cised on the same sorts of grounds as the twin studies, it being more likely that very close relatives share a similar (or even the same) environment than less close relatives. So you'd expect people to be more alike the more they were genetically similar.

But what about the adoption studies? Professor Steven Rose of the Open University, who is a neuro-biologist and the staunchest British critic of behaviour genetics, says, "The adoption studies look quite convincing. When children are taken from their parents at or near birth to an adoptive family, you can compare their behaviour with that of the biological parents and of the adoptive parents. The trouble is, when you look at the studies in detail—the best study was Danish, of schizophrenia—you find there is selective placement for adoption. Adoption agencies go to considerable lengths to find families similar in social class and environment."

David Fulker says, "This has happened in some studies, not all, and not to a sufficient extent to explain the findings [that around 50 per cent of the variance in measured traits is due to heredity]. In the most recent one, the Colorado Adoption Study, there is no evidence of selective placements for social class, abilities, or any measures of personality." But this study undoubtedly won't go unscathed either.

The argument about genes and environment does look like it's hotting up. As behaviour genetics pokes its head round the door, Leon Kamin and Steven Rose are waiting with a club. With a colleague, Richard Lewontin, they have written a book called *Not In Our Genes*, to be published by Penguin, probably later this year.

Rose is vehement that behaviour genetics is totally misconceived, and that it is impossible to separate out the effects of genes and the environment. "Genes and environment interact during development to produce something that is not reducible to x per cent genes and y per cent environment. To make a cake, you mix sugar, flour, butter, spices and so on. You bake the cake, and when you taste it you can't say 5 per cent of the taste is due to the butter, 10 per cent is due to the flour, and so on. It is qualitatively different from the ingredients you started with."

We're not puppets

Social psychologists would probably agree. It's been argued that genes may set some general limits on the way that, say, our personality is likely to develop. For example, extraversion is thought to have something to do with our chronic levels of physiological arousal. But if you're extraverted, they point out, that says *nothing* about how that extraversion will be expressed—whether you'll spend all your time at noisy parties, take up politics, or jump your motorbike over a row of London buses.

We have plenty of scope to become the person we want. Whatever the role of genetics finally turns out to be, no one is suggesting that we are the puppets of our genes.

Pandas, police and the public

Paul Ekblom and Kevin Heal

It is early evening on a busy Thursday, and the radio controller at the local police station receives several telephone calls for assistance in quick succession: a complaint of a stolen car, a noisy neighbour, a troublesome gang. A red light flashes on a panel: a burglar alarm has gone off in a high street shop. Only one panda car is free—the remaining patrols are handling earlier calls. How should the controller cope? The level of help that callers receive depends on the decisions made. Very occasionally, life may be at stake.

The easy answer is to take the most urgent request first. But in practice the situation is more complicated. Some incidents, like break-ins, may be serious but "cold"—discovered after the event. Others, relatively trivial, may nevertheless need a fast response: rowdy youths can quickly vanish. Burglar alarms are notorious for crying wolf; yet delayed reaction might just prove costly.

Underlying these very practical dilemmas of "fire brigade policing" are unresolved issues of policy. We have carried out research into this kind of policing, which casts light on the broader issues of what the police can, and should, offer to the public.

Our research was carried out for the Home Office with the assistance of the Humberside police, which is in many respects a typical provincial force. It involved analysing some 500 tape-recorded telephone conversations between radio controllers and members of the public; interviewing controllers and their supervisors; and observing them on duty. To broaden the study, we asked nearly 300 callers why they contacted the police, how they went about it, and how they rated the service received. We also assessed the tangible achievements of patrol action.

Radio controllers in local stations occupy the hub of public/police communications. So they would seem to be in a strong position to balance demand against supply, and to ensure the best use of police resources. But our research showed that what they did, in practice, was simply to open the door for those seeking police assistance, and to avoid issues of risk and priority.

Following a "just-in-case" rule, they sent panda cars to the vast majority of calls. They made little effort to handle calls in order of priority. They rarely pressed callers for information on which to assess urgency. They assigned incidents to patrols on a first-come-first-served basis. In general, the controllers played safe. They avoided making decisions for which they could be criticised later. Underlying their pattern of behaviour seemed to be a lack of any policy guidance except the injunction to treat each call that they received "on its merits."

