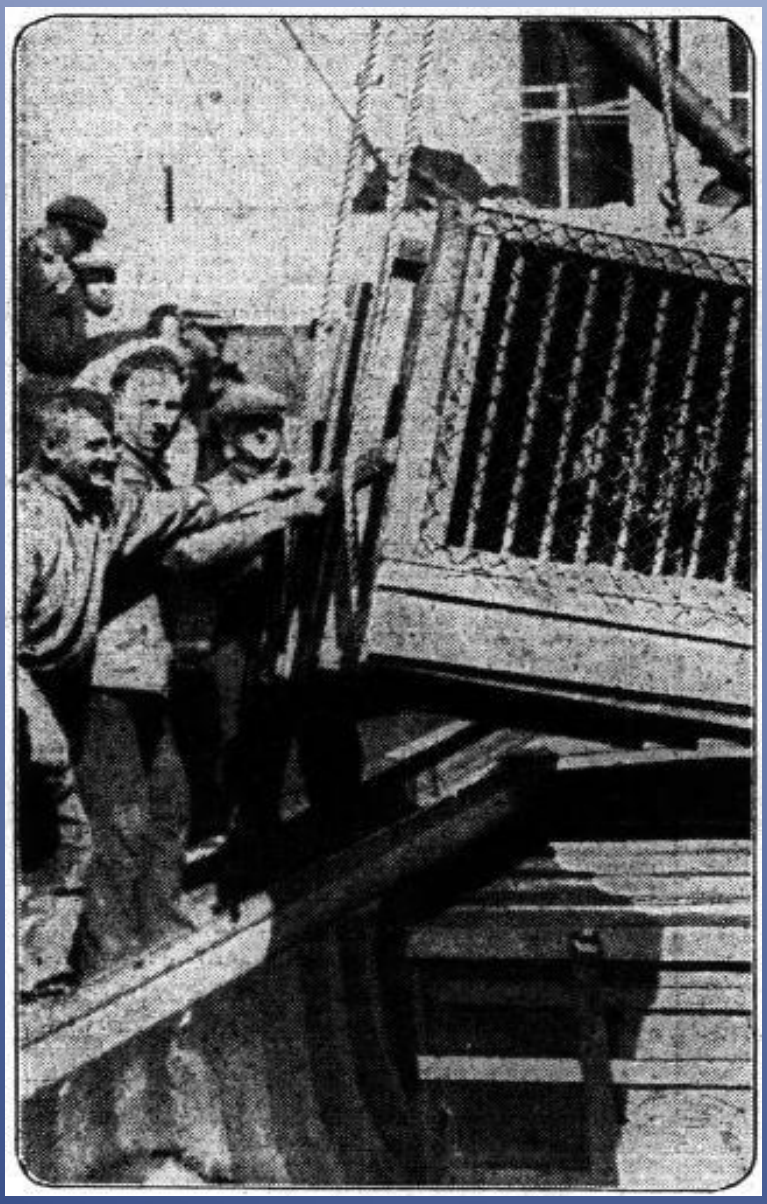

Dockworkers moving through the City

Residential mobility and social segregation in Amsterdam 1890-1940

Henk Laloli

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Contents

Introduction

Theories of urban change in cities (the Chicago school or social area analysis) continue to give inspiration, but when specific cases are investigated they show many divergences from supposed patterns. Does Amsterdam's development conform to that of American cities or even other European cities? One idea that would not stand up to scrutiny is the radical change of the old city. Before the industrialisation Amsterdam was already divided in areas with dominant social groups. The inner city contained a mixture of people and activities. Around it a canal zone (Grachtengordel) was laid out for the rich and round these canals the working-class districts could be found. This pattern remained intact well into the 20th century. The reasons for this were several. The old city was not radically altered in terms of housing: some bad housing was tore down, but the replacements were filled with only a slightly higher income group. The elite, once living in the city centre, moved out, but not completely, and established itself in the new districts in the south or in the regional suburbs. The old city centre remained a mixed area: more homogenous in terms of population, but mixed in terms of functions used for housing, offices and shopping. The harbour and new large industries were actually quite near the old city, because they were built along the IJ the workers could stay in the same place despite job changes.

The mentioned theories of the modern city see its residential and economic functions diverge into separate zones or sectors that lead to the rise and deepening of social segregation in the city.[1] They suppose that economic and occupational change led to increasing social differentiation, individualisation and social mobility. One outcome was different residential choices of different social classes. Another would be constant filtering down of housing: the lowest income groups establishing themselves into the houses left vacant by better off groups escaping to an outer zone of new housing. These theories presuppose the unfettered reign of free markets and individual choices. Certainly, Amsterdam showed in the pre-1900 expansion all these signs of unchecked commercial housing development, but after the establishment of a Housing Act in 1901 the city and the national government had powers to regulate the free market and plan urban development. Still, it remains to be seen if the forces of economic change and social mobility were checked.

We can define residential segregation as the spatial clustering of people in terms of several aspects: income, ethnicity, family size, health etc. Research into these matters has proposed that segregation takes different spatial characteristics according to different aspects: the economic differences fall out into sectors, the family differences into zones, and the ethnic into clusters. Segregation according to these characteristics can be studied by using data on income, housing, rents and health at the district level. I will also use data from individual life courses that show residential change and relate these to broader patterns. The above mentioned theories lead us to suppose that Amsterdam's residential segregation by income increased, that the poor were either chased out of the inner city or remained locked into a downgraded old area, that the better off workers and middle classes preferred the newly built zones to the old city. In short, that social and residential mobility led to increasing social segregation in a pattern of constant resettlement of different groups outwards.

