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CRIME PREVENTION THAT WORKS: *The care of public transport in the Netherlands*

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An experiment has been carried out in the Dutch public transport system to tackle fare-dodging, vandalism, and aggression. On the tram and metro system the level of inspection has been increased by employing about 1,200 young people. On buses the boarding procedure has been changed. The results show that the percentage of fare-dodgers fell after the introduction of the measures. The number of incidents decreased during the project; feelings of insecurity did not decrease. Damage experts, passengers, and staff agree that the measures put a halt to the increasing trend in vandalism. Given costs and benefits, the measures made an important contribution to cutting petty crime on public transport and thereby improved the quality of service.

Introduction

When the present government came to power in the Netherlands it expressed concern that the massive scale of minor traffic offences, petty offences against property, and other forms of minor vandalism were seriously endangering safety on the streets. The response of the minister of justice was to set up a special committee in September 1983. The minister took the line that petty crime not only had a negative impact on the quality of life in the Netherlands but also placed enormous demands on the police and courts.

The committee's first report, published in December 1984, contained an attempt to apply the theory of situational crime prevention to the phenomenon of petty crime.[1] According to this theory, certain forms of crime are committed simply because numerous opportunities for doing so present themselves (Mayhew *et al.*, 1976; Clarke, 1983). It is not poverty or a personality defect that makes the thief, but opportunity.

In addition to the question of whether the temptation does or does not exist, there is the importance of security measures. In view of the limited success of technical security measures (Mayhew, 1984), the committee recommended tackling petty crime by reinstating service personnel (instead of machines) to perform supervisory functions in otherwise impersonal situations (the concept of occupational surveillance).

One of the areas considered by the committee was public transport. The increase in fare-dodging and vandalism on Dutch public transport is a good example of petty crime which can largely be attributed to a decline in functional supervision (i.e. the theory of opportunism). Conductors disappeared for economic reasons as long ago as

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[1] The Committee defines the term 'petty crime' in its first report (p. 12) as follows: 'punishable forms of behaviour occurring on a large scale which can be dealt with by the police on a discretionary basis or, in the case of a first offence, are generally handled by the Public Prosecutor or are dealt with by the courts at the most through the imposition of a fine and/or a conditional custodial sentence and which—mainly because of the scale on which they occur—are a source of nuisance or engender feelings of insecurity among the public'.

1963. This entailed a change in procedure on boarding a bus or tram: the driver was now responsible for selling and checking tickets. The introduction in 1966 of automatic machines to stamp tickets relieved the driver of some of this responsibility but at the same time increased opportunities for fare-dodging. In the case of trams the problem was compounded by the introduction of a new design of vehicle with more than one door. Responsibility for ensuring that passengers had a valid ticket shifted from driver to individual passenger, and contact between the two parties was reduced; supervision of passengers in bus or tram largely disappeared (Hauber, 1977).

In response to these developments, the minister of transport and public works announced in December 1984 the introduction of two measures: one for the tram and metro system and one for the bus system. The public transport companies operating tram and metro services in the three major cities (Amsterdam, The Hague, and Rotterdam) were thus authorised to take on, as an experiment for a period of three years, approximately 1,200 unemployed young people to tackle fare-dodging, vandalism, and aggression on the tram and metro system and to improve the information and service available to passengers. These new officials are known in Dutch as VIC (corresponding to *Veiligheid, Informatie, Controle*—safety, information, and control). A sum of 33 million guilders was set aside each year for this purpose, reflecting the government's concern with combating petty crime and with practical steps to reduce youth unemployment and for opening up employment opportunities for women and members of ethnic minorities. In calculating this sum, allowance was made for some 13 million guilders per year in extra revenue for the public transport companies and a saving of 3 million guilders on the costs associated with vandalism. Thus the total budget for the tram and metro experiment was 49 million guilders per year. The second measure introduced involved changing the procedure when boarding a bus. All passengers must now walk past the driver, who checks their tickets to see if they are valid and sells them a new one if necessary.

The two measures—the VIC project (tram, metro) and the change in the boarding procedure on buses have been jointly evaluated by the Ministry of Transport and Public Works, the Ministry of Justice[2] and the public transport companies of the three cities. This article briefly assesses the extent to which the goals of the project were realised in the first two years of operation. The following questions are considered. Have the appointment of VICs and the change in the boarding procedure on the buses reduced fare-dodging and thus increased public transport revenue? Has vandalism in vehicles, at bus and tram stops, and in metro stations declined? Has passenger information improved? Do passengers and employees feel more secure? Discussion of the results is preceded by a brief description of the measures themselves and the design of the evaluation.

Description of the Measures

VIC project

In autumn 1984, the public transport companies of Amsterdam, Rotterdam, and The

[2] Following its first report the committee received funds to carry out a number of experiments. These built on the recommendations to the minister of justice made in the plan for fighting crime entitled *Crime and Society* (Bottomley, 1986). The evaluation of the VIC project is just one instance of this.

Hague were given permission to recruit 1,200 new VIC employees as a way of increasing safety, information, and control. The companies were allowed to organise the project as they considered appropriate for their own situation.

The recruitment campaign was geared to employing unemployed people aged 19–28 and every effort was made to ensure that women and ethnic minorities were well-represented in the intake. There was a good response to the campaign. Requirements were low, but employees had to be able to cope with unfriendly passengers and fare-dodgers: in the end, only one in ten applicants could actually be recruited as VIC, many proving unsuitable for lack of the required social skills. Of those taken on, 50 per cent had been unemployed, 30 per cent were women, and 25 per cent came from ethnic minority groups (blacks, Mediterranean, etc.).

On 1 January 1987, 535 VICs were employed in Amsterdam, 375 in Rotterdam and 230 in The Hague. All VICs received short (2–3 month) training comprising a number of courses in criminal law and legal theory and practical exercises in ticket inspection. In general the VICs performed well in their new function.

VICs are deployed in different ways in the three cities. In Amsterdam and Rotterdam they are authorised to impose fines. In Amsterdam they work in groups of 2–4, checking trams and the metro system on a random basis. Once they have checked a tram or metro train they get out and board another one. In Rotterdam the VICs check trams on a random basis, but man the metro stations permanently. However, their role in the metro stations is not to check passengers but to provide information and fulfil a preventive function. The Hague opted for a 'customer friendly' approach. VICs travel in pairs the full length of the tram route and are not authorised to impose fines. Passengers caught without a valid ticket are given the choice of buying one from the driver or leaving the tram.

In the event of problems with passengers, VICs in all three cities can obtain support from a special team or from the police as the tramdriver can use his radiotelephone to summon assistance which should arrive within minutes.

Change in boarding procedure on the buses

Until the 1970s, responsibility for both ticket sales and ticket inspection rested with the bus driver. Automatic machines for stamping tickets were introduced as a means of speeding up the service and improving punctuality. This reduced direct contact between the driver and passengers and was followed by an increase in fare-dodging. After a successful pilot project in which all passengers were required to board the bus at the door nearest to the driver and show their tickets or buy a new one, the new procedure was introduced on a permanent basis in Amsterdam in 1985 and in Rotterdam and The Hague a year later. The automatic machines for stamping tickets in buses have been taken out of service or removed altogether.

