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A PSYCHOLOGICAL APPROACH TO DIFFERENCES IN SENTENCING

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FOREWORD

This issue is devoted to a psychological interpretation of decision-making by judges and public prosecutors. The writer bases his interpretation on a model taken from the psychology of information-processing and problem-solving as developed by experimental psychologists in the "psychological function theory". Although the point of departure is highly abstract, right from the outset the model is tailored to fit the concrete reality of criminal justice. This article can be regarded as an example of the application of a highly abstract branch of social science (psychological function theory) to an important aspect of community life, criminal justice. This should show that psychology is relevant not only to the judgements made about defendants but also to the interpretation of judges' and public prosecutors' decision-making behaviour itself. The article suitably concludes with a number of specific recommendations.

Following the article this issue contains adaptations of three other articles which take certain ideas from them and apply them to the theory of judicial decision-making developed here.

The first article, by Rumelhart, deals with the understanding and retention of brief stories, and develops a simple model for the way in which people process written and oral information. The model is derived from the 'schema theory' developed in recent years; although the principles of this theory are not new (dating back to before the war), their recent development in linguistic psychology has refined it, so that it would seem to be applicable even to such complicated areas as criminal justice. In any event the theory is an important component in the model of judicial decision-making.

The second article deals with the relationship between thinking and feeling, which has received little attention as yet in the psychology of information-processing. In his article Zajonc tries to give the psychological function of feeling the place it would have in reality: the emotional judgement is a person's primary reaction to the information he is given to process, whether that information is music, the faces of people in the street or criminal files. Although Zajonc does not do so, the writer of the introductory essay regards evaluation as an

inseparable part of the total information-processing process.
The third and last article deals with a concept which performs a key function in any psychological theory of judicial decision-making: the opinion people have of themselves and of the way they function. Markus analyses and empirically investigates this self-opinion on the basis of the schema theory. In particular the writer investigates how people process information about themselves in relation to their self-schemata, which act as a sort of filter or sieve. This introductory article relates an important component of the self-schema concept to judicial problem-solving, this being the job-concept, which gives unity and coherence to judicial action.

A PSYCHOLOGICAL APPROACH TO DIFFERENCES IN SENTENCING

by Petrus C. van Duyne[*]

1. Introduction

Decision-making by judges and public prosecutors has been the object of intensive study and research in recent years: we would refer only to the essays included in the Ars Aequi collection: *Decision-making factors in criminal justice* (1978), and the studies carried out by the WODC (Van der Kaaden and Steenhuis, 1976; Van Bergeijk and Van der Kaaden, 1977; Zoomer, in preparation; van Duyne, in preparation). The purpose of most of these studies was to investigate how demonstrable or apparent differences in sentencing could be explained. Although there are big differences in the aims and results of these studies (cf. the controversy on "class justice", Jongman versus Buikhuisen) they seem to agree on one point: the person of the decision-maker explains a good deal of the differences in sentencing. This shared conclusion is in itself not new; not only from research but also from their own experience judges and prosecutors know of each other, and defendants and counsel know of judges and prosecutors,that it can make a considerable difference who the judge or prosecutor is.
The well-known court reporter Van Veen has also considered this matter on several ocassions (Van Veen, 1971 and 1977). However, although the person of judges and public prosecutors has by no means escaped attention -mainly of a critical nature- few attemps have been made to discover more about their psychology. Following the pioneering work of Hogarth (1971) and Leslie Wilkins and others (1965, 1973) few new empirical studies of the psychology of judicial decision-making have appeared apart from that by Crombag and others (1977). This is to some extent only an apparent lull in the proceedings; since 1978 a number of research projects concerned specifically with the person of the decision-maker have got under way. The WODC has undertaken projects to observe the decision-making behaviour of prosecutors and judges. Koppen and Katen (Universities of Groningen and Rotterdam) are at present studying the relationship between personality characteristics and interpretation of the law, and Van de Bunt (University of Utrecht) is studying the way in which public prosecutors operate in their offices. These projects are

[*]The author is a psychologist working at the WODC (Research and Documentation Centre of the Dutch Ministry of Justice) and is studying the decision-making behaviour of judges and public prosecutors.

being subsidized by the Ministry of Justice.
In this introduction we shall set out a psychological framework within which we wish to look at judicial decision-making.
We proceed from the assumption that although judges and prosecutors form a special professional group, they are not so special that their actions cannot be interpreted within a comprehensive psychological framework. Our framework is taken form the psychology of information-processing and problem-solving, which we shall consider in some detail. Our account makes use of the study carried out by the WODC into the decision-making behaviour of prosecutors and judges; a report of these investigations is to appear in the course of 1981. The argument proceeds as follows.

- We shall first consider briefly the relationship between problem-solving and information-processing.
- We shall then look at the handling of criminal cases as a form of problem-solving. A judge or public prosecutor has to solve different kinds of problems, "well-defined" problems and "open" problems. As we regard sentencing as normally constituting a form of open problem-solving, we shall consider only this kind.
- The next subject for consideration is the judicial context within which the problem-solving takes place, the "working environment" of the judge and the public prosecutor.
- As regards information-processing -as part of problem-solving- we discuss (1) the interpretation of case information
  (2) the evaluation of this information
- The processing of the "problem" information and the solving of the problem requires certain choices to be made. The judge or public prosecutor makes these choices on the basis of his opinion of his function in general and in particular. We shall call this his "job concept".
- We shall conclude by setting out some consequences of our theory.

