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CONSUMER BEHAVIOUR, SHOPS AND CITY CENTRES¹

1. INTRODUCTION

A few months ago an act of civil disobedience was committed in the Prins Hendrikstraat at the Hague. The shopkeepers in that street actually demolished the cycling route laid out with subsidy of the Ministry of Traffic and Public Works with the result that shoppers arriving by car can now enter the Prins Hendrikstraat unhindered. That this need not be without importance for the street in question may appear from the fact that in 1976, 78% of the turnover in the sector of non-essentials was due to customers from outside their town quarter (Laan van Meerdervoort and surroundings), namely 44% from contiguous town quarters, 24% from other parts of The Hague, and 10% from the rest of the study area. In absolute terms, a turnover of about 33 million guilders not originating from the shopkeepers' own town quarter is at stake².

The data consulted do not show to what degree people come to the Prins Hendrikstraat by car, but from other NEI-inquiries the proportion of car owners among those not coming from the town quarter itself may be expected to be rather high. It is worth mentioning that so far the act of disobedience has not been corrected by once more leading the cycling route through the Prins Hendrikstraat.

The above event has not been chosen to contemplate the legal pro-

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¹ This contribution has been achieved by a team. The tables to be mentioned later on have been run by H. Stijnen; the collecting of literature and processing of tables have been done by W. Willemsen and B. M. Lankheet. The translation into English was done by Mrs. A. C. A. Elderson.

² See: *Consument en detailhand in Den Haag en omgeving*, deel 5a, *Het functioneren van de overige winkel centra in de Haagse stadsieden*, EIM-study, p. 19.

blem of civil disobedience, however interesting, but as a practical introduction to our subject. For what indeed, strikes us at once when we learn of this incident? That the consumer is not mentioned at all. Public authorities and shopkeepers each pursue a policy of their own, conflicting policies in this concrete case, but not a word is spoken about the consumer, who is the actual object of the conflict. The question arises: can a policy be conducted without understanding of actual consumer behaviour? Or, more concrete: can a cycling route be laid out and built through a shopping street without the effects of the intervention being known? Apparently, the answer is yes. Even more serious is the absence of any attempt to consider the difference in expenditure between cyclist shoppers and car-driving shoppers in the investigation preceding the construction of the demonstration cycling route. Why was no such attempt made? Because, as a spokesman of the Ministry of Traffic and Public works declared on the radio, the relevant data are not available in the Netherlands. A most untrue statement, as may appear from what follows.

In the past decades, the consumer has had rather a raw deal as far as the planning of new shopping centres or maintaining of existing provisions is concerned. Mrs Fransen, president of the Consumer Association, formulated her criticism clearly and concisely thus:

„In the planning of future shopping provisions the consumer is hardly considered. The planning inquiries currently made when the establishment or expansion of shopping centres is considered, is too much based on a business-economic approach, the interest of the supply side being object and objective of the study and the demand side being mostly considered as given. Moreover, planning has been far too rigid in the past”³.

The increasing mobility has been underestimated, and it has not been pointed out that consumers do not wish to behave according to a conception that planning experts have based on standard figures. Recent investigations at home and abroad have shown that the consumer's buying pattern has become more varied and dynamic in the seventies. However, the consumer's dynamics has hardly played a role in the planning of new shopping provisions, at any rate when standard figures were used, for those figures rely on empirical figures from the sixties.

Until about halfway the sixties the development of retail trade consisted mainly in following the population. The consumer, still limited

³ A. G. Fransen, *Distributieve voorzieningen en konsumentenbelang* [In:] *Consument en distributie*, „Consumentenbond”, April 1978.

in his movements, was more or less obliged to shop at the nearest corner shop or the shopping centre in his own town-quarter. Shops on the level of neighbourhood or town quarter met the wish of customers to do their daily shopping at a short distance from home, thus saving time. For that matter, essentials like bread, milk, and groceries were at the time still largely delivered. For the purchase of more durable articles consumers were willing to spend far more time and effort to go to the nearest town centre: accordingly, the assortment of articles and qualities offered by shops in the town centre was such as to meet the customers' wishes on that score. That was the structure to which the standard figures in the planning of shopping provisions corresponded. That means that the behaviour of consumers of the sixties was made into the criterion for the seventies and eighties, an approach that could not but lead to a faulty planning policy. Indeed, increased mobility, manifest from

- 1) spatial dispersion of purchases,
- 2) large differences in the amounts spent on an average in neighbourhood, town-quarter, and town-centre shops,
- 3) considerable differences in average expenditure by mode of transport, coupled with changes in behaviour due to changes in family composition and age composition of the population, and the effects of increased prosperity on the spending pattern, have not been, and could not be, accounted for in the standard figures of consumer behaviour operated in planning.

