

# Theft from cars: reduced or displaced?

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Over the last decade situational prevention has been an important part of Dutch crime prevention policy, and many programmes have proved to be successful in reducing crime (Ministry of Justice, 1990; Willemse, 1995). As our theoretical and empirical knowledge of the effects of situational prevention has grown, we now know that this type of crime prevention may have two side-effects (Clarke, 1992; Clarke and Weisburd, 1994; Hesseling, 1994). Firstly, the reduction in crime in a programme area may go hand in hand with some form of displacement to other targets, times, places, methods or offences. Secondly, the intervention may also reduce crime in areas adjacent to the programme or for other targets. Thus the opposite of displacement occurs, a phenomenon known as *diffusion of benefits*.

Although displacement is usually limited in extent and scope it nevertheless limits the effects of crime prevention programmes. Furthermore, some forms of displacement could be considered as malign, for example, when offenders switch from non-violent to violent methods (Barr and Pease, 1992). So one should always be aware of the danger that some preventive measures or programmes may result in displacement.

The issue of displacement was also one of the reasons for evaluating a programme to reduce theft from cars in the inner city of Rotterdam.

During the planning of the programme several critics stated that it would merely displace crime to other areas or to other offences. For example, one of the participants in the programme, the Chamber of Commerce, feared that offenders would switch to robbing shopkeepers. Whether the programme led to displacement is the main topic of this paper. The findings are based on the evaluation carried out by the Research and Documentation Centre of the Ministry of Justice (Hesseling and Aron, forthcoming).

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## The programme

The programme was a response to increased theft from cars in Rotterdam. In 1988 for example 17,250 thefts from cars were reported to the police, while in 1991 this number had increased to almost 20,000. Statistics further show that almost 40 percent of the offences took place in the inner city. It was therefore decided to start the programme in this part of the city.<sup>2</sup> The programme began in January 1992 and it will last for four years (1992-1995). Several preventive and repressive measures have been taken over the period. During the first two years (1992-1993) the following measures were implemented simultaneously.

First, there was increased surveillance by the police at ten 'hot spots'. These hot spots were in public areas in the inner city where the number of thefts from cars had been relatively high for some years. The surveillance was performed by so-called police surveillants. Police surveillants are members of the regular police force and wear the same uniform as other police officers; they have full powers, but do not carry fire arms. They perform duties for which less specialized training or knowledge is necessary and which do not involve great risks or uncertainties (e.g. surveillance in public space or traffic control). During the programme the police would invest 10 man-hour per week/location. In the evaluation study it was found that the actual presence of the police surveillants varied in time and between the hot spots. In the first year of the programme (1992) the average number of man-hours invested was six and in 1993 this rose to eleven hours per hot spot. Because the surveillance was usually done in pairs the actual presence of the police at the hot spots varied between 4.3 and 6.8 hours per week/location in the research period.

Second, in 1992 and 1993 a small car park (*Willemsplein*) with 156 places near a tourist attraction was guarded from April until October. The car park was guarded by employees for seven days a week between 11 am and 7 pm. Besides watching over the car park, the employees also provided some services to the public.

Third, the police surveillants provided written advice to car owners who parked their cars in the hot spots in a risky manner (e.g. by leaving the door unlocked). All victims of theft from cars in the inner city also received this advice when they reported the crime to the police. The advice consisted of various suggestions for preventing theft from cars,

2 Rotterdam has a population of almost 600,000. The inner city is an area of 2.3 km<sup>2</sup> with approximately 15,000 residents.

**Table 1: Number of arrests and the percentage of offenders taken into custody by precinct in the period February-July 1992 and the period January-June 1993**

precinct	1992		1993	
	arrest N	custody %	arrest N	custody %
inner city	182	61	277	83
North	101	48	96	74
East	57	63	67	73
West	82	20	125	34
South	49	47	41	24
Grijs*	-	-	-	-
total	471	50	606	66

Arrest data for the Grijs precinct were not available.

and a map with the location of the ten safest car parks in the inner city. A survey revealed that 67 percent of the car owners and 64 percent of the victims read the information. Furthermore, 42 percent of the victims and 30 percent of the car owners who read the information, took measures to prevent theft from cars.