2. The psychology of information-processing and problem-solving

2.1 Why this approach?

If the person of the decision-maker is considered to be so important, it may be wondered why we have selected *abstract* approach based on the psychology of information-processing; in this approach the personality of the individual decision-maker is never in question. We may answer by saying that the theory of personality is not of immediate importance to the *substance* of our subject.

We are concerned not with differences between types of personality but with general aspects of human behaviour. We are not concerned with introvert and extrovert types, age differences, social characteristics, etc. Introvert people have to read files (process information) just as do extrovert people, and young and old judges and prosecutors equally have to make decisions and untie knots (solve problems). In this general approach the psychology of information-processing and problem-solving is concerned with questions such as the following. How do people turn stimuli (information *input*) into significant messages and how, in turn, do they send out certain signals or messages (information *output*)? How do people carry out certain tasks which can be characterized as problems, i.e. when they are working towards a goal but to begin with do not know how to reach that goal (problem-solving)?
These are important categories of behaviour which can be assumed to underlie judicial decision-making.

2.2 The relationship between information-processing and problem-solving

Information-processing and problem-solving are extremely closely related (Newell and Simon, 1972), albeit the concept of information-processing is more comprehensive. In general it is the case that people are continually processing information (with the obvious exception of when they are unconscious); this is not true of problem-solving. However, a problem cannot be solved (a summons drafted, a journey planned, etc.) without processing information. We shall regard problem-solving as a particular form of information-processing aimed at a particular goal or goals which cannot be reached automatically.
This question of goals is very important: the way in which one processes problem information is highly dependent on the goal one sets oneself. A counsel, for example, will take a completely different view of a criminal case than a prosecutor or judge; his goal is acquittal or leniency. On the basis of this goal he will process the information in the file and summons differently from the prosecutor or judge.
Although, then, we are introducing the theory of problem-solving as a model for judicial decision-making, it does not necessarily cover all the actions of judges and prosecutors. As Van de Bunt states in his article in Ars Aequi (1978), prosecutors may spend part of their

working day doing routine work. This is true not only of the office work he describes: decisions relating to criminal procedure may also be made as a matter of routine if the prosecutor or judge sets himself a goal which can be reached by way of fixed routines. For instance, a public prosecutor has a lot of work and decides to dispose of his pile of police court cases by the end of the afternoon. Most of them concern drunken drivers, with a few shoplifters and drugtakers. There is nothing 'problematic' about them. As soon as they see the offence marked on the outside of the file the public prosecutors immediately know (as they say themselves) what they have to do according to the guidelines which set out the routines. The working goal of moving files from in-tray to out-tray can be reached without any problem-solving in our sense of the word. Information-processing does of course take place. We shall ignore routine work of this kind here in view of the fact that prosecutors and judges are increasingly delegating it to their office and court secretaries.

2.3 Judicial decision-making as a form of problem-solving

In the previous section we imagined a public prosecutor dealing with files in accordance with fixed routines. This might give the impression that problem-solving is concerned only with difficult cases involving a lot of thinking. This would be an incorrect interpretation in our view. The same pile of simple cases could also give rise to a form of problem-solving, albeit a simple one. As we have said, this depends on the goal or goals the prosecutor sets himself. He could, for instance, set himself the goal of investigating what sentences would be most appropriate for the particular offences and offenders. This goal could not in our opinion be reached by way of fixed routines; he would have to set himself various subsidiary goals, such as investigating whether the cases are covered by a guideline or whether they contain elements which could justify making an exception; whether there is sufficient information to answer this question; if a case is not covered by an explicit office policy, whether the case could be compared with an other case.

To these subsidiary goals for questions many others could of course be added. It is doubtful, however, whether judges and prosecutors process cases on the basis of explicit subsidiary goals of this kind. It seems more likely to us that they approach cases with relatively

vague goals in mind, e.g. "Let's see what kind of case this is, then see what I can do with it". The more specific questions would not occur until a little more case information had been processed *).

To what extent judicial decision-making can be regarded as a form of problem-solving, then, does not depend only on the complexity or seriousness of the case. Above all it is the goals one sets oneself in relation to the processing of a case which determine whether it constitutes a "problem" in our sense of the word.

Goals may vary considerably as regards substance; we are concerned, however, not with their *substance* but with their *psychological function*. Various goals such as rehabilitation, resolution of conflicts, prevention etc., have the psychological common factor that they are characterized by a great degree of uncertainty. The decision-maker rarely, if ever, knows whether he actually achieves goals of this kind. He does know in the case of different working goals such as finding evidence, persuading the court to keep the prisoner detained in custody, etc. The fact that goals differ in substance does not, then, prevent them form having psychological characteristics in common. In the next section we shall say a little more about the different kinds of problem which can be distinguished according to the different psychological types of goal.