Approaches

In geography there exists a huge volume of research on residential mobility and also on social segregation. In history we see less of this. In the study of Dutch cities some researchers have

[1] For a critical overview of these theories see: M. Cadwallader. *Urban geography: an analytical approach.* Upper Saddle River: Prentice Hall, 1996. Chapter 6, 'Urban social areas'.

paid special attention to social segregation. Michiel Wagenaar did this for Amsterdam for the period 1878-1915 and he concluded that between these dates there was decreasing heterogeneity and increasing segregation. He compared the quarters of the city on income, industry, schooling and population density.[2] The new districts became either lower-middle class areas or elite and the poorer districts lost their elite and middle groups. The inner city lost some of its elite and paupers. The canal zone (Grachtengordel) remained one of the richest areas in the whole city and the remarkable thing is that many rich people did not move. The poor could not move outside the working-class districts in 1915 because rents were too high elsewhere. Wagenaar explains the increasing social segregation in the new areas by the housing rent, which was too high for most of the poorer people. He thinks that municipality was unable to change the structure of segregated development. The poor remained tied to the structures of support and credit that were part of their survival in the old districts.

In a recent article Jan Kok and others investigated if the number of residential moves in Amsterdam can be interpreted as part of workers living strategies.[3] They show that the number of movements can be explained in general by the housing market. When a large number of houses was available until approximately 1910 the number of movements was the highest. After that period housing shortage grew till into the nineteen twenties and the number of movements dropped. There are clear social differences in the number of movements: casual workers are the ones that move most before 1910. The authors relate this to their living strategies. The poor used these changes as part of making ends meet means. A house with a somewhat lower rent would be taken up in no time. The poor also moved inside a small area: most movements took place inside the street and they hardly left the old city centre. This again can be explained in financial terms: housing in the newly built areas was more expensive and few unskilled workers could afford it. The support network of family and neighbours (if it existed) was nearby. The findings agree with other research for later periods: people change addresses frequently when they have a young family, there is less change in the later life course, most movements occur over a short distance, in a small sector of the city.[4]

These authors did not analyze the movements as such, the geographic beginnings and destinations and the clustering of movements in certain areas. I propose to do that. They limited themselves to the frequency of movements and they only categorized the city into five areas, whereas I will use the most detailed subdivisions available: the neighbourhoods.

In this article I will use only a part of the same dataset of Kok et al: limited to workers who were mainly casual workers or dockworkers in Amsterdam. These are individual data gathered from the population register and poor relief archive. The people here represent the unskilled workers, one of the lowest income groups in the city. The names come from an unemployment relief agency of 1916 and a list of the harbour's employers union from 1920.[5] I have limited myself also to data that applies to the start and last address or that is constant.

For the city as a whole I have data on taxation and rent of neighbourhoods for several years. Some rent and tax data are only available on the highest level that I have termed districts. I will use this level for presentation of data. There is also a level in between called 'buurtcombinaties': combinations of neighbourhoods. The neighbourhoods were in time subdivided ever more until there were more than 200. They varied enormously in population though: from 300 to above 10.000. New districts were added in 1920 with the city's

[2] See M. Wagenaar, *Amsterdam 1876-1914:* economisch herstel, ruimtelijke expansie en de veranderende ordening van het stedelijk grondgebruik. Amsterdam, 1990. chapter 7.

[3] J. Kok, K. Mandemakers and H. Wals show that for the period 1910-1940 about 20% of the unskilled workers moved out of the old city. 'City Nomads: changing residence as a coping strategy, Amsterdam 1890-1940'. *Social Science History 29(2005)15-43*.

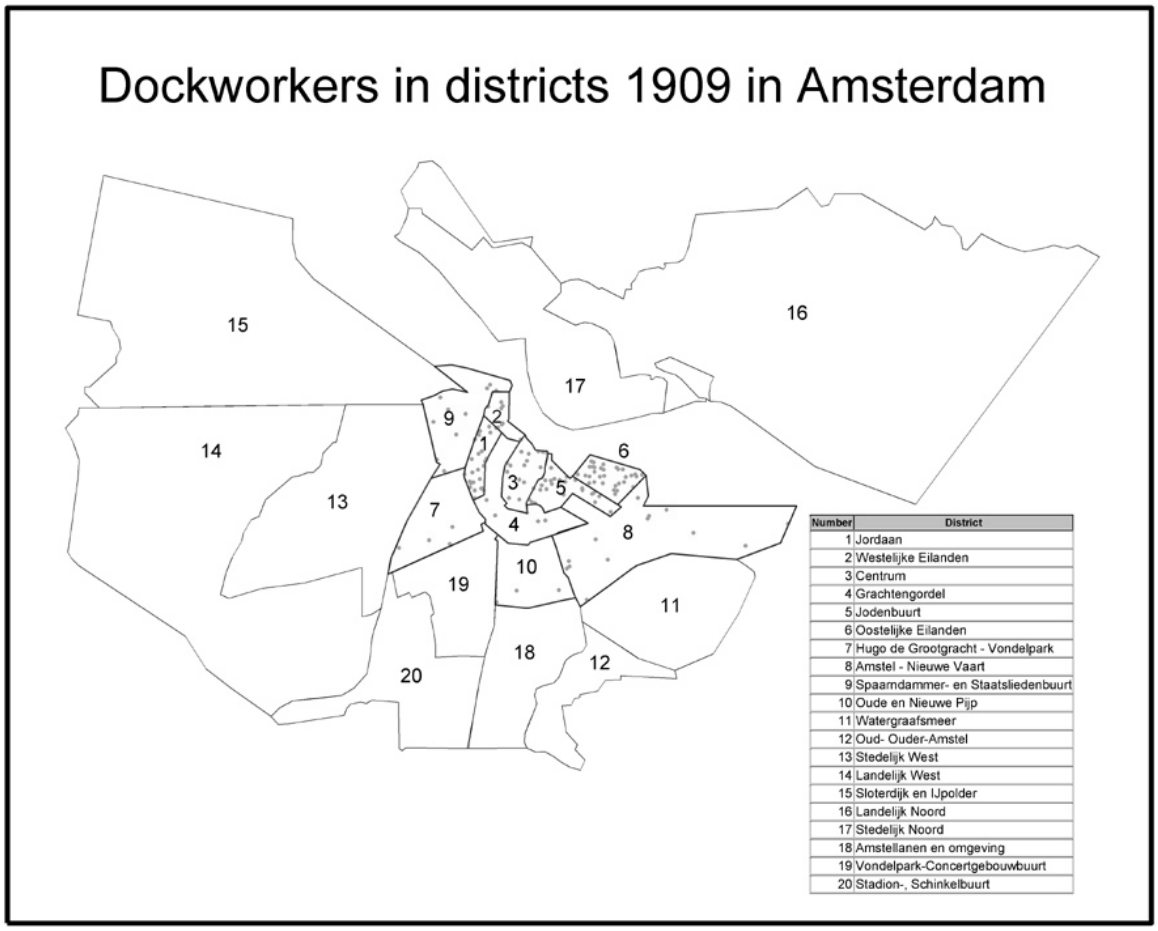
[4] J.J Harts. en L. Hingstman. *Verhuizingen op een rij: een analyse van individuele verhuisgeschiedenissen*. Amsterdam, 1986.