Owing to changes in the spending pattern (holidays abroad, car, second house, etc.) consumers have become more critical and price-minded in their shopping, in particular as far as the so-called convenience goods are concerned. Retail trade has responded by creating types of shops where a low price level is the first concern, such as supermarkets, discount shops, consumer markets, and — sparsely spread across the Netherlands — hypermarkets.

In the sector of non-essentials, too, there have been great changes, as witness the development in do-it-yourself shops, centres for furniture and home decoration, garden centres, and shops for leisure-time articles.

It will have become clear by this time why the title of this contribution first mentions consumer behaviour. It comprises more, however.

The suburbanisation process that in the last two decades has governed spatial planning in the Netherlands, has left its traces. Around the large cities new, extensive, spacious settlements have been realised which, combined into town quarters, call for new, contemporary,

easily accessible local shopping centres. Easy access by car, a single general store as a lure, specialised shops and a few supermarkets on the corner sites of the local centre form a provision that not only binds much of the purchasing power in that part of the town, but also attracts many customers from the region. Such shopping provisions have been shown by recent studies to function as intervening opportunity: consumers from the region will use the new local centre for a large number of articles instead of driving on to the town centre. In short, new large-scale shopping provisions on the outskirts of towns affect the regional orientation to a town centre negatively.

Town centres are menaced by other dangers as well. Indeed, people living in 19th century town quarters are willing to move to the new, spacious quarters, but the process results in:

- 1) loss of population in the town centres and 19th century quarters,
- 2) the coming into being of a multi-racial community, calling for rather drastic adjustments, also as far as the shops are concerned.

We cannot go into the details of all the aspects touched upon within the range of this article; in the next sections, however, a few concrete examples will be given and commented upon from the point of view of consumer behaviour, the land-use of shops, and some socio-demographic facts. The consequences of the process of change for the town centres in particular will be pointed out throughout the article.

2. CONSUMER BEHAVIOUR

In the previous section we have quoted with approval some criticism of the rigid approach to consumer behaviour in shopping inquiries. It is, of course, easier to criticise than to find dynamic solutions. Interesting results have nevertheless been achieved with the shopping-orientation model recently developed within the Netherlands Economic Institute. In this model, the individual choice of the consumer is essential. Thus the quantity to be explained is designed as follows in the studies so far carried out: the chance of an average consumer from a certain living zone u making his purchases of article group k by mode of transport m in shopping centre j ⁴.

The chance of a consumer's spending money in a certain shopping centre is thus determined by:

⁴ In the shopping survey carried out in the Eastern Mining District there were distinguished 32 living zones i , 23 shopping zones j , three modes of transport m (car, public transport, and other transport), and four groups of articles k (essentials, semi-durable goods, electric equipment, and durable articles).

1) characteristics of each individual consumer, such as the situation of his residence within a study area, and the question whether or not he has a car at his disposal for shopping;

2) characteristics of the shopping centre in the area, such as size, assortment, parking facilities, presence of general stores and super-markets;

3) travel time, by mode of transport, needed between the consumer's home and the shopping centre.

The above enumeration shows what can now be worked up in practice in the analysis; the limitations of the approach are apparent: among the elements left still out of account are

1) the socio-psychological characteristics of the consumers;

2) the price element as far as the characteristics of whole centres are concerned⁵.

Evidently, the individual data have to be aggregated for the sake of reporting, but also to be able to make a forecast on the basis of the model analysis.

As we have pointed out elsewhere⁶, a model is not an oracle that has the answer to all policy questions. Forecasts based on models are more reliable than those made on any other basis (for example, by extrapolation or the operation of standard figures); still, there remain uncertainties. It is notably unsure to what extent the parameter values found to reflect consumer behaviour at this moment, may be considered constant; they may well change in the long run.

In the NEI reports published recently on the application of the shopping model, much attention has been given to its possibilities and limitations; those interested are referred to those reports⁷. In the present article we want to highlight those aspects of consumer behaviour that most model-wise analyses take in their stride but that are only glanced over in the reports; they concern, nevertheless, certain asso-

⁵ For individual shops the price element can be introduced, but for shopping centres as a whole it is not possible to include the price factor objectively in the analysis in a comparable way.