2.4 Different types of problem

Depending on the psychological function of the goals set, problems can be divided into two main categories.

a. Well-defined problems

Problems are described as well-defined (McCarthy, 1956) if the problem-solver himself is able to investigate whether his solution was the correct one by means of an irrefutable test. The solving of well-defined

*) This tallies with Dörner's (1974) hypothesis that the first problem in some tasks would seem to be that of finding out what one precisely wants. It would be incorrect in our view to assume that a person does not know what he wants at all; there are always vague limits outside which one would not wish to go.

problems has been subject to detailed psychological investigation in the past: e.g. the solving of perceptual problems requiring a certain visual skill (match puzzles, Katona, 1940); chess (De Groot, 1965; Jongman, 1971); arithmetical puzzles and questions of logic (Newell and Simon, 1972).

b. Open problems

This category differs from the previous category in that it cannot be unambiguously established whether the solutions to these problems are right or wrong. The correctness of the solution found (however irrevocable) can always be brought into question. This category covers a wide range of problems with which we are continued daily: writing a letter, preparing a meal, chairing a meeting, furnishing a house. This vast area of behaviour has been studied only sporadically. Eastman (1969), using thinking-aloud reports, investigated how a number of architects designed an interior. Using the same method, Sanchez and Reitman studied the composition of a fugue (Reitman, 1965).

Important in the context of this argument is whether criminal procedure is to be regarded as a form of well-defined problem-solving or of *open* problem-solving. The answer to this question depends in turn on the fols set by the judge or prosecutor [x]. If they work towards a goal whose achievement or non-achievement can be established irrefutably, the problem is of course well-defined. When a public prosecutor works towards imprisonment of a defendant there is only one correct and verifiable solution: the granting of his demand by the court. To take another hypothetical example: a magistrate who sets himself the goal of dissuading the convicted defendant from appealing against his judgement immediately after giving judgement is concerned in his sentencing with a well-defined problem.

x) It is noteworthy that judicial problems differ in this respect from other types of problem, such as chess and arithmetic, which can be described as well-defined as regards their content. Even in cases where problems appear at first sight to be well-defined it is often found that this merely reflects unanimity as regards goals. It will be agreed, for instance, that the primary goal of a lawyer is acquittal. But there are always other options open to him: e.g. in the well-known case against Annie E. in the Court of Appeal her counsel did not work towards acquittal (Annie E.'s goal!) but a fresh psychiatric examination.

He can immediately verify whether he has achieved his solution when the defendant states whether or not he wishes to appeal.

But even "real" judicial goals may amount to well-defined problems. An attempt can be made to resolve a conflict by laying down as a special condition of a suspended sentence that the victim be compensated. Failure can be established if the damage is not paid for or if the victim nevertheless takes revenge. Whether the goal of resolving the conflict has been entirely reached, however, is more difficult to verify.

Most judicial goals, however, are such that, as problem solvers, judges and prosecutors can establish only with difficulty, and certainly not irrefutably, whether their action has in fact been succesful. The effectiveness of measures relating to goals such as rehabilitation, preserving standards, etc., is difficult to measure, since the goals themselves cannot be described unambiguously. Goals such as general and specific prevention can in theory be measured, but research into the effectiveness of punishments in relation to these goals is not very encouraging (d'Anjou, 1975). The question is, moreover, whether judges and prosecutors can make use of rigorous tests of this kind during -or just after- the time they deal with specific cases.

This would mean that such goals, seen from the problem situation of the prosecutor or judge, are also open.

For these reasons we would regard sentencing as a form of open problem-solving. If this is correct and judges and prosecutors do not in fact have a yardstick to measure the correctness of their action sentencing problems, this presents them with a serious difficulty: in many cases they must do something without finding out the ultimate effect of their action in the short term. Put this way it would seem that sentencing is "groping in the dark" to a large extent. In a sense the comparison is apt, but the gropings of a judge or prosecutor are not entirely unguided, nor do they take place in a vacuum. To a large extent the context in which they work is prestructured by the law and the court system, which can have a major psychological influence on their problem-solving. We shall therefore interrupt our account of problem-solving and say a little more about the context in which judges and prosecutors solve their problems.

3. External factors in judicial problem-solving

In our discussion of the external factors in problem-solving we shall consider two major aspects, the working environment in which judges and prosecutors operate and the actual files, the cases they have to deal with. We shall see that these external factors are not unrelated to the human factor: in reality there is interaction between a person's mind and his environment. People shape their working environments and their individual cases; this in turn can affect their information-processing and their image of reality. This shaping process is based on a number of "free" choices, which can influence (differences in) sentencing, both systematically and in individual cases.