[5] So when I refer to the sample the data comes from the database on dockworkers using many sources.

expansion until we end with 20 of them in 1940. Of the buurtcombinaties there were 50-56 from 1930 onwards.

In this paper I will just make a beginning and not use the rich set of individual variables that is in the database. I will limit myself to three questions.

1. What were the movement patterns in geographic terms? From where did they come, what was there destination?
2. Did the residential moves show changes in income as measured through the taxation scores of the neighbourhoods where they came from and went to?
3. Did the residential moves contribute to social segregation according to income?



Residential mobility

The general trend in Amsterdam after 1860 was for people to move out of the old city areas into newly built ones. The number of houses and people in the old city declined steadily because of renewal, slum clearing and enlargement of tenements. Of the sample the generation that married before 1909 was still heavily concentrated in the old city: only 21% lived in the new areas, mainly working-class districts west and east of the centre lying very close to the harbour. The Oostelijke Eilanden, Jordaan and Jodenbuurt were still the main districts were the dockworkers lived. These workers ended their lives in different places though (75% end in the 1930s): the new districts referred to (mainly IJ - Hugo de Grootgracht: Spaarndammerbuurt and Staatsliedenbuurt, and Oost in the Indische Buurt) had become their main living quarters. 63% had their final addresses in the new city (see Figures

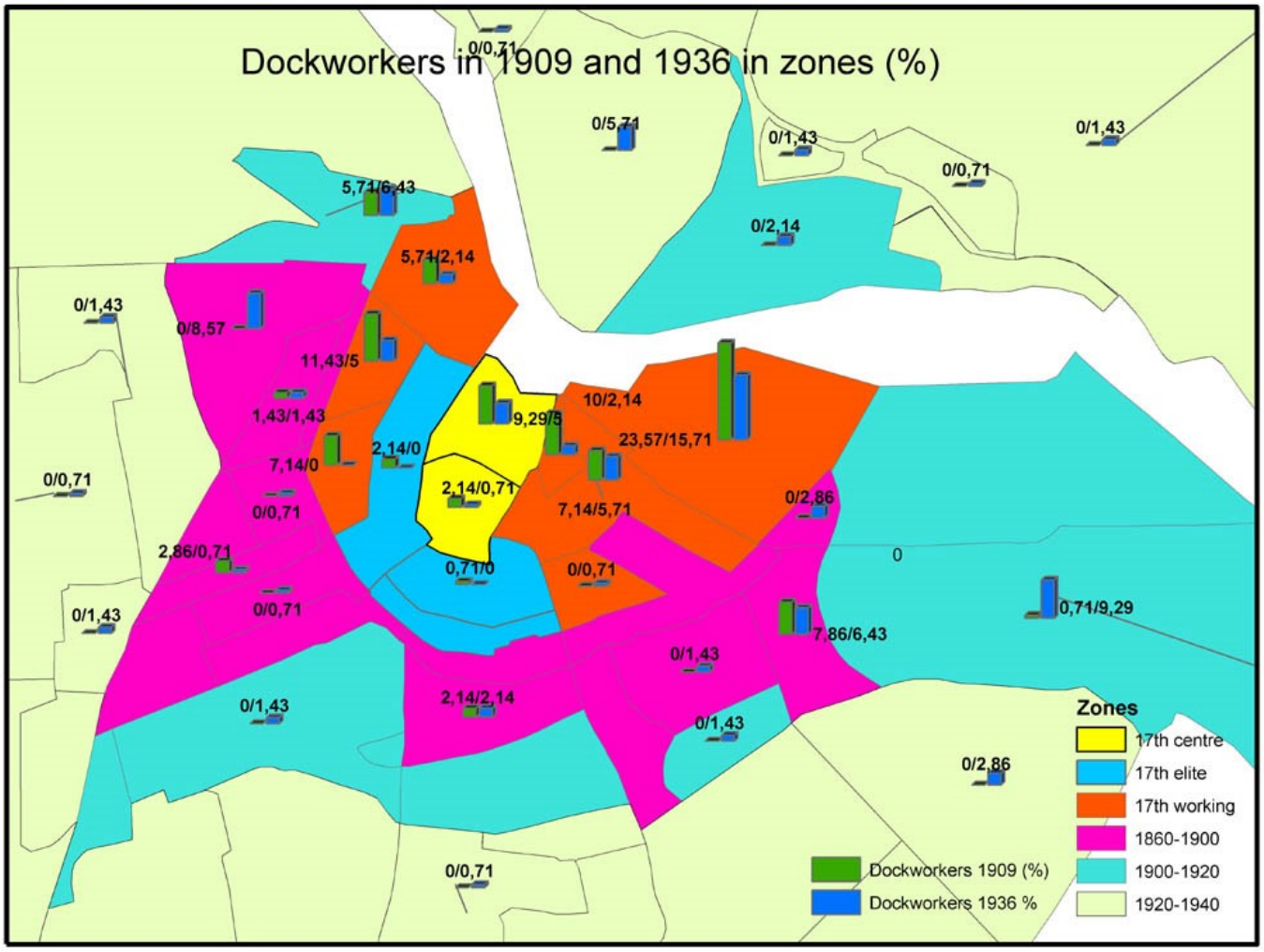
1,2 and 3). They had also spread to the north part across the IJ, where new industries had sprung up. The cohort that married after 1908 started to live mainly in these new areas already (52,8%) and in the 1930s were spreading to the newest lay-outs of the city, leaving the 19th century districts: they went to the western and northern parts for instance. So, these poorest of workers were also following the general trend of spreading outwards to ever newer areas. And their movement outside the city centre had started in the 1910s. Still, of the second cohort there remained a sizeable fraction in the old city (32%). When we compare the neighbourhoods of the start and final addresses in our sample 14,1% ended up in the same area.

