the east dominated by skilled tradesmen and white-collar men, while a substantial area in the centre had a much higher proportion of unskilled and was more socially mixed. As St Kilda became more densely settled after 1910 the proportion of unskilled workers increased. In 1919–28, the most volatile of our five decades, St Kilda had the lowest rate of persistence, 38 percent, of any subarea (Table 3).

It might be thought that renters in rundown older houses, concentrated in Kensington and eastern South Dunedin (around the gasworks), might be more likely to move to new suburbs where the absence of infrastructure made land cheaper. Some might want to argue that local movements might have reflected the frequency of evictions or even tenants shifting to escape payment of rent, or to find cheaper or more desirable rentals. Although there were high concentrations of rental housing in South Dunedin and Kensington — some of it owned by government departments — it is telling, however, that in some periods renters were less likely to move than home owners. To what extent people sold and bought their own homes in the hope of making a capital gain is beyond our data, but given how widespread that ethos had become in rural New Zealand it would be surprising if it was not significant in periods of

economic buoyancy.[64] All of these possibilities occurred, but without knowing their frequency, we are left to speculate.

How should we interpret the frequency of residential movements between the southern suburbs? The authors of our persistence analysis for Caversham Borough favoured Katz's and Thernstrom's negative views of spatial mobility (i.e. that people moved because of blocked opportunities or frustrated aspirations); the expanded database suggests, as Chudacoff found in Omaha, that movement more often reflected men and women seeking to realise their aspirations for a better place to live.[65] Our own work has also underlined the importance of more mundane imperatives: getting married, critical points in a family's life cycle, or becoming owners rather than renters. It is clear, contrary to Katz and Thernstrom, that high levels of spatial movement were not peculiar to either the skilled or the unskilled and certainly did not prove the existence of a rootless proletariat. The webs of connection which residential mobility created between families in old and new neighborhoods, and between people of different religious denominations and different classes, also made coming together in voluntary associations easier. Nor did these high levels of movement prove inimical to the formation of trade unions or a mass-based Labour Party.[66] Mobility and community were not incompatible. The complex ways in which they became interwoven, in fact, provided a solid foundation for the emergence of an egalitarian society.

11. Conclusion

Our analysis of geographic movement in these suburbs has shown the remarkable fluidity of population, a fluidity that for many began as they searched for a primary school that best suited them. Our project's initial focus on Caversham Borough alone yielded rates of persistence at the low end of studies elsewhere with as much as two thirds of the adult male workforce disappearing from the Borough in about a decade. That did suggest conditions inhospitable to demographic class formation or even community formation. But when the project expanded its database to cover the entire Flat, we discovered how many of those leaving Caversham made short-distance moves to the adjacent boroughs (and later suburbs) of South Dunedin and St. Kilda.[67] As the older parts of Caversham and South Dunedin became congested by New Zealand standards, and it had become a unique standard by the 1900s, families increasingly migrated to newer areas on the Flat and its surrounding hills.[68] A surprising number of school children also moved from one school to another although their parents remained at the same address.

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[64] For the enthusiasm of farmers for selling and buying land to lock in capital gains see Condliffe (1959:273–9), who first analysed the importance of farming for the property market and the speculative frenzy of 1919–23. For a more recent discussion see Pearson and Thorns, (1983:67–70). The importance of home ownership to urban working class voters also became a major issue for the Labour Party; see Olssen (1977:32–5).

[65] Chudacoff (1972:156–59).

[66] Some of these issues are explored further in Olssen (2008) and with a commentary by Olssen and Scates, (2008).

[67] Caversham's ratepayers voted to amalgamate in 1904, South Dunedin's in 1905, but St Kilda was forcibly amalgamated only in 1986.

[68] Cooper et al. (2003:22–40), and for the later flow further east into Musselburgh, Tainui and Anderson's Bay see Heenan (1962:45–8).

The cumulative effect of these various forms of spatial mobility contributed to the fluidity of urban society in New Zealand, especially when one bears in mind the way in which spatial movements played the weft, as it were, to the warp of marital, worklife and intergenerational occupational mobility.[69] Although spatial movements, like worklife occupational mobility, varied dramatically from one decade to another, even within the short period we have analysed, cumulatively they created a fluid society. By an early age every child knew how to negotiate class differences and a small minority had tried to master more than one socioeconomic environment. As Sorokin remarked many years ago, such social mixing fosters intellectual vitality and cultural innovation. His conclusion continues to attract scholarly support across a range of disciplines.[70] In a new society, such as southern Dunedin, largely created by immigrants from four other societies (England, Scotland, Ireland and Australia), that social fluidity helped to underpin the emergence of an egalitarian society characterised by a deepening consensus about the importance of looking after those who, for whatever reason, could not always look after themselves.[71] High levels of spatial movement, one might also imagine, contributed to the growth of a distinctive New Zealand accent, remarkable for its failure to reflect either class or regional difference, and a growing sense of national identity. Transience, for those who persist with this word resonant with ancient meanings, may sometimes be symptomatic of dysfunction, or even help create it, but those instances are the exceptions. Voluntary spatial movements, whether long-distance or local, contributed to a vibrant and dynamic society. There seems no reason to conclude that this is not still the case.

[69] The distinction is discussed in Heenan and Johnsen (2003:228–29) and passim. See also Law (2003:258–84); her earlier seminal paper, Law (1999:567–88); and her last thoughts on the subject, Law (2002:425–45). See also the first report on migration in and out of the original study area, Caversham Borough by Brooking et al. (1999:55–73).

[70] Sorokin (1964), 5 and Pt. 1 passim, pp.511–12.

[71] Clark (1949:141–44, 148–50), first noted the sizeable presence of those born in Australia.

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Appendix I

Definitions of occupational groupings

Large employers/higher managerial
Employers or managers of more than 10 individuals.

Professionals
Occupations which require a formal qualification to practice and have a professional, body which controls entry into the discipline within the profession.

Semi-professionals
Occupations requiring extensive training or education but lacking a professional body to control them.

Small employers and self-employed
Individuals who work for themselves or run a small business employing less than 10 individuals.

Officials and supervisory
Supervisory positions requiring relevant experience and educational qualification.

White-collar workers
Non manual office/shop/factory occupations.

Skilled
Jobs requiring a period of training normally indicated by an apprenticeship.

Semi-skilled
Jobs where some skill is needed but that skill may be gained "on the job".

Unskilled
Occupations that require very little or no training.

Three further categories are used because not all adults participated in the labour market. First, from 1898 onwards an increasing proportion were able to retire and live on the old age pension; we classified them (10). Because most women left the labour market on marriage, which on average women undertook at around 25 years old, we have no occupational information on them other than that they were wives and mothers; we classified them (11). And in a small proportion of cases we had no information concerning an adult's occupation; they were classified (99).

Definitions of classes

The main classes defined in the project are upper, middle and working classes.

- The upper class is made up of large employers and higher managerial positions, professionals, and semi-professionals;
- The middle class includes small employers and self-employed, officials and supervisors, and white-collar workers;
- The working class consists of skilled, semi-skilled and unskilled workers. People in this class would have had the lowest paying jobs therefore best represents the lower class.

The justification for this particular scheme is outlined fully in Erik Olssen and Maureen Hickey (2005). For further discussion of the occupational and class structure of southern Dunedin, see Olssen (1995), and for the interplay of class and gender across several social sites see the various essays in Brookes, Cooper and Law (eds), (2003).