Finally, special attention was paid to the offenders of theft from cars. After arrest offenders were usually released when the official report for the public prosecutor had been made. During the programme, however, offenders of theft from cars were taken into custody immediately.<sup>3</sup> It was believed that the detention of offenders would have a deterrent effect. In February 1992 it was decided this pre-trial detention should be extended from the inner city to all six precincts in the city. The results of the evaluation show, however, that the practice has not been fully implemented. Table 1 shows that almost half of the arrests for theft from cars in Rotterdam took place in the inner city. There is a striking 56% increase in arrests in the inner city between 1992 and 1993. In West the number of arrests has also increased substantially (52%). The figures also show that in the inner city the number of offenders taken into custody had been the highest of all precincts.

The evaluation showed that during 1992-1993 several preventive and repressive measures were taken to reduce the number of theft from cars

3 In the Netherlands this is possible up to a maximum of three days. To keep an offender longer into custody before a trial special permission is needed by the examining magistrate or the Council Chamber.

in the inner city of Rotterdam. Furthermore, in 1993 surveillance increased and more offenders were taken into custody than in 1992. Did the programme lead to a reduction of theft from cars, and if so did it result in any form of displacement?

## Data

To answer these questions two sources of data were used. First, computerized police data on crime was gathered for the period 1988-1993. For most analyses the data was aggregated on an annual basis for the different geographical units of analyses (the car park, the hot spots, the precincts). We used data for six years (four pre-programme and two programme years) because several studies have shown that the use of short periods does not give a reliable picture of the effects of crime prevention. Secondly, 81 offenders arrested for theft from cars were interviewed March - October 1993.<sup>4</sup> The interviews were held at two police stations and at the public prosecutor's office. In the interviews the offenders were asked what kind of offences they usually commit, how they committed theft from cars, whether they had noticed any aspect of the programme and how they would react if committing theft from cars in the inner city became too difficult. The results of the interviews were complemented by information from their police records. We cannot say whether the offender sample is fully representative. Furthermore, we are aware of the problem that the offenders' answers are not always valid (see, e.g., Cromwell et al., 1991). Despite these limitations we believe that the results provide valuable information about the reactions of offenders.

<sup>4</sup> The sample comprised two women and 79 men. The mean age was 32 years, with a range of 16 to 48 years. Thirty percent of the offenders were of Dutch origin, 23 percent came from Morocco, while another 23 percent came from the Dutch Antilles or Surinam. The remaining offenders came from elsewhere. Most offenders had a very low educational attainment. Sixty-four percent received social security payments, usually supplemented by income from illegal activities or charity. The others did not have social security and got their income solely through crime. Fifty-nine offenders had no settled home during the interviews. All except two of the offenders were addicted to hard drugs. Almost 60 percent started using drugs before the age of 21. All respondents can be labelled as habitual offenders. On average they had a criminal record for 11 years prior to the study. Furthermore, over 80 percent of the offenders committed four or more types of offence. Despite this versatility many offenders stated during the interviews that they preferred committing certain offences. Theft from cars and shoplifting were the most favoured offences, 49 percent and 23 percent of the respondents respectively, preferred committing these offences. The others mentioned dealing in drugs (10%), burglary (6%), petty theft (5%), robbery (1%) or prostitution (1%).

**Table 2: Recorded theft from cars by precinct from 1988 to 1993**

precinct	pre-programme years				programme years	
	1988	1989	1990	1991	1992	1993
inner city	6,266	5,936	6,006	7,773	8,688	7,806
North	2,397	1,780	1,939	2,210	2,837	2,945
West	3,501	3,378	3,542	3,800	3,872	4,024
East	1,609	1,187	1,157	1,745	2,926	1,777
South	1,587	1,394	1,287	1,614	1,846	1,902
Grijs	1,890	1,730	1,585	2,657	2,660	3,135
total	17,250	15,405	15,516	19,799	22,829	21,589

**Table 3: Relative changes in theft from cars since 1991 by precinct**

precinct	1992	1993
inner city	+ 12%	0%
North	+280%	+33%
West	+ 2%	+ 6%
East	+68%	+ 2%
South	+ 14%	+ 18%
Grijs	0%	+ 18%

### Changes in theft from cars

Table 2 presents the number of recorded thefts from cars for each precinct from 1988 to 1993. The figures show that in the North, West, South and Grijs precincts the number of recorded thefts from cars in 1992 and 1993 was higher than in the period 1988-1991. In the inner city and in East the number of offences in 1992 was also higher than in the previous period. However, in 1993 there was a substantial reduction in the figure for the inner city (882 offences) and East (1,149 offences). Furthermore, the relative changes in the inner city can be considered as favourable compared to the other precincts since 1991 (table 3). Finally, it can be seen from table 2 that since 1991 the overall rate of increase in thefts from cars in Rotterdam has slowed.