Table 1 First marriage cohort in the districts (figure 1)	Marriages before 1909: first address	Marriages before 1909: last address	Zone	Class[6]
	%	%		
Centrum (3)	11,4	5,7	17thc.	Mixed
Grachtengordel (4)	2,9	0,7	17thc.	Elite
Jodenbuurt (5)	17,1	7,9	17thc.	Working-class
Jordaan (1)	18,6	5,0	17thc.	Working-class
Oostelijke Eilanden (6)	22,9	15,7	17thc.	Working-class
Westelijke Eilanden (2)	5,7	2,1	17thc.	Working-class
Oost (Amstel-Nieuwe Vaart) (8)	9,3	21,4	19thc.	Working-class
IJ - Hugo de Grootgracht (9)	7,1	16,4	19thc.	Working-class
Hugo de Grootgracht – Vondelpark (7)	2,9	2,1	19thc.	Lower-Middle-class
Oude en Nieuwe Pijp (10)	2,1	2,1	19thc.	Lower-Middle-class
Stedelijk gebied west (13)		3,6	20thc.	Lower-Middle-class
Stedelijk Noord (17)		9,3	20thc.	Working-class
Oud-Watergraafsmeer en Omval (11)		2,9	20thc.	Middle-class
Amstellanen en omgeving (18)		0,7	20thc.	Middle-class
Museum-, Concertgebouw- ,Willemspark- en Apollobuurt (19)		1,4	20thc.	Elite
Landelijk Noord (16)		2,9	20thc.	Mixed
Total (N=140)	100	100		
In 19th & 20th c. districts	21,4	62,9		
In non-working-class districts	19,3	22,1		

People of the first marriage cohort that ended in the old centre usually came from the other old districts. The Oostelijke Eilanden and the Jodenbuurt had the highest rates of stayers (25 and 29% respectively). Their inhabitants moved in the majority to the north-eastern areas. The Jordaan had very small numbers that stayed and the inhabitants went mainly to north-western harbour districts. Those that already lived in the new areas mainly stayed there. This east-west split continued in the movements of the second marriage cohort. Only the northern area was receiving people in equal amounts from both sides of the city.

[6] Categorized according to: working-class: >80% wage workers and <7% middle class tax payers; lower-middle: >70% wage workers and >7% middle class tax payers etc. in 1930.

Figure 2 Residential mobility of the first cohort (between 1909 and 1936)



Social and geographic mobility

To establish a score for income standing of the neighbourhoods I have computed the z-score of the number of people who were taxed in relation to the population of the area. These z-scores show how many standard deviations the percentage of people taxed was above or under the mean in a particular year. The number of people who were taxed increased in this period, so it would not do to record just the percentage of the taxed population. The z-scores can be used to compare different years with different means. I have used several years for which I have tax data: 1893, 1898, 1915, 1920, 1930 and 1936. In 1889 24% of the occupied population had an income tax assessment. In 1910 this was 46% and in 1930 this was 70%. The crisis of the thirties reduced this but I don't know how much.

Can the incomes at neighbourhood level be used to gain insight into the social standing and social mobility of individuals? Individual incomes in the sample are so diverse and incomplete that makes them hard to use. And occupation cannot give a quantitative indication of social mobility therefore I try to find out if the neighbourhood tax score can be

used for this purpose. The main problem is that an income rate by neighbourhood washes away individual difference. But, as I will later show, the working-class neighbourhoods where most of the sample people lived were relatively homogeneous in their (low) income rates.

The tax scores of the neighbourhoods people lived in give a clear picture of the social standing of the addresses they lived at. The starting addresses of the married couples show that only 18,1% of them lived in a neighbourhood that had a tax score above the mean. The first addresses for the marriage cohort before 1909 are between 1890 and 1909. The final addresses of the whole sample that have been recorded before 1941 show an increase to 28,5% that have tax scores above the mean. Many addresses recorded an upward change. This being said these data show that these people still lived in the poorest of the neighbourhoods in the city.

Table 2 Tax score by cohort and zone of last address (%)

Marriages	before 1909		after 1908	
Tax score above mean	no	yes	no	yes
Zone last address				
17th c. inner centre	1,9	16,2	1,3	8,8
17th c. elite				2,9
17th c. working class	36,9	16,2	37,3	5,9
1860-1900	23,3	27,0	13,3	32,4
1900-1920	22,3	18,9	25,3	20,6
1920-1940	15,5	21,6	22,7	29,4
Total (%)	100	100	100	100
Absolute total	103	37	75	34
	%		%	
Start address	85,7	14,3	77,1	22,9
Final address	73,6	26,4	68,8	31,2
17th c. working class (start address)	96,7	3,3	95,7	4,3
17th c. working class (final address)	86,4	13,6	93,3	6,7
New districts (final address)	71,6	28,4	62,2	37,8

Were the ones that stayed in the centre the poorest? Table 2 above shows that those who lived in the old city primarily did so in under average taxed neighbourhoods. In the new districts this was less the case. The people that moved to the new areas must have been rising in tax terms then? Table 3 shows that those that started in a taxation area below the mean in the old city were better off in the new districts than in the old ones. In terms of absolute change those that remained in the old city had the highest increases in the second cohort. This is because the highest rises in the number of people taxed between 1920 and 1930 can be found in the old city's working-class districts. But they remained the poorest districts.