Design of the Evaluation

The research was designed to be quasi-experimental, involving both a pre-test and a post-test (Cook and Campbell, 1979), and comprised three elements:

1. *Quantification of the extent of fare-dodging.* The purpose of this was to discover the extent to which the number of people illegally using public transport has fallen since the

deployment of VICs and the introduction of the new boarding procedure for buses. For this purpose, the public transport companies carried out a series of counts, making random checks on all passengers in a tram, bus, or metro train.[3] These took place in March 1985 (base figure), November 1985, March 1986, and November 1986.[4]

2. *Following trends in the costs associated with vandalism.* This research used the costs of repairing damage and drew on the opinions of damage experts, passengers, and staff.
3. *Interviews with passengers and staff.* The measures taken were expected to make public transport safer and more attractive. In order to ascertain whether this was indeed the case, a survey was carried out among passengers and staff (including VICs). A representative sample of public transport users (N=900) were asked before and after the introduction of the new measures to assess a large number of aspects of the public transport system.[5] They were also asked about their experiences as regards safety, vandalism, information, and inspection. The first survey was conducted in November 1985, the second in September 1986. A preliminary survey revealed that passengers regarded safety as the most important of the three VIC responsibilities for ensuring a high standard of public transport. A questionnaire was also carried out in September 1986 among regular staff and VICs. The survey among VICs was useful for determining whether they considered their job worthwhile and whether they were motivated.

Results

Fare-dodging

It is clear from the counts that the percentage of fare-dodgers fell in all three cities after the introduction of the VICs and the change in the boarding procedure for buses (Fig. 1). The decline was most pronounced during the rush hour on weekdays, largely because of the hours worked by the VICs: a 32-hour week with a heavy bias towards normal working hours; deployment is less at weekends and late at night, and this is reflected in the higher percentage of fare-dodgers at these times.

In Amsterdam the introduction of the VICs produced a sharp fall in the percentage of fare-dodgers on the tram (from 17·7 per cent to 9·0 per cent) and the metro (23·5 per cent to 6·5 per cent). The largest drop occurred in the first year. The publicity surrounding the intensification of ticket inspection probably led to a sharp initial decline in fare-dodging which subsequently stabilised. The new boarding procedure on the buses also led to a sharp decline (from 9·2 per cent to 1·7 per cent).

A reduction in fare-dodging was also evident in Rotterdam, despite the fact that the

[3] The research used a national registration system in which the public transport network was divided into a number of equal areas/routes. For each area and time of day (peak hours, off-peak hours, and evening), a sample was taken among those passengers who had their tickets checked.

[4] In Rotterdam the measure for the base figure was taken in November 1985.

[5] The study began at a time when the change in the boarding procedure had been operating for over six months in Amsterdam and only one month in The Hague. Some transport companies had already recruited the full number of VICs on certain sections of the system. Because of this, and because changes in attitude and behaviour take much longer to manifest themselves than the period covered by the counts, the results do not convey a complete picture. The results should be seen as an indication of what actually happened.

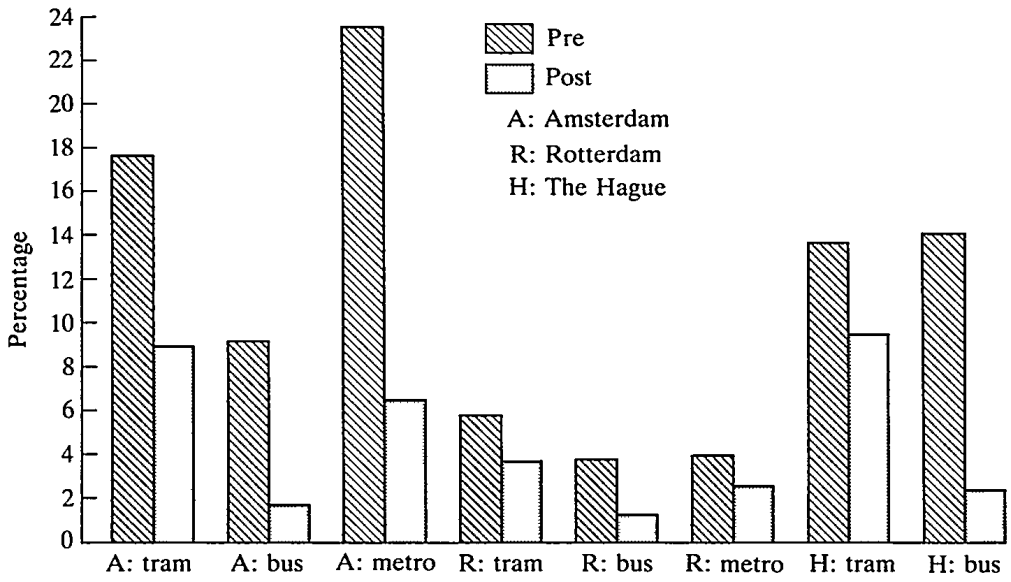

FIGURE 1 Percentage of fare-dodging: before and after the new measures

percentage of fare-dodgers before the introduction of the measures was already low. On the trams the percentage of fare-dodgers fell from 5·8 per cent to 3·7 per cent, on the metro from 4·0 per cent to 2·6 per cent, and on the buses from 3·8 per cent to 1·3 per cent. The Hague experienced an initial decline in the percentage of fare-dodgers on the trams (from 13·7 per cent to 9·5 per cent), but this was not followed by any subsequent drop. The change in the boarding procedure on the buses produced a large drop (from 14·1 per cent to 2·4 per cent).

The survey carried out among passengers revealed that they had noticed an increase in ticket inspections, more so in Amsterdam and The Hague than in Rotterdam. This can be explained by the proportionately greater increase in the number of ticket inspectors in these two cities. Rotterdam already employed a relatively large number of inspectors before the introduction of the VICs. The changes have produced a significant, across-the-board increase in passenger satisfaction on this issue. In the 1985 survey passengers often awarded a low score to the transport company for the frequency of ticket inspection, a year later most considered this aspect highly satisfactory. Passengers apparently like being asked to show their tickets. The increase in passenger satisfaction is connected with passengers' impression that fewer people are dodging fares than they used to before the VICs. However, a quarter of passengers still think that fare-dodging is acceptable in certain situations (e.g. for people on low incomes).

As a result of increased ticket inspection, respondents claim that they no longer dodge fares or that they do so less than before. There seems to be a strong correlation between behaviour and a person's views on fare-dodging: those who regard it as acceptable show a greater tendency to dodge fares.

A closer analysis of fare-dodgers as a group reveals the following:

— Young people dodge fares more often than old people and have been least influenced by the new measures; the average age of the fare-dodger has fallen in the

period covered by the evaluation. Old people are apparently more afraid of being caught without a ticket or take being caught more to heart.

— Men dodge fares more often than women; however, the difference has become less pronounced as a result of a more marked decline in fare-dodging among men aged 25–40.

There remains, therefore, a specific group of young passengers who are little affected by the increased controls.

Safety

The number of violent incidents on public transport has fallen during the project. In 1985, 11 per cent of passengers reported having seen someone attacked or harassed in the three months preceding the survey, and 5 per cent had themselves been the victim of such an attack. A year later, in 1986, the percentages had fallen to 3 per cent and 2 per cent respectively.

One in three passengers thinks that safety has improved because of the increase in the number of staff. However, the level of feelings of insecurity has declined only slightly and such feelings remain common: 24 per cent of passengers sometimes feel unsafe, and 13 per cent occasionally avoid public transport for this reason (the corresponding figures before the changes were 27 per cent and 15 per cent). Clearly, feelings of insecurity are influenced by many social factors, and being the victim of an incident makes a lasting impression on a person's perception of the situation (Heijden, 1984).

Vandalism

In the years preceding the new measures, public transport companies were faced with ever-rising costs as a result of vandalism. Deploying VICs to combat vandalism is just one of many projects which have been started in response to this problem. Municipal authorities, for example, have initiated various projects to tackle vandalism and apprehend young vandals, and public transport companies have invested large sums in materials designed to withstand vandalism.

A slight reduction in repair costs for vehicles and rolling stock was evident in Amsterdam in 1986 after the introduction of VICs,[6] but there was no noticeable difference for metro stations. The reduction in the other two cities was less marked. The figures show no consistent trend.