3.1 Working environment

It seems strange when looking at problem-solving from a psychological point of view that detailed attention should be paid to external aspects of the work of judges and prosecutors: at first sight the organizational and legal aspects of their work would seem to have little to do with psychology. In our approach, however, this is not the case. One of the basic principles of the psychology of problem-solving is that man is a simpler being than he thinks he is, but he continually has to adapt to a messy reality, which he seems to be good at.[x)]

However, this approach implies that more attention is given to the significance of the environment to the psychological functioning of man as a "problem-solver". Thus in many experiments apparently similar problems nevertheless elicit different kinds of behaviour. This is what often makes it so difficult to extrapolate form one problem situation to an other. This has been found not only in Newell and Simon's classic study (1972), but also in research into medical problem-solving (Elstein and others, 1978). There is no reason to assume that the situation in the judicial system is any different. Here too minor differences between problem situations can result in different behaviour: different behaviour by defendants charged with the same offences, a different prosecutor or judge who has to be approached differently, etc. The concept of "working environment" is

x) Newell and Simon (1972) in their various publications employ a model of man as a "general problem-solver".

very broad, and hints at all the factors which influence the work of judges and procescutors -both the criminal law and the Courts Act and social and physical aspects of the working environment, e.g. the organization of the court's office and the public prosecutor's office. Since this is a very wide and complicated area our consideration of it will be extremely short and incomplete, confined to some *legal* and *social/organizational* area.

a. Legal environment

First we should like to take note of the *legal* environment. A large part of the actions of judges and prosecutors are due to the nature of the legal system; there is little that requires psychological explanation. The preliminary hearing by the pu-lic prosecutor is a good example. While still unfamiliar with the system in practice, the present writer wondered why the interview with the suspect during the preliminary hearing was usually so brief and superficial. Although a psychological explanation is of course quite feasible, it was later found that the best explanation was the legal one: the preliminary hearing is a formal act in which the prosecutor informs the suspect whether or not he intends to bring him before the examining magistrate and whether he intends to require remand in custody. No report is made of any interview that takes place; consequently any longer exchange of ideas with the suspect than is absolutely necessary is legally optional. A busy prosecutor therefore keeps it short. Not only formal acts but also the nature of many "solutions to problems" can probably be explained better in terms of the law than in terms of psychology.

This would seem to us to be the case in particular when the judge or prosecutor wants more than the law allows him but has to be satisfied with the legal maximum. Such is the case with the fight against white-collar crime, which would seem to be handicapped more by the law than by any tolerant attitude taken by judges or prosecutors (e.g. as regards pre-trial detention, low maximum penalties for forgery, and the maximum of only three months' detention in place of fines). In a recent whisky smuggling case, for instance, to his great regret the prosecutor was unable to demand more than twelve months' imprisonment and a fine of a million guilders, which still seemed to

to leave the defendant with a handsome profit.

b. Social/organizational environment

Thus the law lays down the frontiers of the area within which prosecutors and judges must operate and many of the routes which they must follow. However, these frontiers and routes are closely packed with *organizations:* the police, the Public Prosecutions Department with its local offices, the courts and the prisons and other penal institutions. Leaving aside how all these components of the judicial system are linked up with one another legally, we are concerned only with those aspects of the organizational reality which can restrict the freedom of action of judges and prosecutors. Here we shall confine ourselves to three examples.

- The time taken by the police to send their report to the public prosecutor's office can affect the sentence demanded or imposed.
- The sentence demanded or imposed is a matter of the relationship between the Public Prosecutions Department, the court and the Court of Appeal. If the prosecutors attached to a particular court think it is "too soft" and succesfully appeal against the -in their opinion- excessively lenient sentences, the court may regard this as a clear hint, as the Court of Appeal's sentences in the case of the Queens's Inauguration riots and the Prins Hendrikkade riots would seem to suggest.
- The facilities for the execution of sentences may considerably restrict the freedom of action of both prosecutors and judges. Here we would mention only the difficulties in executing sentences of detention in a mental institution which recently led a Public Prosecutor in a serious case against a suspect regarded as dangerous to demand *not* detention in a mental institution but a long prison sentence, owing to the lack of security precautions which *he believed* the mental institutions had for dangerous criminals. That this was not an isolated problem became clear from our observations of decisions made in camera (Van Duyne, Verwoerd and others, in preparation); several times the bench encountered the problem that the psychiatric facilities for receiving and treating prisoners did not correspond with their own goals.

There are merely a few of the numerous aspects of the organizational context which affect prosecutors and judges in their problem-solving. It should however be noted that the organizational limitations are less stringent than the legal restrictions; a judge may for example completely ignore the lack of prison space and simply continue to impose terms of imprisonment which cannot be executed in the foreseeable future. Whether he takes restrictions of this kind into account remains optional. (Van de Bunt is at present carrying out a study into the organizational aspects of the work of public prosecutors).

Lastly we would point out the hierarchical pressures which can be exerted in the organization of the Public Prosecutions Department, which made it possible, for example, to introduce policy guidelines for prosecution and criminal procedure.
(Justitiële Verkenningen, 1977, No. 8; Hoekema, 1979). This mention will have to suffice here.
If we take a look at sentencing we find that, strictly speaking, judges and prosecutors are restricted only by the maximum penalties under the law, which are so generous that sentencing in most cases has something of a discretionary nature.
It is true that the social and organizational factors already mentioned can restrict the freedom of decision of judges and prosecutors, but this organizational environment does not exist in isolation from the judge or prosecutor, who are able to influence this environment by their own actions. There are dramatic examples of this, such as summary jurisdiction in cases of public violence, but there are also less striking but equally effective courses of action, such as reducing the time taken by the police to submit their official reports to the public prosecutors and by the public prosecutors to present them to the courts. This influence on the judicial organization and on methods of problem-solving may vary from one public prosecutor's office to another and from one court to another (as well as from one individual to another). This in turn depends first on the local material conditions and second on the judicial views of the judges and prosecutors. We shall consider this latter point later on.