⁶ *Distributie-planologisch Onderzoek Oostelijk Mijng gebied; winkelen nu en in de toekomst*, „NEI Rotterdam” May 1979, p. 100.

⁷ *De effecten van de Maxis-Muiden; operationalisering van een winkelmodel*, „NEI Rotterdam” May 1976, ch. 6. A discussion of the research-technical results from the Maxis investigation is incorporated in the article by A. C. P. Verster c.s., *Effecten van de vestiging van een perifeer gelegen zelfbedieningswarenhuis*, in *Planning: methodiek en toepassing*, September 1976, pp. 24 ff.; *Distributie-planologisch. Onderzoek Oostelijk Mijng gebied; winkelen nu en in de toekomst*, „NEI Rotterdam” May 1979, ch. 6.

ciations and data which to science and policy are relevant in their own right.

We will discuss, in succession:

- 1) the distinction between consumers with and without a car;
- 2) the significance of Saturdays in the shopping pattern;
- 3) the amounts spent in shops by car owners and non-car owners;
- 4) the range of consumers who visit a town centre or local centre;
- 5) the distances to be bridged on foot in town centres after the car has been parked.

On the distinction between consumers with and without a car we can be brief: the surveys executed for the Eastern Mining District and for the Rhine Estuary both have proved that nearly two thirds of the households interviewed have a car available for shopping. The next question is, whether car-owning consumers do indeed use their car; the answer is positive; in particular for the purchase of semi-durable and durable articles the car is used almost without exception. For daily essentials the picture is less one-sided, understandably so, for housewives are apt to run to the corner shop for the occasional bit of shopping on weekdays. As an illustration we will give the figures found for essentials in comparison with those for semidurables. Shopping for daily articles is done in 75% on weekdays and in 25% on Saturdays and during late-closing hours (the latter accounting for no more than 4%). 49% of the semidurables are bought on Saturdays and late-closing days, 51% on weekdays. With this group of articles, too, the late-closing hours account for a relatively small proportion (5%) of the purchases; on Saturdays the amount of money spent exceeds, relatively speaking that spent on weekdays.

What can be concluded from the figures presented of the expenditure by day of the week? That in the semi-durable sector an average 44% of the turnover is achieved on Saturdays; for the Rotterdam shopping centre Zuidplein the percentage is 49, for the centre of Rotterdam 52. Considering that mobile consumers use their cars for shopping purposes notably on Saturdays, we may conclude that shopping expeditions by car are more important for town and local centres than for other shopping centres⁸.

For the near future no change is to be expected in the use of cars for shopping purposes; presumably the number of cars per 1,000 inhabitants (278 in 1977) will still continue to grow in the Netherlands to about 315 in 1985. On the other hand, the average size of households

⁸ Aggregated data from the consumer survey conducted in the spring of 1979 for the Rijnmond-South West investigation.

will decrease considerably in the period 1977—1985; there will be more households per 1,000 inhabitants, so that more cars will be distributed among more households, the average number of cars per household being slightly reduced.

The above considerations are valid as long as no drastic measures are taken to restrict the use of cars. With respect to the combination of shopping and car driving it should not be overlooked that a car is not only an easy means of transport to bridge the distance between one's home and one's chosen shopping centre, but serves also as a family pack animal. Now that the undercarriage of a perambulator⁹ is more and more falling out of use, the car has become more important as a means of transporting voluminous and heavy articles.

Table 1
Average amount spent on semi-durable articles, in guilders
(rounded to whole guilders)

Frequency	Means of transport				
	Car	Public transport	Bike/moped	On foot	Total
Once a week/once or twice a month	78	66	27	23	48
Once in 3 months	127	106	59	70	103
Once a year /less	215	176	104	116	171
Total	148	132	65	71	115

For that matter, it would be a mistake to assume that voluminous and heavy articles to be transported are found only in the sector of daily necessities. The semi-durable sector, too, has its voluminous and/or heavy units (costume, overcoat, do-it-yourself goods, etc.).