We assessed achievements of fire brigade policing in two ways: by the operational outcomes of patrol action for the police, and by consumer satisfaction.

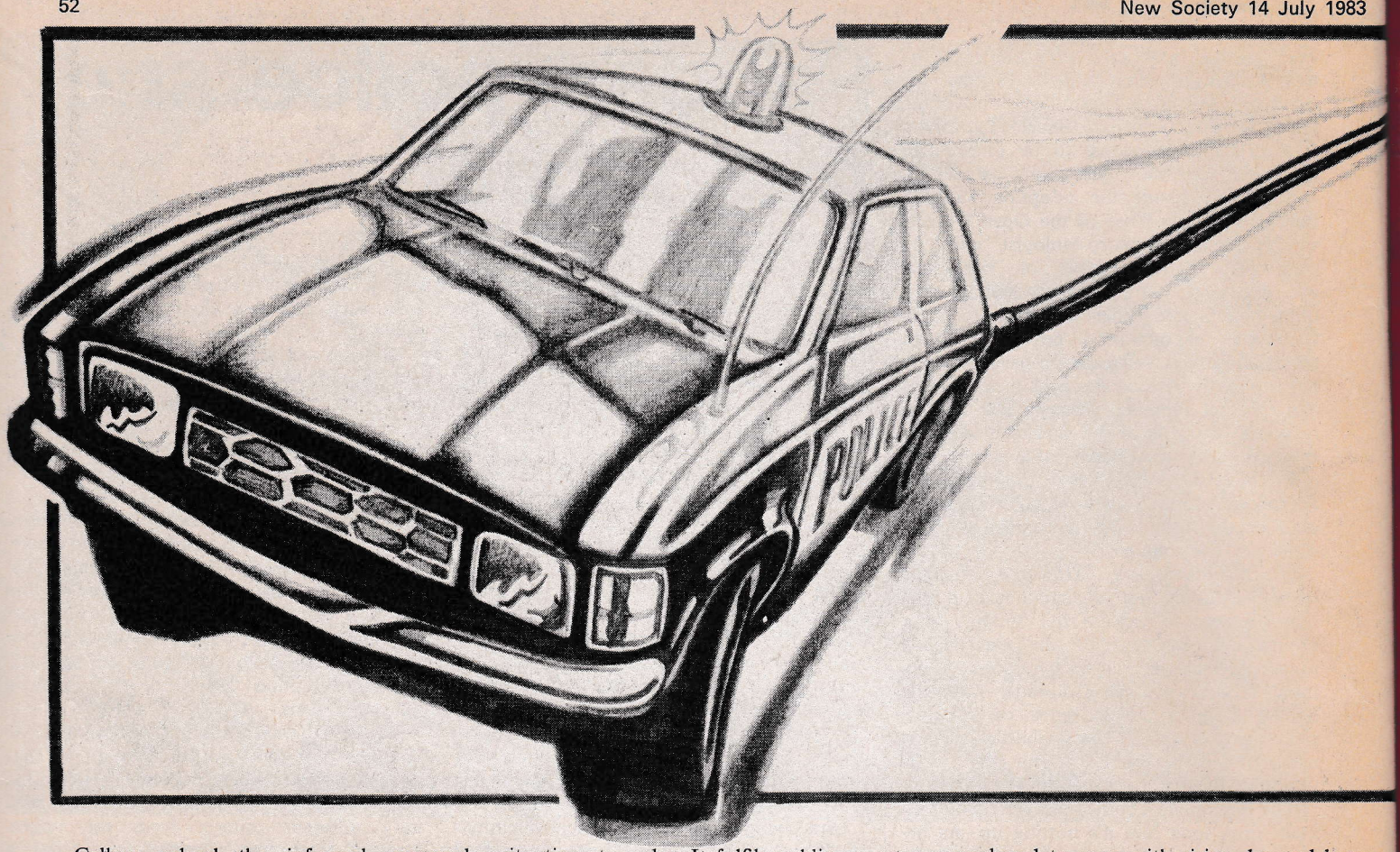
From an operational point of view, we judged (as far as this could be done from written records) that only 20 per cent of the calls which were acted on had a "useful and conclusive" outcome—for example, arresting thieves or helping motorists locked out of their cars. At the other end of the scale, 31 per cent seemed to achieve almost nothing of tangible value—for example, reports of rowdy youths "gone on arrival," domestic disputes "all in order," or false burglar alarms.