3.2 Cases

In the last section we took a look at the permanent working environment of judges and prosecutors, albeit en passant and at a great distance. We have seen that judges and prosecutors do not passively accept this environment as an immutable fact but do something to it. In the

processing of cases we see again the interaction between the "given element" (the file, the defedant) and the person of the information-processor. If we now focus our attention entirely on prosecutors and judges,[x)] we shall see how each of them in turn makes use of the room for manoevre which the file gives them. Until the hearing the prosecutor gives the lead: he receives the file and makes the case. In this he may encounter opposition form the defendant or his counsel, or from the court (the examining magistrate or the bench sitting in camera in cases requiring remand in custody - the latter is of course relatively rare).

Thus the prosecutor shapes the case, and unless he decides to drop the case, he presents the result of his production process and the options he has chosen to the judge in the form of a summons and file. The judge is presented with the case as laid out by the prosecutor as an "objective" fact from which he may not deviate (e.g. the summons). This does not mean that there is no scope for the judge to influence the case. By virtue of presiding over the hearing he has a number of possibilities under the law, including adjournment and referral back to the examining magistrate - too many to list in full.

Here we are concerned only to indicate that judges and prosecutors as "problem-solvers" do not passively "take in and process" information; they solve their judicial problems by actively intervening in their environment and the case. With this in mind it would seem appropriate to consider the information-processing which forms part of judicial problem-solving.

4. Some aspects of information-processing

Having explored the working environment of judges and prosecutors we now return to the psychology of information-processing (as part of problem-solving). Here we shall have to consider in some depth the "internal" mechanisms of the person of the judge or prosecutor and their effects on information-processing and problem-solving, and we shall find that the

x) Much of what we have to say about prosecutors is also true, where a lot of the work is delegated, of the secretaries of public prosecutors' offices who prepare the cases for the prosecutors, many of whom do not see most of the cases until just before the hearing.

borderline between the internal and external world from a psychological point of view is not so easy to locate as one might at first think. There are two factors to be taken account of in information-processing: on the one hand the *input* of information, on the other the person of the information-processor. Particularly important is the fact that verbal information can be both interpreted and evaluated in more than one way. This might mean not only that "correct" sentencing is an "open" problem, but that information-processing itself can be regarded in the same way in many respects.

4.1 Information is open to more than one interpretation

An important characteristic of verbal information in general, and consequently case information, is that it is open to more than one interpretation: this applies to the processing of both oral and written information. Just how much room there is for interpretation is not possible to say in any general sense, but it seems to us that there are clear "objective" or at least culturally determined limits. A phrase in a police report such as "the man hit me on the head with a truncheon and hurt me" would seem to us to be capable of only one interpretation in any culture. Nor would a police report on a failure to display a rear light seem to us to present any problems, at least in our culture.

However, a file or an examination during the hearing does not consist of a series of separate statements. We may regard the total information in a case as a "story" concerning one or more criminal offences in which the reporting officers, defendant and witnesses express their findings and views, and which may contain contradictions and points which are unclear: this can result in different interpretations of one and the same file. We are thinking here not only of the linguistic form or content of the "story" as a cause but also of the person of the information-processor.

Prosecutors and judges do not begin their work on cases with a "blank slate"; they are experts with wide experience in their field. In psychology this background knowledge is described by the broad and intuitive term "knowledge of the world" (Neisser, 1976). Although this is a somewhat vague concept, it is of great importance to an understanding of the

way in which information is processed, and we shall therefore have to consider it briefly.

In recent years attempts have been made to make this concept scientifically more watertight. The point which is in fact at issue is how the memory works. As might be expected, opinions differ considerably. A relatively widespread notion is that the memory is built up predominantly of "mental images" (Paivio, 1969). This notion has recently been disputed by Pylyshyn (1973) and others.[1] The controversy as to whether the memory is populated with images now seems to have been superseded by the "schema theory" as put forward by Brobow and Collins (1976), Neisser (1976) and others.

The memory may consist of both "cognitive maps" (Downs and Stea, 1973) and abstract schemata for verbal information. These abstract mental schemata can best be compared with the grammar of a language: just as a language can be spoken and read quickly and flexibly using a set of abstract rules, mental schemata, it is said, can be developed in a fraction of a second according to the needs of the moment.

Although at first sight this would seem to be an abstract and theoretical concept, quite concrete things are involved, as will be illustrated by two practical examples. When a prosecutor or judge prepares for a hearing he does not learn the whole file by heart: he makes a few brief notes on the back of the summons. Using these he can easily reconstruct any important detail from his memory or, if necessary, find what he wants in the file quickly at the hearing. The summons itself can also be regarded as a schema which contains the legal essence of the case; the case in its totality is of course much richer in detail.