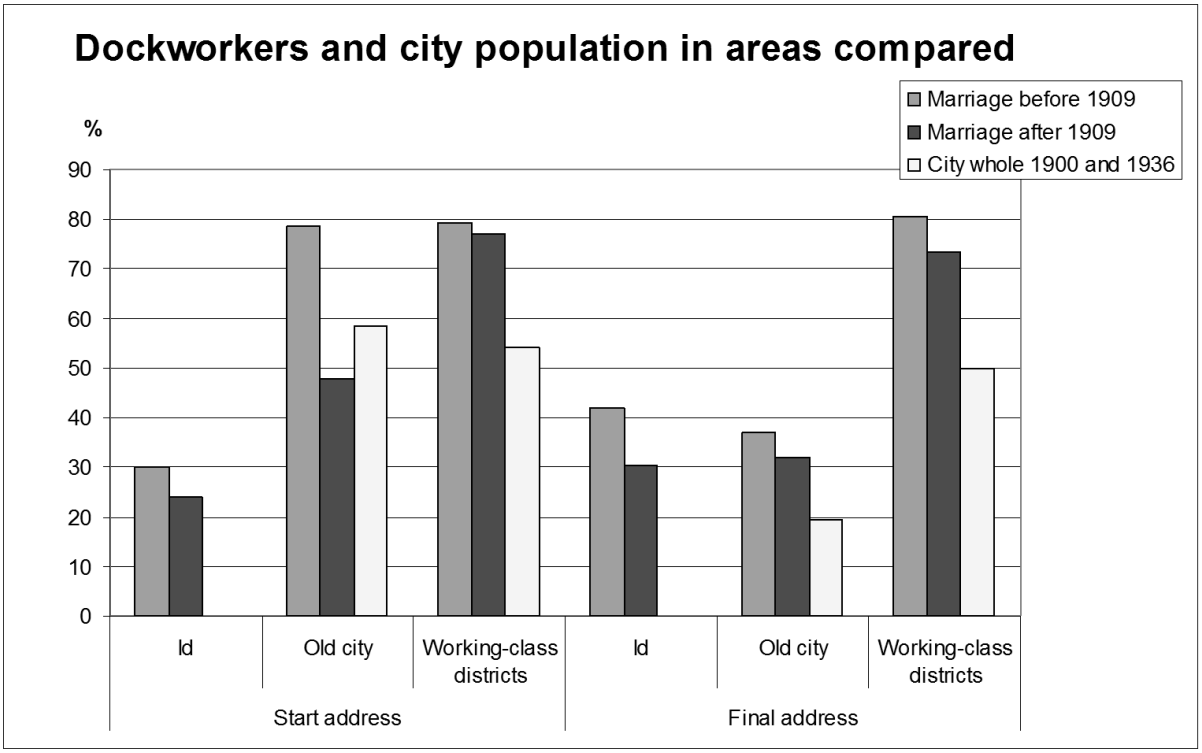
Table 3 Taxation of those below mean taxation of movers in old city (%)

	Marriages before 1909		Marriages after 1908	
	Below mean	Above mean	Below mean	Above mean
stay in old city	79,5	20,5	81,8	18,2
to new city	66,1	33,9	63,2	36,8
Absolute total	72	28	39	13

Social segregation

Did social segregation increase? Let us compare the city data on the district level with the patterns of the sample.

Figure 3



A quick indication of segregation can be gained from a summary measure like the index of dissimilarity.[7] As this index increases with the number of categories (districts) it is of limited use for comparisons in time with changing categories. For a comparison of the distribution of city population and the sample at two points in time it will do. For the city population of 1900 and the start addresses of the first marriage cohort the I_D is 30, meaning that this amount (%) of the population was in different districts (see figure 3). The first marriage cohort is overrepresented in the old city and the workers districts. While 58,6% of the total population lived in the old city this was 78,6% for the sample. For working-class districts the ratio was 54% and 80,7% for the city and the sample. We have seen that the first marriage cohort spread out over the city. While in 1936 in the whole city the population in working-class districts and the old city was 50% and 19,4 respectively, for this cohort it was 77,9 and 37,1. For the second cohort the same values for the final addresses were 62,4 and 32,1 respectively. The I_D for the final addresses increased for the first cohort to 42, for the second cohort it came from 24 to 30,4. The comparison between the sample with many addresses and two points in time is an uneasy one, but it is clear that the dockworkers had their places not in the south far from work or in the elite districts. In social geographic terms the dockworkers of the first cohort clustered together in five broad areas of working-class type (table 1 and figure 2). Their spread over the city did not keep pace with that of the general population. This remained so in the second cohort.

[7] The formula is $I_D = 0{,}5 * \sum |X_i - Y_i|$. Use percentages for the share of the entities in the total. Sum the absolute differences between the percentages of the two populations you want to compare and multiply the result by a half.

Table 4 Homogeneity of working-class districts			
Taxed belonging to middle and elite group (%)			
	1915	1930	1936
New city working-class areas			
North	13,21	4,56	2,53
East	0,44	6,77	1,4
West	0,94	3,68	2,12
Old city working-class areas			
Jordaan	2,16	4,71	2,77
Oostelijke Eilanden	1,87	2,72	2,84
Mixed area			
Pijp	10,08	15,07	7,95
Total city	12,11	16,66	11,58

What about segregation according to income? Above and in table 2 I have already mentioned that the sample population was heavily concentrated in neighbourhoods with very low tax rates. They showed some upward movement in both cohorts that can be interpreted as decreasing income segregation, but this was probably due to a general rise in income. For the sample there is the indication that those who remained in the centre were among the poorest. Of the city as a whole one can speak of a tendency toward desegregation, at least after 1920, meaning that the general rise in income meant the spread of (lower class) tax payers across districts. This did not mean that the working-class districts were stepping up in the income hierarchy, but that they gained more tax payers.[8] Up to 1915 segregation had increased. In 1878 50% of the districts had more than 80% of low-class tax payers; in 1915 this rose to 75% of the districts; in 1930 the figure had fallen to 68% of the districts which had increased in number by then. The working-class districts where the majority of the sample population ended were rather homogenous in income division: they mainly had lower class taxpayers and a large class of non taxpayers (40-50% of the occupied population in 1930 whereas the richest area had only 5% non taxed!) (see table 4). In 1915 they did not have more than 2% of mid category tax payers. In 1930 some had risen to around 7%. City means in these years were 8,8% and 18,5% respectively. Their share of the elite tax payers was very small as you can see from figure 4. This figure also shows the lack of diversity in house rents in the poorest districts (Oostelijke Eilanden, Jordaan, Westelijke Eiland): these three areas had above 40% of housing with a rent below fl 2,50. An area like Amstel-Nieuwe Vaart was not so homogenous, because it was a mixture of working-class and middle-class districts. I lack rent details to split it up.