But there was a marked contrast in the consumer's view of policing. We found that 84 per cent of callers indicated satisfaction with the police response. They employed very different criteria from the police. Few of them had expected the police to succeed in solving their problems. They contacted them not so much to exact retribution or *fight* crime, as for help in coping with its consequences. Some simply wanted theft certified for the insurance company. But more salient reasons, for many who called the police, were the emotional benefits. They merit being described in detail since they are some of the key achievements of policing.

Reassurance

Reassurance was a central benefit of contact with the police. Their accessibility on the telephone, the prompt arrival of a patrol, the unfolding of a "ritual" sequence of questioning, note-taking, and such actions as searching for a lurking prowler or the use of forensic technology—all served to restore order to a threatening situation thrust upon a household. Where any of these procedural elements were omitted, callers appeared disappointed: ". . . and he didn't even get out his pocket book!" was one plaintive cry.

Contacting the police seemed to give callers a sense of "fighting back," of regaining control of events. As one of them put it, "You feel you are *doing something* when you call the police." This sense of constructive action was enhanced where callers could contribute useful evidence, or name likely suspects. Lack of interest in callers' suggestions caused ill-feeling. In domestic or neighbour disputes, where the police sometimes decided they could only advise callers to seek civil remedy, such *refusal to take responsibility* kindled far greater annoyance than attempts to act that failed.



Callers valued the informal, personal concern the police often conveyed; but a deeper need occasionally surfaced. They wanted some sort of *authoritative sympathy*, an acknowledgement, from those representing society at large, that an individual had been wronged and deserved justice and support. Failure by the police to take a complaint seriously (or taking the side of the adversary) was unsatisfying.

What consumers consistently criticised was the follow-up stage. They were dissatisfied by having no progress reports from the police, and by the lack of return visits by patrols to check on the welfare of victims of crime or to attend to recurrent problems like Saturday-night drunks. Much of this criticism appeared to stem from feeling forgotten by those whose sympathy they had commanded—or thought they had commanded.

The patrol officer seems to serve a similar function to the physician. Much of the benefit from contact lies less in the substantive treatment prescribed, and more in the psychological aspect of the encounter—the ritual procedure, the technical paraphernalia, the sympathetic yet authoritative manner.

Patients often avoid judging doctors' performance; we found the same with callers. "It's not my place to criticise the police," said one. "They're doing a grand job under difficult circumstances." This may derive from an awe of professional authority and mystique; perhaps also from unconscious realisation that excessive questioning may puncture the magic of the remedy.

The generous and timely despatch of patrols brings a wide range of threatening situations to order. It fulfils public expectations, provides reassurance and generates satisfaction. But in terms of conclusive, long-term resolutions to callers' problems, the police achievement is limited. The police often seem reluctant to refer persistent difficulties like domestic or juvenile strife to other agencies (such as local authority social services departments). This is matched, the police say, by an equal reluctance by these agencies to assume responsibility, particularly during anti-social hours.

The entire operation is fragmentary and geared to the here-and-now. The deployment of police resources is overwhelmingly shaped by the demands of citizens seeking assistance at any given time. This neglects continuity of service to previous callers, and the broader policing requirements of the community as a whole. A glance at history suggests how this imbalance has come about.

New technology

The police have traditionally coped with rising demand by increasing their resources to provide more of the same service (a strategy harder to maintain in today's financial circumstances); and by boosting efficiency, often through new technology (a strategy which the American researcher, George Kelling, sees as providing "more of the same, faster"). But both strategies may well have been self-defeating.