A study was carried out in Amsterdam into cleaning times for two virtually identical tram routes. For a three-week period, VICs were present in the trams on one line for 29 per cent of the time but never boarded trams on the other line. All trams on both lines were inspected every night and cleaned and repaired as thoroughly as possible ready for reuse. Trams on the line without VICs took roughly 15 per cent longer to clean than those on the line patrolled by VICs. In Rotterdam and The Hague, the decline in damage and graffiti in buses and trams does not show up in the figures, but experts and

[6] The damage repair costs represent the adjusted calculations of damage clearly identified as being the result of vandalism. Repair costs are calculated on the basis of repair work and replacement costs using new or old parts which are still in stock and in working order. In some cases repairs are combined with regular servicing. Not all costs are recorded immediately. Damage to vehicles and street furniture as a result of football hooliganism or squatters' riots is included in the general figures.

depot managers nevertheless have the impression that less time has been spent on vehicle repairs and cleaning to remedy the effects of vandalism.

Since VICs have been on duty in the metro stations in Rotterdam the amount of graffiti on external walls has remained virtually unchanged, but the amount inside the stations has fallen by roughly 30 per cent.[7] There has also been a decline in the number of broken windows in metro stations. At tram and bus shelters at street level, however, the number of windows that had to be replaced in the same period doubled.

Passengers reported seeing fewer cases of people damaging or defacing property in 1986. In the survey they expressed greater satisfaction with the appearance and cleanliness of the public transport system.[8] As would be expected, vandalism usually occurs out of sight of employees, but a quarter of the staff interviewed did discover at the end of the shift, anything from several times a week to every day, that something had been damaged or defaced. However, at least half the staff felt that vandalism had declined since the introduction of VICs.

It is impossible on the basis of the various figures available to draw any firm conclusions about the impact on costs associated with vandalism. The variations are too marked, and vandalism also depends on other factors. However, damage experts, passengers, and staff unanimously agree that the VICs and new boarding procedures on the buses have stemmed the long-standing increase in vandalism.

Information

Passengers' assessment of the information provided on public transport has been almost unaffected by the measures, although they are pleased that there are more opportunities for asking staff questions. The proportion of people dissatisfied on this score has fallen from 37 per cent to 26 per cent. The proportion of people who regularly ask employees questions inside the vehicles has increased from 9 per cent to 28 per cent.

What the changes mean to passengers and staff

The introduction of VICs and the change in boarding procedures on buses have not gone unnoticed among passengers and have improved the image of public transport. Passengers now give a higher rating to many aspects which affect the quality of public transport. Aspects which were rated unsatisfactory before the introduction of the VICs (such as ticket inspection) are now judged satisfactory.

Despite the fact that passengers give a positive verdict on the performance of the VICs and have noted a number of improvements, this has not led to an increased use of public transport in Amsterdam and Rotterdam. Only in The Hague do 7 per cent of respondents now claim to use the system more frequently. On the other hand, there is no indication that former fare-dodgers have abandoned public transport: it can therefore be inferred that they are now more likely to buy a ticket.

Employees are in general well-disposed to the new measures. A large percentage of the staff believe that thanks to VICs the number of fare-dodgers and incidence of

[7] However, most graffiti is done after 23.00 hours when VICs are no longer on duty in the metro stations.

[8] In Amsterdam in particular, it was found that benches, arm and back rests, and seats were damaged less frequently. This is partly connected with the fact that seats with padding, which are easily slashed, have been replaced by hard, polyester ones that are less easily vandalised.

vandalism have decreased and information on services has improved. Tramdrivers do not feel that their personal safety has improved, but do feel less lonely. There has been no change in the level of aggression by passengers against tramdrivers. Busdrivers feel that they now have more authority and are in favour of the new boarding procedure.

The VICs themselves take a positive view of the project. They think their work is effective and have a high opinion of the co-operation and supervision from the public transport companies. The VICs feel that they have managed to establish a clear role in the eyes of the passengers. Their only regret is that they cannot devote more time to the safety aspect of their work which, they feel, has yielded the fewest results.

Evaluation

Deployment of VICs

The public transport companies have adopted different policies as regards the powers allocated to VICs and the way in which they are deployed. The principal differences relate (*a*) to whether they are authorised to impose fines and (*b*) to whether they carry out random checks or travel on particular vehicles.

One of the most important tasks of the VICs is to inspect tickets on trams and in the metro. Counts show that the percentage of fare-dodgers has fallen sharply on all three public transport systems. In The Hague, however, the percentage soon stabilised at a relatively high level. Passengers, and fare-dodgers in particular, quickly realised that the VICs in The Hague were not authorised to impose fines, and this has undermined the effectiveness of the checks. People would pay only if confronted by a VIC, and even then would not receive a fine. Further, the disadvantage of the system of assigning VICs to particular trams is that passengers can see whether there are VICs on board and decide to wait for the next tram instead. With 250 VICs working in pairs, it is never possible to man more than 20 per cent of the tram services in The Hague.[9]

The greatest improvement in safety seems to have been achieved in those places where staff (VICs) monitor the situation for longer periods of time. In particular, the passengers on the trams in The Hague, where VICs accompany particular vehicles, and on the metro in Rotterdam, where they are deployed in a particular metro station, feel that safety has improved.

The decrease in graffiti and damage in the metro stations in Rotterdam which are permanently manned by VICs and the lower cleaning costs on tram lines in Amsterdam which are inspected by VICs suggest that VIC presence over a longer period of time has a stronger preventive effect on vandalism.

The foregoing suggests that from the point of view of ticket inspection, VICs who accompany particular trams for the length of their journey are less effective than those who carry out random checks, because their movements are more predictable. On the other hand, the presence of VICs in a particular place for longer periods improves safety and reduces vandalism. If VICs are to carry out their inspection duties effectively they must be authorised to impose fines.

[9] The Hague has since experimented with a new approach. At the end of 1986, in an effort to increase the surprise factor in inspections, the transport company started to deploy VICs on particular sections of a route; on certain sections of a tram route all vehicles are manned by VICs.

Financial costs and benefits of the VIC project

Deploying the VICs costs 49 million guilders per year: 43 million guilders for wages; 2·5 million guilders for management costs; and 3·5 million guilders for overheads.

The benefits which the public transport systems derive from the deployment of VICs may be classified as follows:

— A *significant decline in fare-dodging*. Depending on the type of journey and the sort of ticket bought, the extra revenue from ex-fare-dodgers on the trams and metro is estimated at between 12 and 14 million guilders.
— An *increase in the number of fines imposed*. The extra revenue generated (for the Ministry of Justice) is estimated at 1 million guilders per year.
— *Costs associated with vandalism have stabilised or even fallen slightly*. However, these changes cannot be ascribed exclusively to the introduction of VICs, as other measures to tackle vandalism have undoubtedly also played a part. A sum of 1·5 million guilders has been credited on the benefit side of the project: this does not represent an actual cost reduction but a levelling off of the trend of increasing costs.

Given that the benefits to the public transport systems are worth between 14·5 and 16·5 million guilders and total costs are 49 million guilders, the VIC project in its current form covers roughly one third of its costs. This is more or less what was expected when the project was started.

Financial costs and benefits of the new boarding procedure on the buses

Reactions to the new boarding procedure have been overwhelmingly positive, even though buses are delayed longer at the stops as a result. This has forced the bus companies to put on extra buses on some routes, given that passengers regard punctuality as the most important criterion in their assessment of public transport.

The new boarding procedure entails costs of 6·1 million guilders. The benefits take the form of increased revenue because fewer people are dodging fares. One obvious difference between this and ticket inspection by VICs is that everyone boarding the bus is checked. The benefits for the three cities together are estimated at 3·6 million guilders. In Amsterdam and The Hague the new boarding procedure almost completely covers its costs. In Rotterdam, where an effective inspection system already operated so that the percentage of fare-dodgers was relatively low in the first place, the costs were relatively high.