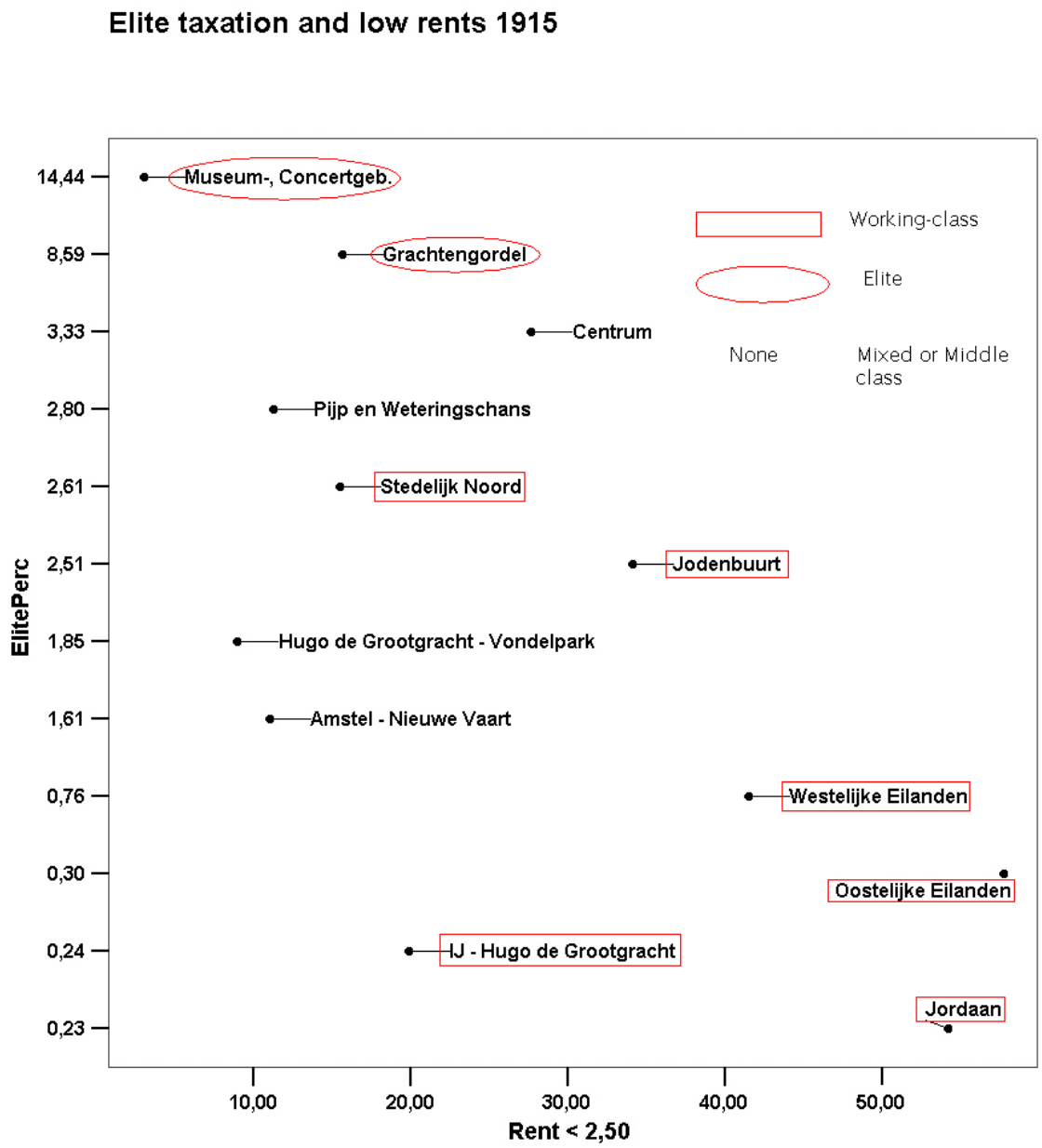
The elite and middle categories were also concentrated in a few areas, but they spread out more after 1915. The newly built districts in the 1920s gained a large share (26%) of middle category tax payers by 1930. The main elite area switched from the centre (the canal zone Grachtengordel) to the south (Vondelpark-Concertgebouwbuurt – see figures 4 and 5).

[8] See my paper "Social class and area differences in fertility decline in Amsterdam, 1850-1940" for all the data on tax income segregation. At: http://www.niwi.knaw.nl/home/henkl/. Taxation data of 1936 from: Gemeentefondsbelasting 1934-'35 en 1935-'36, table 4. (Statistische Mededeelingen Bureau van Statistiek Amsterdam; no. 104).

In 1915 the old city contained 41% of elite tax payers, but this fell to 18% in 1930. The new elite district Vondelpark-Concertgebouwbuurt contained 36% of elite tax payers in 1915 and

increased its share to 41% in 1930, and to 54% in 1936. It was much more homogenous in its rent structure than the old elite district the Grachtengordel. The last still contained almost 5% of low rent housing, i.e. 18% of its housing stock in 1936.