It is clear from these figures that the programme had no effect in 1992. Despite the measures thefts from cars in the inner city increased by 12 percent in 1992. In 1993 however there is a substantial reduction in both the inner city and in East. We saw that in 1993 more offenders were arrested and taken into custody in the inner city and that the surveil-

**Table 4: Recorded theft from cars for the 10 hot spots and the other parts of the inner city from 1988 to 1993**

	pre-programme years				programme years	
	1988	1989	1990	1991	1992	1993
hot spots	874	1,004	1,092	1,352	1,456	1,419
other parts of the inner city	5,392	4,932	4,914	6,421	7,232	6,387

**Table 5: Recorded theft from cars for the parking lot *Willemsplein* from 1988 to 1993**

	pre-programme years				programme years	
	1988	1989	1990	1991	1992	1993
1st quarter	4	4	6	5	3	12
2nd quarter	4	10	6	6	8	9
3rd quarter	10	8	8	10	10	10
4th quarter	5	12	4	3	10	5
total	23	34	24	24	31	36

lance of the hot spots intensified. This suggests the possibility of a slow but progressive influence of the programme.

Subsequent analyses show, however, that the surveillance of the ten hot spots and the guarding of the *Willemsplein* car park had not been effective. Table 4 presents the figures for the hot spots. From 1988 to 1992 the number of recorded offences rose continuously in the hot spots; in 1993 there was a small fall. The reduction in the hot spots is, however, relatively small (2.5%) compared to the rest of the inner city (11.6%). If the surveillance had been effective the reduction in theft from cars should have been largest in the hot spots.

The *Willemsplein* car park was guarded only from April to October. For the analyses we therefore used quarterly periods (table 5). The figures show first that the absolute number of recorded offences is small. Secondly, on the basis of the second and third quarter of each year, no reduction of the number of thefts from cars took place in 1992 and 1993. It can be concluded that the extra surveillance of the hot spots and the car park had no effect on the level of theft from cars in 1992 and 1993. This outcome is unexpected, but corresponds with the findings of the interviews with the 81 offenders.

### Offender interviews

In the interviews, offenders were asked if they noticed the extra surveillance in the inner city. Some did not, but most (68 percent, n=59) said that the surveillance and control of the police had increased. However the evidence of increased surveillance which they offered included other factors in addition to the programme: more police patrolling by car or bike; the police speaking more often to the offenders on the streets; and increased levels of social control by residents and bystanders.<sup>5</sup> Some offenders said that they were deterred by the higher levels of - perceived - surveillance and control. They refrained from committing theft from cars or they reduced the frequency with which they offended. Most offenders, however, still perceived enough opportunities to commit theft from cars. Surveillance and control were not seen as continuous, letting offenders choose the place and time to offend. This kind of displacement is very restricted in time and/or space and takes the form of 'going around the corner'.

Further analyses for the *Willemsplein* car park showed a slight shift to the hours when the guard was off duty (7 pm to 11 am). From the evaluation we know that the actual presence of the police surveillants on the hot spots varied between 4.3 and 6.8 hours a week. Although theft from cars may have been prevented during the hours of surveillance, the presence of the police surveillants had been too limited to reduce the number of offences. Thus, these findings imply that surveillance itself is not necessarily an effective means to prevent crime, but that it will be effective only when it is intense enough (Polder and Van Vlaardingen, 1992).

Whether the advice given to the car owners and victims (to prevent repeat victimization) had a preventive impact cannot be established independently from the crime statistics, given the other measures in the inner city. So we had to rely on the views of offenders on this issue. Some stated that giving information was useless. They said that there was an abundance of cars and it was always possible to find one with goods to be stolen. Other offenders thought that giving advice was effective. They noticed that more owners removed valuables from parked cars which led to a reduction in the number of attractive targets. Given this finding it is safe to assume that this measure had some effect on theft

<sup>5</sup> This suggests that it is very hard in practice to make a distinction between the specific measures of a project and the more general changes in the policies of the police or other relevant authorities.

from cars, although this effect cannot be quantified in this study. The new policy of taking perpetrators of theft from cars into custody immediately was noticed by most offenders (85 percent, n=60). This is not a real surprise, because it is this part of the programme they experienced directly. In general, however, this approach had hardly any deterrent effect, at least for the 81 offenders we interviewed. With a few exceptions (see also footnote 4, p. 82) all offenders were hard drug addicts with a long criminal history, and being arrested was just a part of their lifestyle. Most offenders stated, in different terms, that they would continue offending. These claims were confirmed by police records. The interviews were completed in October 1993. During the first eight months of 1994, 69 of the 81 offenders were arrested again at least once by the police. Although the new policy had no deterrent effect, it had some incapacitative effect. More offenders were taken into custody than previously and the evaluation shows (see also table 1) that this was especially the case in the inner city.