Psychological research into the understanding and retention of verbal information too has given this theory a firmer basis. Bransford and Johnson (1972, 1973) demonstrated that an apparently nonsensical and incoherent story could be understood and retained if the readers were first shown a schematic picture with the concealed content. Rumelhart (1977) investigated the way in which brief stories are retained and reproduced in a person's own words. He concluded that readers reconstructed

1) In the opinion of Kosslyn and Pomerant (1977) Pylyshyn was too radical in rejecting the "imagery" hypothesis, which they believed to be as valid as the proposition hypothesis which Pylyshyn put forward.

the story they had read from an "abstract" scheme[*] which is said to contain the kernel of the particular story (at least in the reader's opinion. Different mental schemata of one and the same story may result in different reconstructions containing mistakes in relation to the original story. Such mistakes, omissions, additions, distortions and the like are not all random, however: they arise from the need to make the reconstruction conclusive and logical. This need to process the information in a "suitable" way using one's own mental schema so that it forms what the person regards as a coherent whole was also found in experimental studies of the way in which people process information about themselves using their own self-image (Markus, 1977).

This short detour by way of the memory may make it clear how much the "ambiguity" of the case information points both to the file information and the defendant and to the "mental structure" of the judge or prosecutor; first, judges and prosecutors approach cases on the basis of schemata, which may differ from one person to another; second, a case may be built up from different story schemes -the story of the defendant, the victim, the probation officer, etc. This can result in different readings of the same case because the judge and prosecutor, using different mental schemata, choose differently among the "story schemes" which can apparently be derived from the same file. From the point of view of the psychology of problem-solving the statement that a great deal depends on the person of the judge or prosecutor in the judicial process is consequently fairly self-evident. A more interesting question is whether this involves irrational factors which are alien to our idea of justice, or rational behaviour *within* mental schemata. The findings from our research into prosecutors' decision-making processes seem to indicate that their problem-solving behaviour can best be described as a rational interaction between the public prosecutor as an information-

[*] Rumelhart refers to a "problem-solving scheme" as the most abstract form of story scheme: the main character wishes to achieve something and looks for suitable means.

input.*) On the one hand prosecutors began processing files using their overall schemata ("knowledge of the world", experience as public prosecutor, etc.), and on the other they filled in, confirmed, rejected or amended these overall schemata on the basis of the information processed. **)

The product of these processing cycles can of course differ considerably from one person to another, but would seem to us to remain within certain "limits" of the file information.

This brings us back to the question with which we opened this section, that of the "ambiguity" of the case information. On the one hand there is "recalcitrant" reality: the offences of John drowning his wife and John drowning his cat yield two completely different criminal cases. On the other hand man gives form and significance to recalcitrant reality and there is a shadowy no man's land between "hard" reality and dreamland. In this no man's land the judge or prosecutor has to solve a whole series of different problems. One of these problems is that of assigning the "correct" significance to the file information and the defendant's behaviour during the hearing. As we shall see, concepts of justice can play an important role in the solving of problems of this kind.

4.2 Evaluation of information

In the last section we looked mainly at the way in which people interpret information, which is a rational, "knowing" activity. This is only one side of the coin, however. Judges and prosecutors have to reach an *evaluation* of defendants and *criminal* offences. This evaluation then has to be converted into a penalty, something *un*pleasant for the convicted party. In this section we shall therefore consider what we call "evaluatory information-processing", discussing the relationship

*) Neisser (1976) refers to a cyclic process of information-processing between the information-processor and the "objective" reality. This, of course, raises once again the perennial philosophical problem of how reality would appear if it was not being observed by us, which we are not able to go into in this introductory article.

**) Watkins (1970) refers to "imperfect rationality" in which decisions take place within a simplified and reduced decision-making scheme.

between the interpretation and evaluation of information. Relatively little attention has so far been given in psychology to the relationship between the more rational aspects of information-processing (or rather "knowing" in the most general sense) and evaluation (feeling). Consequently we have to be guided to some extent by the ideas recently put forward by Zajonc (1980) and the use he makes of existing experimental material. Zajonc forcefully argues that in all situations evaluatory ("affective") information-processing is more primary than rational information-processing. Evaluation ("affect", feeling) is not a kind of appendix to rational information-processing: in many respects it goes its own way. This is not to say that evaluatory and rational information-processing work independently of each other; each can strongly influence the other. For example, a prosecutor or judge will begin to read a "310 SR" file (simple theft) from a completely different emotional stand-point from that with which he approaches a voluminous report on a murder or rape. In the case of a minor theft a prosecutor may say to himself, "Let's find out more about this: perhaps the man is in a jam". In the case of a serious offence he may take the view that probation officer's reports etc., would be of no use: the offence is too serious, action must be taken. But a good background report could subsequently cause him to review his evaluatory judgement.

Although to some extent this is speculation, because of the close link between "knowing" and "evaluation" we shall also approach the second of these two psychological functions from the point of view of schema theory. Consequently we similarly regard a person's evaluatory attitude as a combination of more or less abstract schemata. Like knowledge schemata, evaluatory schemata can be developed rapidly and flexibly in concrete situations*). In other

*) This seems to contradict the notion that evaluations are a stable part of a person's personality. In this connection we would point out that, as Rumelhart states (1977), schemata, exist at different levels of abstraction. The most abstract schemata, which also cover a very large area of concrete phenomena, would seem to us to be the most difficult ones to change: e.g. the general notion of causality is more difficult to change than knowledge of concrete causal phenomena and similarly with general notions of good and evil general cultural values etc., which are more difficult to change than specific views on, say, pornography, marriage, etc.