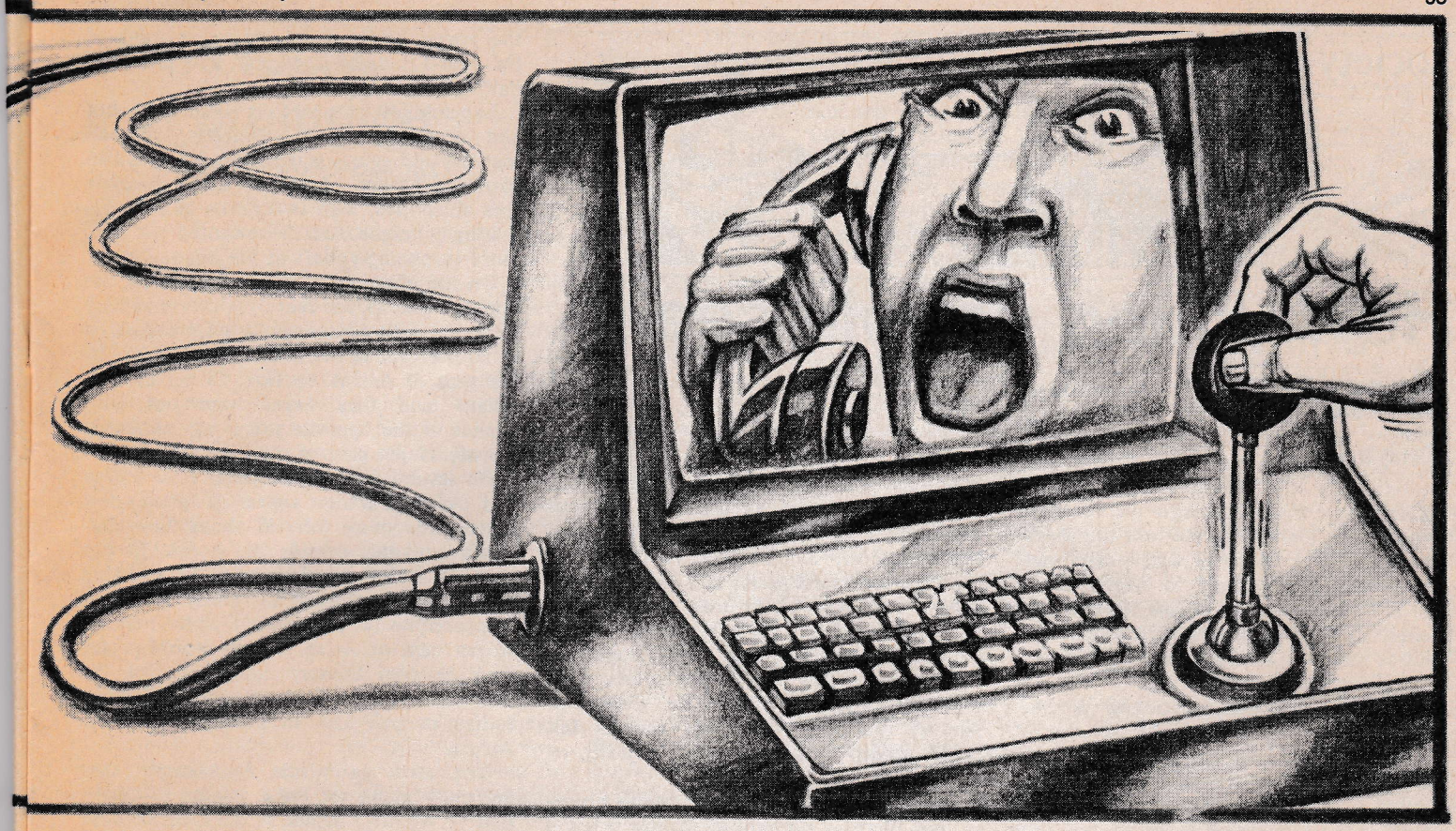
The telephone has made it easier for citizens to contact the police, and the radio and patrol car have made it easier for the police to respond. So demand and supply have tended to reinforce one another in a spiral of growth. The means the police have employed to cope with rising demand have come to re-shape the police organisation and influence its objectives. In responding to the here-and-now, the police have left themselves few resources to design and implement new initiatives aimed at crime reduction and preserving the peace.

Awareness of this logistical trap has inspired moves to put the management of police resources on a more "rational" footing. At a broad level, in an article in *The Times* last year (14 June 1982), the Metropolitan Commissioner, Sir Kenneth Newman, advocated changing from "demand-led" to "policy-led" policing. In other words, he would like the police to determine objectives and priorities deliberately, rather than relying on blind aggregate forces.