Despite these answers the interviews also revealed that a lot of offenders thought that theft from cars had become more difficult in the inner city. They still managed to do so, but this required more energy, time and effort.

Although theft from cars declined in 1993 in the inner city the findings of the offender study raise the important question whether the programme had been effective or not. This question also stems from the fact that in the East precinct the number of recorded theft from cars also declined in 1993 substantially. We believe that a simple yes or no does not apply. On the one hand most offenders continued committing theft from cars, but on the other they stated that it had become increasingly difficult to do so. In this sense we believe that the measures of the programme, especially the increased detention of offenders in the inner city, contributed to a situation in which theft from cars has become more difficult.

### **Displacement**

According to the interviewed offenders, theft from cars became more difficult in the inner city, and the programme contributed to this situation. Arguably, therefore, a necessary condition for displacement had been fulfilled. Our next question is whether this side-effect did indeed occur.

The answer partly depends on the kind of definition one uses for displacement (see also Barnes, 1995). Firstly, displacement can be seen

**Table 6: Change in theft from cars between 1992 and 1993 by precinct**

precinct	offences	
	N	%
inner city	- 882	-10
North	108	+ 4
West	152	+ 4
East	-1149	-40
South	56	+ 3
Grijs	475	+ 18

as a response of an individual offender. The offender is prevented from committing one offence and then commits another one instead. This could be in other areas, at other times or even a different type of offence. Secondly, displacement can be defined as a general shift in the pattern of crime due to situational prevention. For example, crime decreases in the programme area but increases elsewhere. It is clear that this kind of displacement implies that individual offenders have been displaced.<sup>6</sup> In this study we have been primarily interested in displacement as an aggregate side-effect of crime prevention.

Repetto's (1976) classification of five forms of displacement is well known. Most authors acknowledge nowadays that the different forms may occur in combination, and that it may be impossible to measure all forms of displacement. It is, however, not always necessary to do so. Dependent on the type and range of the measures, the offences, and offenders, some forms of displacement are more likely to occur than others (Hesseling, 1994, pp. 43-47). Theft from cars has become more difficult in the inner city. Furthermore, we believe that the success of the programme in 1993 can be attributed mainly to the pre-trial detention of more offenders. So we assumed that crime would either be displaced to other precincts or to other types of offences for which the new policy did not apply.

### *Spatial displacement*

The analyses have been restricted to 1993. Table 6 presents the change in the number of recorded thefts from cars between 1992 and 1993. The number of offences decreased substantially in the East Precinct. In the

<sup>6</sup> In theory it is possible that a lot of individuals are displaced without any consequences for the pattern of crime in time and space.

**Table 7: The 81 offenders' working area for theft from cars before and during the programme**

years	precinct inner city	North	West	East	South	Grijs	number of offences
1989-1991	51%	19%	24%	3%	1%	3%	352
1993-1994	53%	18%	18%	7%	3%	1%	366

North, West, South and Grijs precincts theft from cars increased. This increase could be the result of a spatial displacement. Judging by what the research on the offenders revealed, however, a general shift to other precincts due to the programme seems implausible. Although the offenders were willing to look for, or went to other locations within the inner city, most of them stated that they would keep on working in their usual area. Despite the fact that it had become more difficult, it still remained possible to commit theft from cars in the inner city. Furthermore, some were reluctant to look for targets in unfamiliar areas, while others mentioned that criminal addicts are tied to the inner city as the place where stolen goods can be sold and drugs bought.

The findings from the interviews are supported by the police records. On the basis of the theft from cars admitted to the police we compared the working area of the 81 offenders before and during the programme (table 7). From table 7 it is clear that during 1989-1991 most offences had been committed in the inner city. Most other working areas were in West and North Precincts. It is worth mentioning that until the end of 1994 a major drug market was located at the point where these three precincts met. Thus it can be assumed that the working area of the offenders was strongly related to the presence of this drug market.