Social benefits

In addition to the financial costs and benefits, which are important for the public transport companies, the measures also have a social significance. As in most cases it is impossible to place a monetary value on the social benefits, they are described below largely in qualitative terms:

— The measures have made an important contribution to cutting petty crime on the public transport system. This improves the quality of public transport.
— The VIC project has created approximately 1,200 new 32 hour-a-week jobs. Savings on unemployment benefits amount to some 21 million guilders per year. Many of the new jobs have been taken by young unemployed people, who thereby gain work experience and training.

— The VIC project has provided an opportunity for putting into practice the government's policy of opening up employment opportunities for women and members of ethnic minorities.

Discussion

In the light of the results, the increased level of ticket inspection achieved by the deployment of VICs on trams and metro and the introduction of tighter controls when boarding buses may be said to have succeeded in the short term in reducing petty crime on public transport. Increased staff presence did not, however, reduce passengers' feelings of insecurity, although safety in a number of places did improve. Certain other effects may become apparent in the longer term. Feelings of insecurity, for example, might still diminish. Passengers think that fewer people dodge fares, and this may lead to a shift in norms: fare-dodging may come to be seen as less acceptable. The employees' positive attitude towards the VIC project probably has an effect on their manner towards passengers, which can in turn improve relations between staff and passengers and increase social control. So the results can be seen as a confirmation of the close link between the concepts of situational crime prevention and occupational surveillance. Shaw (1986) came to similar conclusions in evaluating the effect of crime-prevention projects: employing caretakers is more effective in preventing crime than any amount of hardware.

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THE LETTER OF THE LAW? AN ENQUIRY INTO REASONING AND FORMAL ENFORCEMENT IN THE INDUSTRIAL AIR POLLUTION INSPECTORATE

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This paper provides an empirical examination of the influences on decision-making by law enforcement agents in an independent regulatory organisation. A distinction is drawn between those external influences which relate to the qualitative aspects of unlawful behaviour in the regulated population and those internal ones which derive more from the structure, ideology, and objectives of the organisation. The paper emphasises the dynamic and contingent nature of the law enforcement process. It suggests that there are important issues raised when an area of general public concern, in this instance industrial air pollution, is subject to an essentially private regulatory strategy, albeit one which is sensitive and responsive to external scrutiny.

Law cannot, and does not, exist independently of its enforcement. Without procedures for its execution it is a barren concept. There is no stage in the career of a legal case more critical than the decision by an enforcement agent to bring the incident which is the substance of that case into the legal process. The contact between law and law violator produces tensions, the resolution of which is a matter of considerable complexity. Not all violations are pursued formally, for the enforcement of law is subject to discretion, not certainty.

Criminologists have long been concerned with the response of police to unlawful and illegal behaviour in the general population and have rightly focused attention in the discretion which they employ in choosing whether to formally process an individual through cautioning and prosecution (Wilson, 1968). They have also been justifiably concerned with the decision-making processes and criteria within the courts on questions of discrimination and equality of treatment (McBarnet, 1981; Burney, 1985). As visible and public arenas of legal activity, such studies have understandably informed the bulk of critical work in this country on legal decision-making. More recently there has been a growing interest in locating the analysis within administration and regulatory contexts, examining approaches to law enforcement as the product of continuing relationships and organisational ideology (Nelken, 1986; Hawkins, 1984; Hutter, 1988).

This paper provides an empirical examination of the reasoning behind the discretionary decisions of enforcement agents when considering potential formal response. It takes as a case study the Industrial Air Pollution Inspectorate (IAPI) and the ways in which it seeks to control unlawful behaviour in its regulated population.[1]

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[1] For a general survey of enforcement in a regulatory context see Hawkins and Thomas (1984), especially the essay by Reiss. Gunningham (1974) discusses the philosophy behind compliance strategies, placing them within the context of industrial capitalism.

Organisation and Enforcement Tools

Although this paper is concerned with enforcement procedures, it should be pointed out that IAPI is not just a policing organisation. It is heavily involved in updating technical policy, revising notes on the 'best practicable means' (BPM) of preventing noxious atmospheric emission and producing practical guidance for its own inspectors. IAPI also offers advice to government departments, local authorities, and industry on air pollution matters. That said, inspection to secure compliance with legislation is the main task, occupying approximately 70 per cent of field staff time, and 25 per cent of the time of those at IAPI headquarters.

Inspection is of scheduled works whose operations are subject to the requirements of the Health and Safety at Work Act 1974. Section Five of this statute gives the BPM requirement.[2] Works must also register certain processes under the Alkali Act 1906. Failure to comply with these statutes may result in the issue of a notice, or in a prosecution. Presentation of a case in court is not by the investigating field inspector but, as a matter of IAPI policy, by an inspector with particular experience of the legal process.

The IAPI, in common with most enforcement agencies, is a hierarchical organisation. Its 'sharp end' consists of district inspectors (DIs) and inspectors located in twelve districts in England and Wales. The decision whether to issue an improvement or prohibition notice or to recommend prosecution is made at local level. Recommendations pass from the district office to HQ in London for consideration and ratification. HQ staff include the chief inspector and three deputy chief inspectors (DCIs), two of whom are responsible for six districts each. The third is responsible, inter alia, for inspectorate enforcement policy. Without the consent of the appropriate DCI and chief inspector, prosecution cannot be pursued.

The first stage in any formal action against a works is the issue of an infraction letter. This document, formally declaring a contravention of legislation, was introduced by the first Alkali Act of 1863. The statute required that the letter be sent to those premises considered by inspectors to be in breach of regulations. Although subsequent legislation removed this obligation, the use of the letter has been retained. It has no binding legal authority in itself, but is an inspectorate prerequisite for any prosecution and is used in evidence against 'infracted' works. The reason for the issue of an infraction letter, the response to it by the firm concerned, the recommendations which it contains, and the reaction of HQ staff to those recommendations constitute the focus of analysis in this paper.

Study Methodology

This research was conducted as part of a wider study undertaken at the Centre for Socio-Legal Studies into regulation by the Health and Safety Executive. Without the full co-operation of the Executive, which allowed ready access to information, collation and analysis would have been impossible. Three years of correspondence (1983–5) between IAPI and those firms which had been sent infraction letters as the result of

[2] The Act does not supply a definition. The inspectorate subscribes to the one used in the Clean Air Act 1956, where 'practicable' is defined as: 'reasonably practicable, having regard, amongst other things, to local conditions and circumstances, to the financial implications and to the current state of technical knowledge'. In deciding whether the costs are practicable the inspectorate's aim is to achieve a 'reasonable balance between the costs of prevention and/or dispersion and the benefits'.

rule-breaking were examined. For each year there was a file containing the initial infraction letter and subsequent correspondence relating to it. Accompanying these were memoranda from field inspectors dealing with the case to their immediate superiors (the DIs) and HQ with comments about the works; for example, its record of past behaviour and general attitude towards environmental protection. It was these which contained any recommendation to prosecute (or, more often, a recommendation not to proceed further), along with the reason for that recommendation. Such memoranda were invariably responded to by HQ staff. The infraction letter itself contained the reasons for the issue of that letter, but little else.

It is clear that an analysis of behaviour based on documentary evidence of that behaviour is problematic. The material studied in this paper considers events only in their interpretation by inspectors. While it is true that the material precludes definitive conclusions about the 'reality' of enforcement practice, or to the impact and effectiveness of that practice, it does permit an examination of the processes and reasoning behind the discretionary decisions involved.