That takes us to the next aspect to be studied: the amounts spent in shops by customers who arrive by car and by customers who arrive by other modes of transport. We know from shopping surveys that visitors who come by car spend more on average than those who come otherwise. From a survey in two 19th-century shopping streets in the inner city of Dordrecht¹⁰ it can already be derived that car owners spend between 50 and 100 per cent more per visit; at a recent inquiry among passing visitors of the Grosmarkt at Alkmaar, car-dri-

⁹ It should not be underestimated how many boxes of nappies, detergents, etc. can be carried dry on the undercarriage of a pram. Neither a bicycle nor a carrier bag on wheels can compete.

¹⁰ *Autoluw maken van Spuiweg en Vrieseweg*, „NEI Rotterdam” 1976.

ving visitors were found to spend nearly three times as much per visit as others¹¹.

These examples show that figures of the difference in expenditure between car-driving and other visitors is available, though admittedly the figures are specific. It would not have been difficult to obtain material on cases comparable to that of the Prins Hendrikstraat in The Hague. It is possible to derive a trend from the two examples quoted above, but the figures have the disadvantage of being very specific and local. That is why we have combined the figures available from the surveys of Rijnmond North East and Rijnmond South West, to find out if the same tendency — without regard to the direction of the expenditure — could be noticed in a large region. The picture of the amounts actually spent by means of transport and frequency in the semi-durable sector is as follows:

As the distance from the centre of Rotterdam or from the shopping centre Zuidplein is larger, the amount spent becomes higher, a phenomenon that has been observed both in the Eastern Mining District, Dordrecht, and Alkmaar. A next point to notice is that the expenditure at Zuidplein from each shell — whatever the distance — is higher than that at all other centres combined under „Elsewhere”, but that the amounts spent on purchases in the centre of Rotterdam exceed those spent at the Zuidplein shopping centre by an average of 18⁰/₀.

For a proper appreciation of the data presented it must be pointed out that both Rotterdam Centre and Zuidplein are situated peripherally to the residential zones involved in the investigation: that implies that the figures reflect largely the behaviour of the regional consumer in Rijnmond South West. Now 64⁰/₀ of the consumers from Rijnmond South West take the car to go to the Rotterdam centre for the purchase of semi-durable goods; in Rijnmond North East the corresponding percentage is 55. The figures confirm once more that the preference for the car increases with the distance to be bridged. The share of public transport is about the same in both inquiries, namely 36⁰/₀ in Rijnmond North East and 34⁰/₀ in Rijnmond South West. The conclusion must be that to regional consumers the car is more important than public transport, and that, as far as shopping is concerned, it is hardly conceivable that cars could be banned from the inner cities¹².

To conclude this section on consumer behaviour we will illuminate the aspect of walking distances. If a city centre is to be made attracti-

¹¹ *Grossmarkt-Alkmaar Centrum*, „NEI Rotterdam” 1978.

¹² C. S. Jones, *Regional Shopping Centres; their location planning and design*, London 1969; referred to in Dr. J. Buit, *De parkeerbehoefte in moderne winkelcentra*, London 1972.

ve, then accessibility, parking facilities, and the distances that must be bridged on foot are weighty, if not dominating factors. Remarkably enough, in the planning of parking facilities in city centres these factors are heeded far too little. That is the more regrettable as modern local centres in new settlements and large shopping centres in town quarters offer the advantage of free, unlimited parking on open spaces at a distance of between 100 and 200 metres from the local shops. Such facilities cannot be visualised any more for other than the smallest town centres. In the model analysis carried out by the NEI, the shopping potentials of each individual shopping centre are taken into account, comprising not only the driving times but also the walking times between parking place and shops. As town centres are becoming less accessible in two respects (longer driving and seeking, and longer walking), their shopping potential becomes lower, a development that has been reinforced of late years by

- 1) greater mobility of the shoppers,
- 2) sufficient alternatives to badly accessible parts of the town.

In this connection we may refer to an investigation carried out in three English towns, viz. Edinburgh (450,000 inhabitants), Nottingham (295,000 inhabitants), and Cardiff (275,000 inhabitants); a survey has shown that in these towns 20, 19, and 17%, respectively, of the car-owners avoid their town centre because of parking problems.

To return to the walking distances: from a parking survey in Dordrecht it has appeared that on Saturdays the average walking distance is about 300 metres and the longest distance between 600 and 700 metres; about 80% of the parkers did not walk more than 400 to 500 metres¹³.