Figure 4 [9]

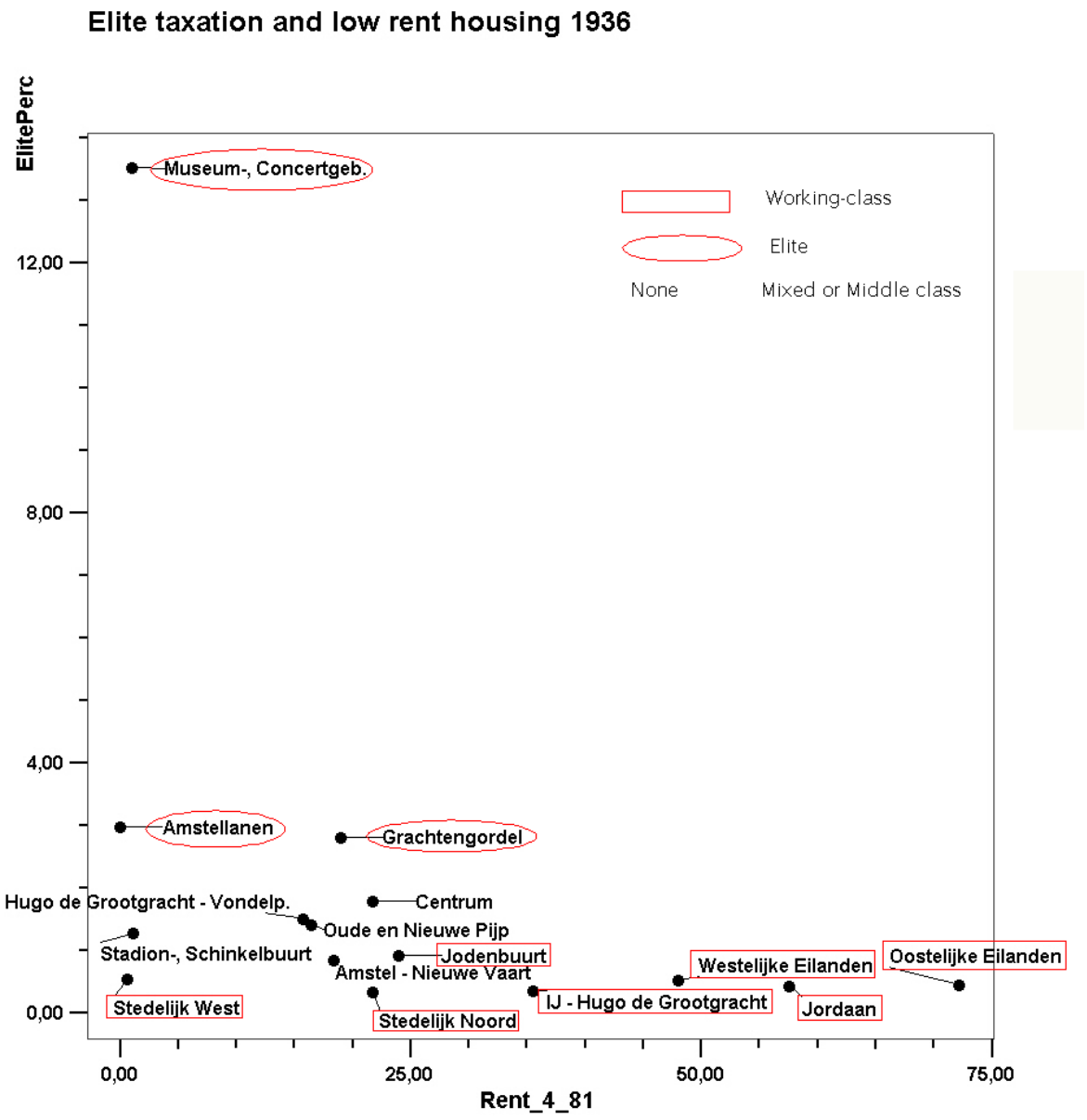


In the 1930s increasing segregation according to income is evident between the districts (see also figure 5). In 1915 four districts contained 81% of the elite tax payers; in 1930 this had decreased to 72%. In 1936 it rose again to 75%. The elite concentrated even more in the southern districts. The relative taxation standing of the districts where the dockworkers lived showed a decline in 1936 compared to 1930 and some even lost compared

[9] Rents calculated from *Verslag over den toestand der gemeente Amsterdam*, 1914. p. 248.

to 1915 (Jordaan, Spaarndammerbuurt, Oostelijke Eilanden; see also table 4). Social conflicts were a dire consequence. In the beginning of the 1930s rent strikes were taking place in many 19th century working-class districts. Rents had not declined as much as other prices and especially for those on the dole meant a bigger part of the budget. In 1934 riots lasting several days in response to welfare cutbacks took place in all the working-class districts where dockworkers were a major part of the population.

Figure 5 [10]



The income divisions were not between the old and new areas as such. No significant differences in income levels for the city as a whole between the old city districts and the new districts or between the old and new working-class district (measured at the level of buurtcombinaties) could be established through *analysis of variance*. This means that variation in incomes inside the zones or inside the working-class districts was bigger than

[10] Rents calculated from *De woning- en gezinstelling gehouden op 1 juli 1936: eenige voorlopige uitkomsten*. Gemeentelijke Woningdienst Amsterdam. 1937. Staat 9a and 10a.

between them. If there was no significant difference in tax incomes between the working-class districts in the zones, there were perhaps differences in rents that mattered?

Housing and rents

A survey of the municipality in 1925 of all the housing in the subsidized sector (owned by housing associations and the municipality, so called 'woningwetwoningen") amounting to 13.857 tenements shows 363 dockworkers and 717 casual workers living there.[11] They occupied mainly housing in the northern part of the city (across the IJ) and in the districts near the harbour like the people in the sample. Most of these workers were living in council houses, having the lowest rents and built for the poorest. They generally paid there a mean 16 to 18% of their income on rent. The houses built before the First World War had lower rents than those built during and after the War. People living in the older houses paid a lower percentage of their income on rent than in the newer houses. In the first a mean rent of 281,85 guilders per year was paid while in the second 347,57 guilders was paid in 1925. As the mean income of the inhabitants was 1.928 and 1.938 respectively, the mean percentage of income paid on rent in the new houses was higher: 15% compared to 18%. The mean rents in old city housing were lower than in the new city, and any distribution shows that the lowest rents were found there.[12] If unskilled workers in the old and new city had no real different incomes then they must have been spending more on rent in the new areas. Workers kept finding it difficult to move to these higher rent areas: they did so mainly because they had a young family that demanded better housing as an investigation from the 1930s concerning people in the lowest rent category points out. The survey mentioned shows that many moved inside their own district because they could not pay higher rents elsewhere. Even though, 71% of 1814 movers did move to a tenement with a higher rent.[13]