The documents used for this paper may represent just one viewpoint, but they do evidence the structures within which decisions about formal enforcement are made. They demonstrate the directions of communication within a law enforcement organisation. They permit us to see individual inspectors' definitions of situations, how they are described and categorised. The documents are produced to achieve specific results and so we may look at the tactical language employed. Through the document we may discover the ways in which illegal behaviour is presented within a particular moral framework in order to add to, or distract from, the culpability of the offender. There is considerable methodological advantage in the fact that the material was written and ordered without the knowledge that it would be used for external research purposes.

Understanding that these documents are not just a resource but a product of interpretation in themselves will inform rather than obscure. The paper may not demonstrate the effectiveness of the enforcement techniques employed, but it can provide an examination of the reasoning behind those techniques. It is a study of means, not of ends.

Enforcement Practice

Lawyers often fall into the trap of referring to cases as if they were static events existing solely on the pages of law reports. This may be defensible if it is only the legal decision reached which is the object of reference. However, the narrowness of such an approach has long been recognised by those concerned with the analysis of the interaction between enforcement agencies and their regulated populations (Nelken, 1986). Since Carson's research, which showed that the strict liability rules in factory legislation were enforced so that only those considered morally culpable in some way were prosecuted (Carson, 1970), scholars have focused on the relationships within, and the dynamics of, the legal process. Some, like Nelken (1983), have been concerned with the transformational aspect of a case as it passes through the various stages of investigation, complaint handling, prosecution recommendation, and court hearing. Others, like McBarnet (1981), have gone further, arguing persuasively that law enforcement is not just 'an area for interactionist study at the micro level, it is also an issue in the politics of law at the macro level'. While sympathising with this latter approach, this paper has more in

common with the former—if only because of its scale. It is an attempt to examine empirically the ways in which a chosen enforcement strategy (for the IAPI, one based on achieving compliance through continuing negotiation) affects the passage of a case. The objective is restricted but not sterile, for it is only through the empirical analysis of law in action that more general theoretical assertions can be derived.

When considering the examples which illustrate the arguments in this paper, the reader should be aware that such examples are taken from documents which exist in a continuum of documentation assessing and reassessing the particular issues involved. In order to emphasise this, a condensed set of correspondence relating to an infraction committed by a mineral works is presented. The points which it raises will be dealt with afterwards in more detail, taking examples from other cases.

Case Study

The case considered comprised the following stages:

1. *Infraction letter, November 1984.* The inspector writes to explain that following a complaint by the local Environmental Health Officer of bad atmospheric emission he had made a visit to the works and noticed excessive smoke from one chimney stack. In discussion with Mr. A, a works manager at the time, it transpired that for nearly a week the plant had operated without the required electrostatic precipitator. This constituted an infraction of the Alkali Act 1906. He asks for assurance that care will be taken in the future to ensure compliance with the legislation, explaining that the case is being referred to the Chief Inspector 'for consideration with respect to prosecution'.

2. *Memo from inspector to DCI (same date).* The inspector details the background of the firm and explains that there had been problems with the precipitator before. IAPI had noted this, and had stressed the importance of clean air to the company. Interim measures had been agreed to, though the works manager's bid for money to rewire had been turned down by the company. Supported by the DI, the inspector recommends prosecution for the following reasons:

(i) The interim operation agreement had been provisional on work being actively pursued to improved precipitation performance.
(ii) The company had known that it was totally unacceptable to operate the process with the precipitator out of action.
(iii) The emission had been heavy enough to provoke adverse comment by the local authority, which had been critical of the works before.
(iv) Even the works had considered the emission to be extreme, but had continued operating without informing IAPI of the problem.

3. *Memo from DCI to inspector, early December.* The DCI sympathises with the prosecution recommendation but wants to see the response to the infraction letter first. He asks whether the precipitator, if working efficiently, is sufficient to prevent breach of these regulations.

4. *Memos from inspector to DCI, mid-December.* The inspector explains that although the precipitator *is* capable of producing adequate results, the economic recession has resulted in inefficient operation. Until a new monitor is installed it has been agreed that three-monthly cleaning will constitute BPM.

5. *Memo by inspector for file, same date.* The inspector refers to a meeting with the firm to discuss BPM, where he told Mr. A of his recommendation to prosecute. The charge was admitted by Mr. A. The inspector notes that foreign development is being considered and that 'adverse publicity' could be detrimental to future sales; the company want to avoid prosecution at all costs.

6. *Letter from the firm's operations director to inspector, early December.* In response to the infraction letter the director admits the problems, which he says were caused by a union dispute. He realizes that this is no excuse, confirms internal monitoring, and says that new wires for the precipitator are on order.

7. *Letter from operations director to DI.* More concern is expressed. He says that he is 'very perturbed' at the infraction and explains in technical detail proposed abatement measures. (This letter is forwarded to the DCI with no comment.)

8. *Memo from DCI to DCI in charge of prosecution, late January 1985.* Recent documentation is attached with a request for the CI's views and approval.

9. *Memo from CI to DI (two days later).* The CI appreciates reasoning but has doubts:

(i) He considers that the case might be defended, in which case the defence could embarrass IAPI for citing out-of-date legislation.
(ii) The inspector must be able to prove from his own direct observation that the precipitator was not working. Reliance on another's evidence, as hearsay, would be inadmissible.

The CI says that he is passing the file on to an experienced prosecuting inspector.

10. *Memo from prosecuting inspector to CI, late January.* The inspector agrees with the CI's reservations: 'It would seem that this is the kind of works we would not want to lose a case against.... on the evidence presented I would be against taking this on, although in our minds they have failed to run and maintain the works adequately, there could be doubt as to what extent we could prove "beyond all reasonable doubt".'

11. *Memo from DI to DCI, mid-February.* Having considered the matter, the DI agrees that there seems little point in continuing. He asks if a strongly worded letter from London could be written instead. No more time should be wasted: 'The sooner we can put the incident behind us and resume normal relations the better.'

This relatively detailed example is important because it outlines some of the complexities involved in the tentative progression of an incident through the decision-making processes of the IAPI. The case, in its creation and resolution, is a product of the initial reaction by the control agency to define that incident as a formal infraction, mediated and interpreted within an intricate web of other determining factors. It involves the considered reasoning and interaction of individuals over time. It is a dynamic process, not a static event. The following section will attempt to differentiate the various elements which influence the progress of such cases. For analytical purposes, a two-fold distinction has been made between:

(i) Qualitative factors which relate particularly to the incident (for example, whether it is the latest event in a pattern of misconduct or the product of mismanagement).
(ii) Factors which relate more to the way in which the agency *deals* with the incident (for example, the legislation and resources at its disposal, or the impact of formal enforcement on the informal strategy employed).

Such a distinction helps identify the tensions, whether qualitative or organisational, which push towards or pull away from formal enforcement action. These factors are further discussed below.

Qualitative Factors

The first stage in any formal action brought by the IAPI against an offending works is the issue of an infraction letter. This is an extremely infrequent occurrence. Between 1983 and 1985 there were 32,080 visits by inspectors to scheduled and non-scheduled works. Excluding those against itinerant cable burners,[3] only 85 infractions were issued in this period, and there were four prosecutions. The IAPI's legal working group states that: 'The primary function of the infraction letter is to warn and notify the works that in the opinion of the Inspector a breach of the legal requirements has occurred ... a secondary function is to state the need for remedial action and to inquire what measures the works intends to take to avoid repetition of the alleged offence.'

At the most basic level, the justification for the issue of a letter is a legal breach, or more accurately, a breach 'in the opinion of the inspector'. This assessment will be made not solely on the technical illegality of the specific incident, but by placing the incident within a wider context, one which helps to identify its quality.[4] Aware of the web of factors which influence the decision, the Chief Inspector explains that the procedure is iniated when: 'The inspector has been to the works and he has found things wrong, and either he has come to the view that ... things are wrong because the manager has been careless or negligent or thought he could get away with it knowing what he was doing, or if there is a long history of difficulties with that particular firm.'[5] To take these points in a slightly different order it seems that the persistence of misbehaviour by a firm is of paramount importance, both in the decision to infract and in the recommendation to prosecute.