One American approach, along these lines, has been to try to conserve patrol resources through more discriminating responses to calls for assistance. These proposals—often highly elaborate—require radio controllers to put aside the "just in case" principle, and follow an explicit set of priorities. They put less urgent calls in a queue, or even refuse certain callers a patrol.

The alternative responses to such people include giving them fuller advice over the telephone; sending them a reporting form to be filled in with details, say, of a minor crime, and returned; asking them to make their complaint at the police station; or referring them to various other agencies for remedy.

Our research indicates that such schemes appear eminently sensible. A clear case exists for introducing them in this country, if only as an experiment. But our research



also suggests that such proposals raise issues of both practice and policy. For this reason, moves to adopt them should be made cautiously.

At a practical level, we do not yet know how accurately radio controllers can classify calls in order to select the right response; or how far callers, if interrogated more closely than at present, could provide the necessary information. A very wide range of occurrences are reported to the police. It is questionable whether priority guidelines could be drawn up in a tangible enough form to overcome the controllers' reluctance to take responsibility for "risky" decisions.

There are also strategic questions. The police would have to decide which types of call should receive a delayed response or none at all. But it is not obvious, for example, that minor infringements and public nuisance complaints—which predominate in calls for service and cause the public much concern—should attract fewer resources than serious crime.

The callers' reliance on the police for "psychological" help poses another difficulty. The callers we interviewed *wanted* a patrol visit. They expressed strong resentment at proposals to deal with their request for assistance in some other way. When they were presented with a number of alternatives, 83 per cent rejected them: one said, "I don't want a clerk recording the event!"

These reactions may have been superficial responses to hypothetical events. But experience in Holland suggests that a more frequent refusal of patrols (especially if clumsily done) can cause reluctance to contact the police, loss of public confidence, and reduction in support for the police. It may also increase fear of crime, and a willingness to take the law into the public's own hands. Finally, it may deny the police and the public significant opportunities to meet in cooperative, rather than adversarial, circumstances.

Even if resources *could* be freed by changes in the handling of calls, what use should they be put to? The outcome of the current debate on policing is by no means certain. Research has widened the argument, rather than narrowed it. On the one hand, some recent studies suggest that many traditional police tactics are unsuccessful in fighting crime. On the other, the benefits and the practicability of "community policing" are by no means established.

Too rational?

To try to move from a traditional to a rationally-based mode of operation is a laudable aim for an organisation coping with rapid social change and financial constraint. But since police and public behaviour interlock so closely, there is little merit in developing a "rational" police force that ignores the very different rationality of the public.

Awareness of these difficulties (and a wish to avoid public controversy) may, in fact, be partly why the police have *not* formulated explicit policies to guide their radio controllers. In recent years, after all, heated reaction has followed attempts to cut down on responding to persistently faulty burglar alarms.

Change is needed but it is important that its introduction does not jeopardise current achievements. The basic concept of a deliberate management of demand is sound. But there is no place for narrowly-conceived and hastily-introduced organisational "master plans." We need modest, guided experimentation, with careful monitoring based on a broad appreciation of the psychological, social, organisational and technical factors that underlie the present system.

In Skelmersdale, in Lancashire, patrol resources are now split between those pursuing "fire brigade" duties and those engaged in more planned preventive or supportive work. In Havant, in Hampshire, non-urgent calls now receive a more measured "graded response," in the form of a bobby on a bicycle. It is early days yet, but both initiatives appear to have freed men, money and material to fill some of the obvious gaps in the service offered by the police. The public seems to be in favour of these experiments, but the impact has yet to be fully assessed.

In any event, change should not be confined to the police. We should educate citizens to be more successful (and realistically critical) consumers of police services. We should inform them how and when to contact the police, and clarify the limits to the police's capacity, powers and duties—particularly the boundary between civil and criminal law. Widespread public ignorance currently causes both dissatisfaction and wasted resources.

Many citizens like to believe in an omnipresent, omnipotent source of help. And some police like to foster the illusion. But the increased demand in all spheres of policing spreads resources ever thinner, and heightens the need for informed decisions by both police and public.