Table 5 Amount of low rent housing by area (%)

	Rent level		
	< fl. 2,50	< fl. 4,-	< fl. 4,81
	1915	1925	1936
Old city %	65	52,4	37,0
New city %	35	47,6	63,0
Absolute total	28.845	36.171	40.426
Total stock of housing	138.084	174.326	204.700
% low rent housing	20,89	20,75	19,75

Mean rents might have been higher in the new areas, but the total stock of low rent-housing did increase in the new areas (table 5, and compare figure 4 and 5). In 1915 65% of housing with rents below fl. 2, 50 (what a worker could afford) was in the old city. In 1936

[11] *De verhouding tusschen inkomen en huur in de vereenigings- en gemeentewoningen te Amsterdam.* Gemeentelijke Woningdienst Amsterdam. 1925.
[12] See: *Statistisch Jaarboek Gemeente Amsterdam*, 1940, table 10, p.48. For a regression analysis of 1925 rents see the appendix.
[13] *Waarheen zijn de bewoners der op 1 juli 1936 onbewoond gevonden woningen met lage huren verhuisd?* Gemeentelijke Woningdienst Amsterdam. 1937.

63% of housing with a rent below fl. 4,81 (again an affordable rate, increased for inflation correction) was located in the new areas (mostly in the 19th century zones). The municipality didn't build these houses, they were privately owned.

Table 6 Final destination of dockworkers

Zone	Abs.	%
Rural	4	1,61
17th century	87	34,94
19th	78	31,33
20th	80	32,13
Total	249	100

Did the workers in the sample move to the social housing mentioned above? Not many. In table 6 it shows that less than a third finally lived in the area (20th century zone) where such housing had been built.

In 1930 there were still marked differences in health and housing conditions between the districts. In terms of residential density the inner city centre came up very high on the list. A mass of people were still living there in overcrowded tenements and rooms. Even clearer do the unhealthy conditions of the old city as a whole show up when we look at infant mortality rates. Here all the 19th and 20th districts show lower rates than the old city districts. What is especially interesting is that these differences cut across the income divide. Of course, these area rates do also point to the mixed character of the old city and might work out differently individually. However limited the social mobility of the dockworkers in the sample was, they did move to areas that were healthier and had better housing conditions than those in the centre and in that respect they bettered themselves.

Conclusion

The spread of the sample population of casual and dockworkers across the city was quite different from the population as a whole. Their place of living seems mainly to have been influenced by the rent of housing and the proximity to work. When one looks at the total of residential moves then the impression is formed that these people remained locked in a very narrow area especially inside the old city. This was not the case: they too moved out of the old city like many others did. If one takes up the perspective to see the residential moves as elements of a living strategy then moving to the new parts of city with better living conditions was an illustration of it. It doesn't seem likely that these people profited from the municipality's efforts in building low rent houses or from it subsidizing rents, but that question should be investigated.

The increasing segregation in Amsterdam that developed between 1878 and 1915 halted somewhat after this date, but did not really change structurally. Segregation according to income and social class between the districts was evident. The workers in the sample did inhabit those areas on the lower end. The neighbourhood tax scores show quite clearly that the sample people lived mostly in the lowest income areas and as these working-class districts were relatively homogenous in their income division they show the segregation according to

income. Those who remained in the old city were almost wholly concentrated in areas with taxation below the mean.

Using the neighbourhood tax scores as a measure of social standing was useful to gain insight in the social segregation of the individuals but as a measure of social mobility it has its limitations. We cannot adequately explain individual changes with data on this level. The next step will be to use all the individual variables to further explanation of the pattern of segregation. Still, the geographic mobility of the dockworkers and casual labourers to the new areas does point to a certain social mobility.

This is a slightly revised version of: Moving through the city: residential mobility and social segregation in Amsterdam 1890-1940." In: *Proceedings of the Association for History and Computing, Amsterdam, 2005*. Amsterdam: Edita, 2005.

Appendix

Weighted Regression on mean rents in working-class neighbourhoods in 1925

WLS estimates using 87 observations (neighbourhoods).
Missing or incomplete observations dropped: 1
Dependent variable: Mean rent 1925
Variable used as weight: Number of occupied houses
Dummy variable to compare: old city

	VARIABLE	COEFFICIENT	STDERROR	T STAT	2Prob(t > |T|)
0)	const	215,650	11,3783	18,953	< 0,00001 ***
1)	zone19	37,4098	15,3224	2,442	0,016725 **
2)	zone20	102,861	13,9174	7,391	< 0,00001 ***

Statistics based on the weighted data:

Sum of squared residuals = 4,23807e+011
Standard error of residuals = 71030,4
Unadjusted R-squared = 0,421687
Adjusted R-squared = 0,407918
F-statistic (2, 84) = 30,6251 (p-value < 0,00001)
Akaike information criterion (AIC) = 2193,57
Schwarz Bayesian criterion (BIC) = 2200,97

Statistics based on the original data:

Mean of dependent variable = 288,748
Standard deviation of dep. var. = 125,722
Sum of squared residuals = 1,35677e+006
Standard error of residuals = 127,091

Comment
Mean rents in working-class neighbourhoods in the 19th century built zone were fl. 37 higher than in the working-class neighbourhoods of the old 17th centre (the zone compared with) in 1925. The mean rents in the 20th century built working-class areas were fl. 103 higher than in the working-class neighbourhoods of the old centre. The regression as a whole and the 20th century rents are highly significant at a level below 1%. This means that the last differ significantly from the old city rents. The rents in the 19th century areas differ at a level below 2%.
Rents were weighted using the number of occupied tenements in the areas.