It is difficult to ascertain from the data whether the infraction letter has been sent as a result of the failure of earlier efforts to achieve compliance or because of a single incident. The format of the letter is such that only the incident to which it is the response is referred to. This gives the superficial impression that the rationale for its issue is unrelated to past behaviour or potential future rule-breaking. However, the accompanying memoranda to HQ from the field help explain the reasoning behind the infraction.

Analysis is further complicated by the fact that many of the incidents which precipitate infraction letters are in themselves 'continuing'. Some breaches are simple in that they are easily recognisable and require little legal interpretation (non-registration of a registrable process, for example). Although such breaches must have existed before the inspector's arrival, and as such have existed over time, they tend to be seen as one-off failures to comply, requiring relatively straightforward solutions. Some problems, however, such as the blockage of an effluent scrubber, are more complex, often taking place

[3] Cable burners were dealt with under S.78 of the Control of Pollution Act until 1984, when local authorities assumed jurisdiction for the offence. As a matter of policy, IAPI prosecuted all cable burners who, being generally itinerant, were not conducive to the preferred strategy of continued negotiation to achieve compliance. There is little or no documentation relating to these cases, and the paper concentrates on the 85 infractions issued for breaches of registration and BPM requirements by scheduled works.

[4] On this point see generally Braithwaite (1982) and Hawkins (1984), both of whom are concerned with the importance of moral intent even in cases of strict liability.

[5] Interview between Keith Hawkins and Mr Rod Perriman, Chief Air Pollution Inspector, 1986.

gradually. The quality of management or supervision is particularly questionable in such cases and the inspector will be concerned that the blockage was either not noticed before his visit or not brought to his attention. It is a single incident as far as the infraction letter is concerned, but its continuing atmospherically harmful nature might be the rationale for the infraction.[6]

Having visited an acrylate works which had been emitting 'objectionable smells', one inspector reports to his DCI: 'Based on earlier mishaps of inadequate supervision and training I feel that this current incident is sufficiently serious to warrant declaration of infraction.' In another case the inspector points out to the CI that this is the fourth recorded infraction since March 1979, the last three for the same reason: 'It is my opinion that prosecution is essential if the inspectorate is to retain any useful degree of credibility with the company.' Inspectors thus take and recommend formal action when it is considered that the incident is not an isolated one, but rather evidence of a complacent attitude towards the preferred strategy of compliance through negotiation. Infractions are not just isolated events, they are the product of the context within which the offending incident takes place.[7]

Because inspectors work *with* companies to help achieve better standards, their 'attitude' towards IAPI's methods of maintaining standards is extremely important. In one case an inspector explains: 'The main reason for recommending prosecution was to indicate to the company that a deliberate failure to honour an agreement with the Inspectorate is considered to be more serious than can be conveyed in a letter of infraction.' A postal reprimand is simply too insubstantial a response for a calculated moral breach. In another case the inspector refers to an infraction in the following terms: 'I would not regard this incident as being as serious as that of November 1984 when an agreement between the works and IAPI was deliberately and knowingly flouted.' The breakdown in agreement in the earlier case is framed as culpable beyond the fact of breakdown itself, which may be excusable in certain circumstances. In this case the inspector recognises the gravity of the present incident (dense smoke emission resulting from a failure to use installed arrestment equipment) but also that 'no deliberate dereliction of duty was intended'. The company is not consciously ignoring IAPI advice, and the severity of response is altered accordingly.[8] The inspector also notes that to prosecute for this infraction may appear 'petty and vindictive' against non-prosecution for the earlier, more serious, incident. This may say something about the properties of an enforcement relationship which is continuing. The longer and closer a policing body relates to the policed population, the easier it is to employ proactive preventive techniques, and the harder it would appear to be to employ the reactive and alienating

[6] While it is true that non-registration must have been 'continuing' before the inspector's visit, it is not a breach of BPM and not in itself environmentally damaging. In such a case the aim is to maintain administrative efficiency for the agency by ensuring registration. To infract for this, unless it is a persistent failure to register (which may be evidence of a generally negative attitude) will be resource-consuming and inefficient. Kelman (1981) points out that the limited time focus employed by general criminal law principles will provide an inadequate measure of the morality of a situation where enforcement decisions are being taken over a prolonged period.

[7] The importance of persistence in precipitating formal action by IAPI is evidenced by the fact that in three of the four cases which were prosecuted in the period 1983–85, previous incidents of non-compliance and infraction are cited as reasons for pursuing prosecution. (The fourth was a serious one-off incident where the health of neighbouring employees was adversely affected by emissions from a misused waste disposal furnace.)

[8] Cranston (1979) and Richardson *et al.* (1982) explain that the perceived intent of the offending company is a factor of fundamental importance in imposing deliberate sanctions. Field inspectors are concerned to distinguish deliberate violations from those which are genuinely accidental.

machinery of the law. It signals a break in the essentially symbiotic relationship, which could prove hard to heal in the future.

Although it is more often than not operating staff who fail to ensure that arrestment equipment is working, the IAPI concentrates its attentions on the supervision and management of scheduled processes. This is to be expected when the strategy adopted by the agency is one of formulating and negotiating appropriate procedures for pollution control. The memoranda from field to HQ are full of observations about failure at management level. In one case the inspector reports to the CI: 'I am very concerned at the apparent lack of supervision. Everything was left to the operator, but he had no clear idea of what to do beyond "feeding the beast".' In another, the inspector complains: 'I am concerned about the efficacy of any new plant since everything will be done on a shoe string and there is a complete absence of any technical ability on the site. Any guarantees will almost certainly be invalidated by inadequate operating attention and maintenance.' In one case which ended in successful prosecution, the inspector differentiates between company management and on-site expertise: 'In addition to the completion of our investigation on this incident, it will be necessary to review in detail the managerial and operational procedures together with adequacy of the materials handling on this site.'

The inspectorate is very aware that it is insufficient merely to possess arrestment equipment. In one case the field inspector explains that although a new dryer had been operational, the management system which 'permitted the plant to decline to this level unfortunately remains'. Rather than recommending legal proceedings he says that on his next visit he will ensure that supervisors are made aware of the need to understand and manage the operation of plant in their charge. Compliance resides not simply in hardware, but in the general attitude of firms towards environmental responsibility. It is this attitude which maintains the hardware, keeps it switched on, and which particularly concerns the IAPI, as the following examples demonstrate.[9]

Having considered a report from the field inspector, the chief inspector replies to the district inspector dealing with the case: 'The impression I get from the file is of a company who adopt the practice of doing the minimum they can get away with and who have had to be pushed hard by the inspectorate, often in the face of justified public complaint, to install up to date BPM.' And in another case the district inspector: 'cannot believe [the] company have taken this matter seriously, particularly since [the works manager] agreed with me that "emission was pretty bad".' Some inspectors are even more frank: 'I don't believe for one minute that he will adhere to his promises.' Integrity is often questioned: 'I am unable to believe very much of what is said at this works, because so much of what is said is played down; delaying tactics to questions are adopted by seeking an answer from a works colleague who is absent from work.' And in one prosecuted case the inspector complains that the 'initial explanation of events was totally inadequate and we were not sure whether we had been deliberately misled or merely misinformed'. Such comments, not atypical, suggest the importance of 'attitude', 'credibility', and 'integrity' in shaping the reaction of inspectors. By their very nature they are matters for individual response and open to substantial interpretative latitude.