If spatial displacement occurs, offenders are most likely displaced to areas familiar to them (Eck, 1993). In our case this implies that the offenders would have been displaced to the West and North. The figures show, however, that the working area of the 81 offenders has hardly changed since the start of the programme. During the programme even fewer offences were committed in West Precinct by the 81 offenders. Thus, it can be concluded that at least these offenders were not displaced to the other precincts. It might also be the reason why the increase of theft from cars in West and North is only a fraction ( $260/882 = 29\%$ ) of the reduction in the inner city (table 6). Although it does not prove the absence of spatial displacement, we firmly believe that during the programme theft from cars has not been spatially displaced and that

**Table 8: Change in four types of offences between 1992 and 1993 by precinct**

offence	inner city	North	West	East	South	Grijs
larceny	-669 -10%	702 34%	229 7%	-208 -7%	53 2%	109 4%
aggravated theft	989 42%	798 52%	203 7%	670 34%	848 40%	357 14%
residential burglary	87 14%	425 37%	396 22%	112 9%	418 43%	803 73%
theft with violence	149 23%	79 35%	5 1%	36 16%	38 17%	34 13%

the rise in the various precincts resulted from the overall increase in theft from cars since 1988.

#### *Functional displacement*

Similar analyses have been performed to see whether some functional displacement occurred during the programme. First of all, we looked at the crime statistics for four types of offence (table 8): larceny, residential burglary, aggravated theft and theft with violence (e.g. robbery). In 1993 the number of larcenies decreased in the inner city, while the increase in residential burglary was less steep than in most precincts. The rise of larceny in the North and of residential burglary in Grijs is striking. Aggravated theft and theft with violence have increased most in the inner city and in North. Again we are left with the question as to whether these changes could be caused by the programme.

The study showed that the interviewed offenders could be labelled as generalists (see also note 4, p.82). During their criminal career they committed several types of offences. Thus in theory it should be relatively easy for them to switch to other offences if committing theft from cars became too difficult. Many offenders also stated during the interviews that they would turn, or had turned to other offences when they were prevented from committing their offence of choice. Strictly speaking this can be labelled as displacement at the level of individual offenders.

Nevertheless, we did not have the impression that most offenders would switch to another type of crime permanently. Switching from one type of crime to another is more part of the continuous effort to acquire income through criminal behaviour: '*if this doesn't work, we try something else*'.

**Table 9: Offences committed by the 81 offenders before and during the programme, in %**

offence	1989-1991 (n=537)	1993-1994 (n=602)
theft from cars	66	61
larceny	8	7
aggravated theft	17	25
residential burglary	7	4
theft with violence	4	3

The police records show that the kind of offences admitted to the police slightly changed during the programme for the 81 offenders (table 9). During the programme the offenders admitted more aggravated thefts to the police as compared to the period before the programme. This finding could be indicative of displacement to this type of crime. It should be stressed, however, that during the interviews the offenders also mentioned the fact that theft from cars had become less lucrative. According to the offenders the value of stolen goods had been depressed by the sheer volume of thefts from cars. Despite this alternative explanation, we believe that the increase of aggravated theft in the inner city or North is partly caused by a displacement effect of the programme.

### Conclusion

Theft from cars became more difficult in the inner city, and the programme contributed to this situation. Therefore, displacement might have occurred. In Rotterdam spatial and functional displacement had been a common reaction when the offenders were prevented from committing offences, at least for the offenders in the sample, and it should be stressed that we have been dealing with a highly committed and versatile group of offenders. This displacement was, however, part of their usual style of offending. They seek other targets around the corner, wait for a suitable moment or switch to other offences. It is this kind of displacement that offsets the impact of preventive measures with a restricted coverage in time and space, like the surveillance of hot spots in Rotterdam. This kind of displacement does not, however, imply that the pattern of crime changes in a larger area.

For example, we do not believe that the increase of theft from cars in other precincts can be explained by a spatial displacement. Although

theft from cars became more difficult to commit in the inner city, it did not become impossible. Furthermore, most offenders had no reason to leave their usual working area because switching to other offences is, given their background, probably easier than finding a new and unfamiliar area for committing theft from cars. This explanation also implies that the increase in aggravated theft in the inner city is partly caused by a functional displacement.

This study demonstrates again how difficult it is to confirm or refute empirically the presence or size of displacement at an aggregate level (e.g. precincts). Furthermore, it confirms the view that examining crime rates in areas adjacent to a programme or for other offences is not enough to study displacement. Both theory and the use of a variety of data sources are necessary to gain a better understanding of the phenomenon.

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