words, people do not have a fully developed store of ready-to-use evaluatory labels. In evaluation too there has to be flexibility to allow for interaction with a changing environment, as in the case of the observation cycles mentioned earlier. Certain evaluatory schemata cause one to look at crimes and defendants, and of course the society in which they are situated, in a particular way. Conversely, information on the defendant or defendants, the crimes committed and some signals from society may exert an influence on the evaluatory schemata of judges and prosecutors, which in turn may result in a different kind of information-processing. Although this is again to some extent speculation, the changed attitude of the Public Prosecutions Department towards rape would seem to be an example which can reasonably be interpreted within our model. As Doomen (1979) argues, the previous, more tolerant, evaluatory schema at the Department was considerably changed under pressure from the women's movement, which again led to a different kind of information-processing and problem-solving: less cases dropped and stiffer penalties. Prosecutors and especially judges can, however, always take an independent line and ignore the pressure. This means that there are few solid points of reference on which judges and prosecutors can base their evaluation of offences, the degree of guilt of the offenders and the severity of the penalties. This can result in sometimes considerable differences in the evaluation of judicial information, which in turn can give rise to different mental schemata of the cases on which the judge or prosecutor has to base his decision.

Although the evaluation and interpretation of the case information strongly influence each other, evaluation is more strongly and more deeply associated with the person of the judge or prosecutor than interpretation. Interpretations may be right or wrong, but the same cannot be said of evaluations. This is what makes it so difficult to judge differences in sentencing based on evaluatory judgements, not only for the public, the press or other critics but also for judges and prosecutors themselves. In our observations of the decisions made in camera (Van Duyne, Verwoerd and others, 1981) we were struck by the fact that the decision-making process ground to a halt particularly when the evaluations of the offence or the guilt of the offender

differed widely. "Rational" arguments were not able to bring the views any closer together, and on such occasions either a vote or an "average" had to be taken. The fact that it is so difficult to negotiate about differences in evaluation is not entirely inexplicable: the way in which a person evaluates people, things and events is deeply rooted in his personality and closely linked with his "knowledge of the world" and job concept.

A final comment on evaluation as part of information-processing and problem-solving. In this section we have not made a direct link between evaluation and problem-solving as we did with the interpretation of file information; this is because the relationship between evaluation and problem-solving is still far from clear and not much research has yet been done into it. First, evaluations occur of their own accord; **there** is no need to look for them. Second, once arrived at, evaluations may be decisive in determining the solution to the judicial problem. We shall reconsider this matter in the next two sections, but in the broader context of the job concept on the basis of which judges and prosecutors work, which they express in their concrete decisions.

5. Job concept

In the sections on information-processing we have considered general aspects relating to both the information input and the person of the decision-maker. There is a close relationship between the two: the more open to interpretation and evaluation the file information, the more important is the person of the decision-maker, his "mental equipment". We have been able to deal with the schematic structure of this mental equipment only in a very abstract and general way; we shall have to take a closer look, however, at a central part of it, the conceptions judges and prosecutors have of themselves and of their jobs. This "self-concept" is a central notion, but one which is difficult to define, and the associated problems in psychology have by no means been solved. We shall confine ourselves to indicating the importance of this notion to be subject under discussion.

The schema theory put forward here from psychology is of recent origin[x] and there are still many points which remain to be cleared up. The picture which the results of the various studies give us of, for example, memory, observation, etc., is still very fragmentary; the "focal point" is still missing: this would seem to us to be the, albeit rather hypothetical, self-concept put forward here. Markus (1977) refers to the "self-schema". Without considering its specific mechanisms in depth, we shall apply this concept to our particular subject, but only in relation to the opinions which judges and prosecutors have of their duties, for which we have introduced the term "job concept". This term refers not only to what a judge or prosecutor thinks of the duties of his post in general, it influences the concrete decisions and choices made from day to day. This can be expressed in different forms. First of all the job concept has an important *guiding* function in information-processing, both generally and in particular. A prosecutor who does not think it is his job to be a social worker will apply for a probation officer's report less readily, or process it differently, from a prosecutor who is particularly concerned to help offenders out of their difficulties. Another example are the differences we observed in opinions on the delegation of duties by prosecutors to their secretaries. One prosecutor said, "If I delegate, I delegate", leaving as much as possible to his secretary and reducing his file-reading to a minimum. Other prosecutors, however, had different ideas about delegation: they believed it was important to process the case information as carefully as possible, and did not take the view that if the secretary had read the file, they only had to check it briefly. Second, job concepts are closely interwoven with what we referred to as *evaluatory* information-processing in the previous section. A prosecutor or judge who regards a particular infringement of law and order as serious will perform his duties in the matter differently from one who regards it less seriously. In this context we would refer to the way in which the district court on the one hand and the Court of Appeal in Amsterdam on the other dealt with the well-known rape case against Hell's Angels.

[x] The "schema" concept itself has a longer history; it was used by Otto Selz (1922) and Barlett (1932).