[9] It seems clear that the incidence of illegality is not of itself sufficient to precipitate formal enforcement action. Complementing that research which emphasises the importance of intent on the part of the offender is that of Lemert (1972) in which he asserts that legal control is often a response to the *style* rather than the *content* of behaviour.

Considering the strength of feeling in these examples it is perhaps surprising that recommendations to proceed with cases are not more frequent.[10] However, the ability of IAPI to monitor works' progress towards better standards after an infraction, and the reluctance to use such potentially alienating tactics as notices or prosecutions, depresses the number of cases taken. Some inspectors state their disinclination blandly--'I do not suggest prosecution would be appropriate this time'—others are more forthcoming: 'I do not recommend prosecution. The problems of supervision have their origin in the dramatic reduction in manpower followed by modest investment in new plant. I believe the occurrence was a genuine error or oversight, albeit one which could not be overlooked.' The decision whether or not to recommend further action is made within a framework constructed from the inspector's perception of the works and its circumstances. The decision not to recommend prosecution is justified by presenting the offender as unfortunate and in need of help. Although such behaviour cannot be 'overlooked', its moral character is interpreted leniently. In cases such as this, the infraction letter serves as little more than a formal warning, though its issue will be taken into account should the company infract in the future.[11]

Deciding in favour of a prosecution recommendation is consequent upon an absence of mitigating factors and a persistence which suggests that the compliance strategy is not working.

Another influential factor, not directly concerned with the inherent quality of the offending incident, is the way in which that incident comes to the notice of the inspector. Evidence of public concern is an important motivating factor in issuing a letter. In its broadest sense, the visibility of the offending incident prevents the agency from dealing with it privately; the event has become a matter of public interest and the inspectorate must be seen to be 'doing something'.[12] In one case a local councillor writes to the Member of Parliament for the area affected by pollution from a cement works: 'It is my view that the local officials of the Health and Safety Executive do not seem able to enforce the requirements of the 1974 Control of Pollution Act and we are now moving into the second year of having to accept this nuisance. The residents are, understandably, quite out of patience with unfulfilled promises...' Concern by IAPI with such criticism led to a speedy resolution of this conflict, though without recourse to the courts. Another case, in which the constituency MP, Local Authority, Greenpeace, and the regional newspaper were involved after workers at a factory near a chemical incineration plant became ill following noxious emissions, was pursued to prosecution. It would seem that the intervention of 'strangers' into an essentially two-sided enforcement relationship may tip the balance towards formal action.[13]

Being 'at the sharp end', and having been trained as engineers, inspectors are very

[10] Of the 85 infractions in the 3-year period, only 10 were recommended for prosecution, and only 4 were eventually prosecuted.

[11] An informative comparison with the infraction letter is the 'statutory sample' taken by water officials in cases of suspected pollution. Research by Hawkins suggested that 'apart from employing the legal (statutory) sample to initiate prosecution, field staff also adopt it as another enforcement move, a sanction in its own right, when dealing with serious pollutions. Here the stat is a black mark on an organisation's record blemishing field staff's future impression of it' (1984, p. 155).

[12] Twenty of the 85 infraction files contain some evidence of third-party complaint about the works in question.

[13] Hawkins (1984) stresses that control agencies cannot appear passive in the face of serious threat or damage. Prosecution is necessary for general deterrence and also to appease external constituencies. Enforcement in some cases can take on the characteristics of symbolic intervention, with the consequence that in some serious cases a prosecution may result even in the absence of blameworthiness.

aware of the technical difficulties faced by industrial firms in keeping down air pollution levels. The definition of BPM adopted by the inspectorate even allows them to take into account the financial implications of installing abatement equipment.[14] Formally sanctioned, this intuitive empathy often leads to the issue of an infraction letter only after several incidents, or, after infraction, to a recommendation not to prosecute: 'After reviewing the total situation, including the company's shaky financial position, I [an inspector] have agreed to hold in abeyance any decision on possible legal action.'

In another case the inspector explains the background of an offending company to the DCI and that he had: 'Asked for load to be reduced but this was not done ... I suspect that a make or break situation has developed. Unless [the plant] can get a reasonable place on the merit table its use in the future will not be high ...' This inspector is aware of the financial and competitive constraints placed upon the company, but he continues: 'All this to be expected, but not at the expense of clean air and BPM etc. agreements.' The proviso is not a precursor to a positive prosecution recommendation, however, for he suggests further liaison and negotiation to achieve better standards. Sufficient to precipitate the issue of an infraction letter, this is one example among many of an internal disorder which is seen to be remediable by relatively informal persuasion and negotiation. In the same way, inspectors are conscious of difficulties over which companies have little control. In the case summarised at the beginning of this paper the inspector explains to the DCI that the installed pollution arrestment plant is capable of efficient operation but is inefficient due to economic recession. In some cases, firms themselves sometimes put forward matters 'beyond their control' in the hope of leniency (see again the operation director in the case outlined earlier, who refers to a union dispute, at the same time saying that this is 'no excuse').

Organisational Constraints

The IAPI is an agency whose role is defined by law and has legal authority to impose sanctions. The law at the inspectorate's disposal and the interpretation put upon it substantially influences agency response to illegal activity.[15] At field level it affects the decision to infract and to recommend prosecution; at HQ it affects the acceptance of such a recommendation.

For many processes, IAPI operates a system based on 'presumptive limits'. Acceptable levels of atmospheric emission are agreed in advance, and a subsequent test result which shows emissions up to that level is evidence that Best Practicable Means are being employed. If tests show emission above the agreed level it is relatively easy to justify the issue of an infraction letter and (though this is rare) a recommendation to prosecute. Presumptive limits relieve some of the indeterminacy inherent in the concept of BPM. In the same way, the strict requirement to register scheduled processes means that non-registration is a legally unproblematic matter. However, the legislation does present difficulties. The implicit indeterminacy of the phrase 'Best Practicable Means' and the definition adopted by the inspectorate engender enormous flexibility and administrative discretion. In the context of the infraction of a works this is potentially problematic, for whereas the Factory Inspectorate, to take an analogous agency, has at its

[14] Even in enforcement systems where such factors are not formally legitimated it seems that the personnel who work within them are influenced by resource implications in compliance for companies. See e.g. Diver (1980).

[15] Kagan (1978) argues that an enforcement agency's policy and enforcement style will be influenced by the legislative and political background against which it must operate.

disposal statutes and regulations many of which are relatively simple and require specific compliance (e.g. the provision of a machine guard), the IAPI has not. The evidence required to show that the Best Practicable Means of achieving *X* is being employed is far more difficult to obtain and present than evidence that a power press, say, was in use without a guard. Consequently, if a factory inspector wishes to prosecute a particular instance of non-compliance it may be easier than for his IAPI counterpart, whose departmental guidance urges against infraction unless a successful prosecution could result from his evidence. The BPM test may therefore lead to a depression in the number of infractions issued.

It was shown earlier how the interpretative latitude afforded by the legislation permits inspectors to take into account the costs of pollution abatement to industry. This sanctioned flexibility, combined with a working ideology based on compliance through co-operation, may also act to suppress formal enforcement.[16]

The tensions caused by the dual role of counsellor and policeman inevitably lead to difficulties, both for the inspector confronted with illegality and the agency attempting to define its role. The inherent tensions lead inspectors to develop a sophisticated attitude towards the problematic issue of enforcement. For senior officials it seems more important that prosecution is successful than that it happens, both because unsuccessful prosecution may damage credibility and because even those legally justifiable may appear vindictive. Nelken (1983), in his study of local authority harassment officers, shows how a case is 'transformed' from a moral issue to one which must satisfy the organisational and ideological requirements of their councils and the courts. In the case summarised at the beginning of this paper the DCI appreciates the reasoning behind a prosecution recommendation but appears to express doubts fostered by the collective IAPI consciousness that embarrassment caused by defeat in court cannot be tolerated. He points out that if the case is defended, the defence could embarrass the inspector for quoting out-of-date legislation in the infraction letter. He stresses that the inspector must be able to prove from his own direct observations that pollution arrestment equipment was out of order, and that he cannot rely on a statement made to him to that effect as that would be inadmissible as hearsay. This advice convinces the inspector, who accepts (probably without much choice): 'the view that our evidence is far too feeble to ensure a successful prosecution. Accordingly, further legal moves concerning the incident would not further our interests with the company.' This shows both an awareness of prosecution as a potentially alienating procedure, and also that to lose in court is detrimental to the credibility of the IAPI as an enforcement organisation.