It is interesting to mention that the NEI has calculated on the basis of an extensive literature study that the average walking distance for medium-sized West European cities amounts to between 280 and 330 metres. What do these walking distances imply for parking in town centres? On the assumption that municipal administrators want to enlarge the shopping potentials of their inner cities or at any rate stabilise them, they will have to pursue a specific policy of indoor garages aimed at minimising the walking distance between garage and shops. Although for keeping the centres of large towns the indoor garage is fully accepted, it should not be forgotten that many (female) shoppers arriving by car still are averse to parking in garages because of the often badly lit and inconveniently placed entrances, the awkward turns in the up- and downward slopes, the sometimes limited capacity of pas-

¹³ *Parkergarages in Dordrecht*, „NEI Rotterdam” 1975.

senger lifts at rush hours, and last not least the limited possibility of guaranteeing the personal safety of parkers. Though town visitors appreciate the outstanding advantage of having to walk only a few metres to their destination, that advantage does not entirely and for everybody weigh up against their aversion.

What kind of shops does a prospective customer find in a city centre? The next section answers that question concisely with the help of concrete data of the three large city centres and the Zuidplein.

3. SHOPS IN LARGE CENTRES

So far we have considered in some detail a few aspects of consumer behaviour. However, consumers also respond to the size and composition of shopping centres and to the changes therein. Just as an illustration we shall give below some information about the space taken up by retailers in large centres, and, for comparison, in the local centre Rotterdam-Zuidplein.

ROTTERDAM CENTRE

In the centre of Rotterdam shops take up an area of 205,200 m² (gross floor area), as can be seen from the annex. Stores and shops in the category of semi-durables account for over 142,000 m² of gross floor area, that is 69% of the entire shopping area in the centre of Rotterdam. There are five general stores in the centre, namely: Bijenkorf, V and D, Ter Meulen, Hema, and Jungerhans, together claiming a gross floor area of 65,100 m² within these stores, the group of semi-durables is very important, taking up 42,700 m² of gross floor area, which is more than 65% of the total area of general stores.

What, exactly, should be understood by a general store? P. L. van der Velden, in his article „A general store, a house of glass”¹⁴ that a general store is a modern, indoor market with everything under one roof, where consumers are given the opportunity to orient themselves, compare prices and qualities, and get to know the new fashion and other novelties.

The assortment is wide (about 300,000 articles) and up-to-date as regards fashion and crafts. The emphasis lies — as said above on the semi-durable sector. Most general stores take up a large area, and are traditionally located in city centres. Gradually, however, they are found

¹⁴ P. L. van der Velden, *Het warenhuis een glazen huis*, [in:] *Dynamiek in de distributie*, A. C. R. Dreesmann en E. van der Wolk (ed.), deel 2, 1975.

more and more in regional centres on the outskirts of large towns; that is especially true of the so-called variety stores, smaller in size, with a highly selected range, oriented at the mass market, and featuring low prices; examples are the Hema and Vendet stores.

Apart from the five general stores there are in the centre two clothing stores with a combined gross floor area of 15,025 m². The furniture branch is represented by 23 establishments with an area of 39,400 m²; seven of them are larger than 1,000 m² of gross floor area.

ROTTERDAM ZUIDPLEIN

The total gross floor area of the Zuidplein shopping centre amounts to some 41,000 m², about 20% of the area in the centre of Rotterdam. The distributive structure is similar to that of the centre of Rotterdam in that general stores and semi-durables take up a large portion of the total area, namely 36,000 m² of gross floor area, that is 87% of the total.

In the shopping centre Zuidplein there are two general stores (V and D and Hema), accounting together for 15,100 m² of gross floor area, about 37% of the total, and a clothing store (C and A).

Clothes account for the greater part of the supply of semi-durables in both shopping centres, as the table 2 may show.

The share of clothing in the supply of semi-durable goods is 61% in the centre of Rotterdam and 71% in the Zuidplein Shopping Centre. Comparison with data of other town centres and local centres in town quarters shows that the branch distribution shown in the above table is characteristic for town and regional centres.

Table 2
Composition of the article group „semi-durables” *

Semi-durable articles	Centre of Rotterdam		Zuidplein Shopping Centre	
	m ² of g.f.a.	in % of the total	m ² of g.f.a.	in % of the total
1. Clothes	72,600	60.6	22,200	71.1
2. Shoes	11,520	9.6	1,700	5.5
3. Household appliances	10,800	9.0	2,200	7.1
4. Do-it-yourself	2,800	3.2	200	0.6
5. Photo (Opt.) Jewellers	5,600	4.7	1,200	3.8
6. Books/games	10,600	8.9	2,300	7.4
7. Sports	5,900	4.9	1,400	4.5
Total	119,800	100.0	31,200	100.0

* Including the clothing stores and share of semi-durables in the area of general stores.

AMSTERDAM CENTRE

The shops in the centre of Amsterdam take up 302,280 m² of gross floor area, of which over 60% is accounted for by the category of semi-durables. There are nine general stores in the centre with a combined gross floor area of 57,456 m², that is 19% of the total gross floor area in the Amsterdam shopping centre. There are moreover 22 clothing stores¹⁵, together taking up 39,165 m². Together with other shops selling ready-made clothes for ladies, gentlemen and children they account for 52% of the gross floor area in the semi-durable sector, which is less than in the centre of Rotterdam and the Zuidplein centre, where the corresponding percentages are 61 and 71, respectively. The share of general stores, too, is smaller in Amsterdam (19%) than in the centre of Rotterdam (32%) and on the Zuidplein (37%). The shares of other articles within the semi-durable sector are systematically somewhat higher in Amsterdam than in the other two shopping centres.

THE HAGUE CENTRE

The shops in the city of The Hague cover 248,900 square metres of gross floor area¹⁶, nearly 60% being taken up by the semi-durable sector. The share of general stores is quite important: 26% of the total gross floor area. Within the semi-durable sector the clothes branch accounts for 58%, the clothing departments of general stores not included. That means that the clothing share in the semi-durable sector in The Hague is about equal to that of Rotterdam centre, and hence exceeds that of Amsterdam centre.

Although the composition of retail trade in the centre of The Hague is similar to that in the centres of Amsterdam and Rotterdam, the average size of the establishments is different, as the table 3 will show.

4. THE SOCIO-DEMOGRAPHICAL ASPECT IN INNER CITIES

In shopping inquiries, volume and composition of the population play an important role next to consumer behaviour and the number and distribution of shops. Two aspects will be briefly dealt with now, name-

¹⁵ Small ones and large ones.

¹⁶ The average gross floor area per establishment, including general stores, is about 100 m² lower in The Hague than in the centres of Amsterdam and Rotterdam; there are numerous small shops in the city of The Hague: 40% of the shops there are smaller than 75 m² g.d.a.

Table 3

Average gross floor area per establishment

Shopping centre	Average g.f.a. per establishment in m ²	
	general stores included	general stores excluded
Rotterdam Centre	500	300
Rotterdam Zuidplein	380	210
Amsterdam Centre	515	370
The Hague Centre	405	.

Source: *Retail investigation 1976 by the Chamber of Commerce and Industry for The Hague, part I: The Hague Region.*

ly, the population losses in the three large Dutch towns, and the change of inner-city town quarters into multi-racial communities.

To illustrate the process of decline in the three large towns we present in the table 4 not only the decrease in their numbers of inhabitants, but also the demographic development in the respective agglomerations.

Table 4

Development of the population in three large towns in the Netherlands

Municipality or urban region	Population of municipality or urban region		Change %	Population of agglomeration		Change %
	1971	1976		1971	1976	
Rotterdam*	843,442	771,146	-8.6	1,141,762	1,123,853	-1.6
Amsterdam	820,406	751,156	-8.4	1,140,080	1,102,441	-3.3
The Hague	537,643	479,369	-10.8	762,900	735,474	-3.6

* Including Schiedam and Vlaardingen.

Source: L. van den Berg, S. Boeckhout, K. Vijlkerberg, *Urban Development and Policy Response in the Netherlands*, NEI, Series: „Foundations of Empirical Economic Research” 1978/2, p. 30.

While the municipality of Rotterdam appears to have sustained the greatest population losses, the decrease in the whole Rotterdam agglomeration was less than that in the agglomerations of The Hague and Amsterdam; apparently, the outflow to places outside the agglomeration has proceeded further in The Hague and Amsterdam than in Rotterdam. Yet, all three municipalities are confronted with a substantial decrease in the number of inhabitants, particularly in the older town quarters. In the period 1972—1977 nearly 75,000 persons left the older parts of Rotterdam, and it will be clear that such an exodus has consequences for the shops in the afflicted town quarters. No wonder then

that for instance in the main shopping streets the shopping provisions are shrinking.

The outflow must be expected to continue for some time, and unless compensation can be found in new purchase flows from elsewhere, it is inevitable that the shopping provisions in town centres will feel the effect. One more reason to give much attention to the effective purchasing behaviour of consumers from the region.