In another case, the DCI responsible accepts that the company has shown a 'cavalier attitude' to air pollution control, but is concerned about the lack of follow-up by the inspector after the infraction letter was sent. Good defence counsel, he argues 'could build that up to indicate that we did not indicate (*sic*) great concern with the situation'. Similarly, the DCIs continually stress that each letter is a possible prelude to prosecution, and that it is therefore vital to have sufficient evidence with which to back up a prosecution should one eventuate.

Just as the prospect of losing may halt the progress of a case, so the possible impact of prosecution on the continuing relationship with a firm may act to prevent its occur-

[16] Richardson *et al.* (1983) argue that because enforcement agents tend to see their primary duty as the prevention of harm rather than the enforcement of law, law is seen as a resource to assist them in their goal rather than as an end in itself.

rence.[17] In one case an infraction letter had been sent the year before for a similar offence of excessive particulate emission, and yet on this occasion prosecution is not recommended since the company had reacted 'very favourably' to the earlier letter. If this favourable reaction is repeated the inspector suggests that prosecution 'should be unnecessary'. Subsequently, however, there are further bad test results, and both district field inspectors visit the works to talk to management and decide whether or not 'there could be any justification for not recommending prosecution this time'. Such a statement, recognising the cumulative effect of smaller events, suggests that further incidents of non-compliance shift the balance from a presumption against prosecution to a presumption for it, which must then be rebutted. In a memorandum to the DCI the inspectors report the sacking of the foreman concerned and that the filters were being fixed. In doing something positive, the company is taking the matter seriously; the inspectors have concrete evidence of efforts at compliance. They recommend the installation of continuous monitors to the company and 'suggest that this would be suitable progress on which to recommend not prosecuting'. So even if the presumption is *for* prosecution, it seems that the inspectors continue to look for reasons to prevent it taking place. Since inspectors cannot be everywhere at all times, they must rely on signs from which they may infer the likelihood of compliance. Even in a case such as this, where there are two infractions within two years, prosecution is not necessarily the outcome; indeed, it is not even recommended. The company has made real efforts to improve the situation, and the appearance of vindictiveness must be avoided.[18]

Evidence of this concern is to be found even when a case is taken to court. As one inspector explains to the CI: 'In view of the decision to go ahead with the prosecution of this company, I considered that in the interest of our past and future working relationship, I should inform [the General Manager] of our decision rather than to wait until he received the information via the Summons. Although he was clearly disappointed by our decision he did express his appreciation that I should call personally to let him know.' The prospect of soured relations means that any decision to invoke the law must be taken seriously and dealt with delicately. On a practical level, it seems that resource limitations, such as the time available to pursue a case, are not supposed to affect a recommendation to prosecute, though this does happen. On one occasion, for example, the DI is against his junior's recommendation to prosecute, commenting to the DCI: 'I would be most reluctant to prosecute on this occasion. We do not have the manpower at present to take on this sort of commitment.' He is criticised in a reply which says that staffing problems should not be an issue. It is suggested that the district inspector 'await the company's response to the infraction letter and then consider this question afresh, on its merits alone'. Such a request may be idealistic, for it is hard to see how cases can be seen solely on their merits when so much reliance is placed on their context and when resource constraints do in fact exist.[19]

[17] Where the emphasis is on the prevention of harm, on proactive enforcement, it would seem that the co-operation of the regulated is seen as more important than any direct threat of legal intervention. This attitude is reinforced by seemingly widespread dissatisfaction at the level and form of the criminal penalties imposed (Rhodes, 1981; Richardson *et al.*, 1983; Hawkins, 1984; Cranston, 1979). Thomas (1982) goes further, saying that the ideology of co-operation is so strong among field officers that it may counteract any policy of stringency imposed from above, even when field officers themselves recognize the objective need for stringency.

[18] Diver (1980) discusses the difficulties faced by a regulatory agency which wants to establish success. If positive enforcement is seen as integral to that success it may be that the agency will lay itself open to charges of over-interference.

[19] Long (1979) argues that resource constraints facing agencies are very influential, especially where law enforcement does not get a high place in their budget allocation.

Conclusion

In order to clarify the complex nature of decision-making in the enforcement process it helps to consider it in terms of the resolution of inevitable tensions. Such tensions are produced by the role which the inspectors perform, the organisational structure and legal framework within which they operate, the strategy which they have come to adopt, the image they want to convey, and the expectations which are made of them, both from within and without the IAPI.

The IAPI has developed a coherent strategy for dealing with air pollution, one based on its historical foundations as an advisory, not a policing, body. Its staff have technical, not legal, training and seek technical, not legal, solutions. Inspectors operate within a seemingly bounded legal arena, employing techniques which foster a productive working relationship with the regulated population. However, tensions arise because although the legal arena is bounded, it exists only within a wider social setting. As such it is subject to continuing external scrutiny. The private ordering engendered and encouraged by the facilitative nature of the law at the IAPI's disposal cannot remove the fact that air pollution is a matter of wide public concern. Consequently, the preferred strategy of the inspectorate will be mediated by the need to present a strong enforcement-based approach, either when complaints are received, when an incident is so serious that people are harmed, or when influential individuals or groups take an active interest. Deviation from the preferred strategy will not always occur, but the pressure is certainly felt and may tip the balance. In a slightly different way, the hierarchical structure of the organisation means that the final outcome of a case is dependent upon the resolution of tensions between field-level inspectors and those at HQ. Whereas the former are concerned more with the substantive merits of a case, the latter are concerned with such things as evidential weaknesses and whether a prosecution is one which will succeed. For the credibility of the organisation it is the success of the case, not the fact of it being pursued, which is important.

This paper provides an empirical demonstration that unlawful incidents do not exist independently of the meanings which they are ascribed by those charged with managing them. It also emphasises the protean nature of the legal process, and how it is shaped by the individuality of its agents, the culture and structure of the organisation within which those agents work, and the perceived responsiveness of that organisation to external constituencies.

Such findings, although important in themselves, should alert us to their wider implications. To what extent, for example, should an area of public concern be regulated in a way which is essentially private? The inspectorate's apparent desire to counteract public criticism by presenting a more vigorous approach would suggest a measure of sensitivity to its chosen strategy. This is not to suggest that the approach is inappropriate; it may well be the most effective in terms of achieving compliance and maintaining an efficient working relationship. However, there are wider issues to do with the very nature of law in areas such as this. McBarnet (1981) points to the limitations of purely interactionist research in areas of legal concern. By concentrating on what enforcement agents do, we remove ourselves from the legal and political context in which they do it. We must remember that the law is the raw material with which inspectors work. It is the law which allows them to take into account, for example, the financial implications for a firm of installing new pollution abatement equipment. And it is the

law which sanctions the flexible 'Best Practicable Means' test, thereby formally legitimating inspectorate discretion.

Further analysis of such important issues is beyond the scope of this paper, which has been restricted to showing that the study of discretion in legal contexts benefits from empirical examination and analysis. No apologies are made, however, for it is only from detailed and specific empirical research that more general theoretical assertions can be derived.

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