The changing composition of the population in old town quarter is another aspect to study with care. A Rotterdam example has been chosen as an illustration, rightly so, because Rotterdam houses the greatest proportion of foreigners¹⁷.

Foreigners and people from Surinam and the Antilles are spread very unequally among the town quarters, the greatest concentration (up to 350 in every 1,000 inhabitants of the town quarter) being found in 19th century quarters, as appears from the table 5.

Table 5

Foreigners and people from Surinam and the Netherlands Antilles in three Rotterdam town quarters (on the 1st of January, 1977)

Town Quarter	Total number of inhabitants	Inhabitants from Surinam and Neth. Antilles	Inhabitants of non-Dutch nationality		Number of non-Dutch subjects + people from Surinam and Neth. Antilles per 1,000 inh.
			total	from Mediterranean countries*	
Oude Westen	10,223	862	2,774	2,457	356
Oud Crooswijk	7,005	579	1,887	1,725	352
Feyenoord	6,187	442	1,691	1,571	345
Rotterdam	601,005	16,201	37,602	28,380	90

* Spaniards, Turks, Yugoslavs, Portuguese, Maroccans, Italians, Greeks.

There is, of course, a relation between the outflow of the autochthones and the inflow of specific ethnic groups in particular in the 19th-century town quarters. The development has resulted in a multi-racial composition of the population in these quarters. The migrations affect the demand for shopping provisions; shops that catered first and foremost for Dutch demand are closing down for lack of customers, and foreigners set up new shops — often in the abandoned premises — that offer the goods the new inhabitants ask for. An interesting aspect of shopping that we have wanted briefly to comment upon.

¹⁷ See: *Guide-lines, Dienst van Stadsontwikkeling Rotterdam*, Planning-Research Department, June 1976.

5. CONCLUSIONS

To summarise the foregoing, the following nine major conclusions have been drawn.

1. In the plans for new shopping centres or decisions to maintain existing ones, the consumer has been rather neglected in the past few decades. Not only has the increasing mobility of consumers been overlooked, but it has not been recognised either that consumers do not want to behave according to planners' standard figures.

2. Shopping centres in new town quarters are functioning as „intervening opportunities” for regional consumers who used to go to the town centre. Such large-scale provisions on the outskirts of towns have a negative effect on the regional orientation to the town centre.

3. Two thirds of the households interviewed have a car at their disposal for shopping, and use it notably for purchasing semi-durable articles.

4. On Saturdays more money is usually spent per visit on semi-durable articles than on weekdays.

5. A car is not only a convenient means of transport to bridge the distance between home and shopping centre, but serves also as „family packhorse”.

6. Visitors arriving by car spend more than visitors arriving by other means of conveyance, irrespective of the frequency.

7. As the distance to the shopping centre increases, the amount spent becomes larger.

8. In planning parking space in inner cities it should be realised that not only accessibility and parking provisions play a role, but also the walking distance between parking and shops. Minimising this walking distance affects the shopping potential of inner cities.

9. Presumably the outflow of population from, in particular, the 19th-century town quarters will continue unabated. Without compensating purchase flows from the agglomeration (due to enhanced shopping potential of the town centre) the outflow will affect the composition of shopping provisions in town centres and the area they occupy.

6. FINAL REMARK

The present note does not pretend to develop a vision of the future functioning of shopping areas in town centres; that is up to the administrators, after acquainting themselves with the relevant facts and developments. It has been our task to present the results of research into

actual consumer behaviour in inner cities, results that may help policy makers to frame their view of the development of inner cities as far as the shopping aspect is concerned.

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POSTĘPOWANIE KONSUMENTA I SIEĆ HANDLOWA A CENTRA MIEJSKIE

W artykule zaprezentowano wyniki badań nad związkami istniejącymi między postępowaniem konsumenta a wielkością i rozmieszczeniem sieci handlowej w dużych centrach niektórych miast holenderskich (Rotterdam, Amsterdam, Haga). W oparciu o przeprowadzone badania empiryczne wyodrębniono i wyspecyfikowano czynniki, zwłaszcza o charakterze przestrzennym i socjodemograficznym, które w istotny sposób wpływają na zróżnicowanie postępowania konsumentów w zależności od dyslokacji detalicznej sieci handlowej w dużych aglomeracjach miejskich.