Third, the job concept has an important function in relation to *sentencing;* for the judge or prosecutor it determines what the "correct" sentence *ought* to be, providing a kind of internal test of the open problem-solving, the exercise of discretion. This can take differing, very concrete forms: for instance, a judge or prosecutor who does not regard a suspended sentence or short term of imprisonment as a suitable judicial reaction will exclude such penalties from his store of possible solutions. He may reach this view because he does not believe that penalties of this kind are effective. Another judge or prosecutor, who believes in such penalties or simply *evaluates* a short term of imprisonment as a correct reaction to a not particularly serious crime, will reach a different solution. In day-to-day life the three functions mentioned are of course interwoven, and normally they will be absolutely inseparable. Evaluation plays a part in all three of them. The same is true of information-processing, which after all does not cease halfway through the proceedings. Lastly, the "knowledge of the (judicial) world" already mentioned affects the job concept. We have illustrated how concrete this effect is by comparing a judge or prosecutor who does not believe in suspended sentences with one who does. Psychologically it is of no importance whether his knowledge (and thus this conept) is "wrong": if he believes he will act according to his conviction.

6. Summary

At this point we should like to summarize the matters that have been discussed so far.

We have found that the model of the psychology of problem-solving covers many of the aspects of judicial action. In the present article we have focused on sentencing as a form of problem-solving" the decision-maker has no irrefutable test of the "objective" correctness of his solution. Problem-solving is not just a process in the prosecutor or judge's "head"; in many respects he must make allowances for his working environment or intervene in this environment and change something in it, e.g. apply a particular policy. The working environment provides the judge or prosecutor with the "information *input*" (on the offences and offenders) he has to process. This information-processing can also be regarded as a form of problem-solving: the meaning of the file

information is not fixed, it is open to more than one interpretation. The mental equipment (the mental schemata) of the prosecutor and judge play an important role in the interpretation of the case information. This is even more true of the evaluation of the case information. Although we have dealt with evaluation and interpretation in two separate sections, it must be assumed that they have a strong effect on each other in the total process of information-processing.
An important guiding mechanism in open problem-solving is the job concept on which the judge or prosecutor bases his work. This directs the way in which he thinks and feels (interprets and evaluates) and also functions as an internal test of his actions.

7. Between tautology and paradox

In our interpretation of judicial decision-making the person of the judge or prosecutor as problem-solver is the central figure.
An important element which we have introduced in the process is the "knowledge of the (*judicial*) world", which is stored in the memory of the judge or prosecutor in the form of schemata, the evaluatory schemata and job concept on the basis of which he judges reality and his own actions. This latter holds a problem, at least as regards the idea of *open* problem-solving. As we saw in the last paragraph of section 2, the judge or prosecutor devises many solutions, but in most cases he is unable to find out, for practical or theoretical reasons, whether he has found the right solution. There is something of a paradox here: he tries to solve his "problems" as best he can, but often he is unable to find out whether he has actually succeeded owing to the lack of a suitable yardstick.
Besides this paradox, the term "job concept" introduces a tautology or circular argument. The central position of the job concept amounts to the fact that judges impose particular sentences because they believe it is right to impose them. Great care can of course be taken to "give reasons"; but with the reasons removed the tautology remains.
In the next section we shall first try to solve the paradox using our psychological approach. The tautology, however, will remain unsolved, from the psychological point of view. Nevertheless we shall discuss it because of the practical consequences it has for the

administration of justice.

7.1 Ars aequi, the art of administering justice

The conflict we have outlined here does not seem to fit very well into the concept of the administration of justice as a form of "social engineering" designed to combat crime or change certain kinds of socially undesirable behaviour. In the context of the "goal/means-approach" with particular emphasis on "useful" goals such as general and special prevention (Langemeijer, 1964; van der Werff, 1976) it seems strange that people should strive for goals while in most cases not knowing whether they actually achieve them. Psychologically this is also a strange situation. It means that judges and prosecutors have no knowledge of the results of their actions. Offenders receive their sentences: most of them disappear from view; some of them surface again before different courts, judges or prosecutors; others disappear from the system for ever. Even if a judge or prosecutor meets up again with an offender he knows, the timespan is too long for there to be any "feedback" of results. Notwithstanding this state of affairs, judicial action seems to be disturbed little if at all by the lack of feedback. This, however, seems to conflict with the findings of psychological research: use is in fact made in psychological experiments of this "knowledge of results" to influence a person's performance.
If a person has no knowledge of results, it is found that his performance eventually deteriorates. The importance of this feedback has been shown by the *incorrect* or fictitious feedback of results: in empirical experiments this resulted in better performances than was the case when the subjects were told absolutely *nothing* about the results of their actions (Mackworth, 1970).
Moving form the psychological laboratory to the reality of criminal justice, it may be wondered how judges, and above all the "specialists" -the public prosecutors- are motivated[x].

[x] We implicitly assume that criminal court judges and public prosecutors work exclusively towards sentencing goals. Officials may, however, also work towards organizational or personal goals and simplify the actual judicial work as far as possible. Such escape mechanisms, the importance of which should not be underestimated, are outside the scope of the psychology of problem-solving. Organizational research may throw more light on this matter.

Are they perhaps a special group to which these findings do not apply, who therefore do not need feedback of the empirical results of their decisions? This does not seem very likely to us.
The whole goal/means approach of criminal justice and the psychological experiments mentioned above are based on the testing of concrete results against a concrete yardstick.
The question is whether this is in fact a prerequisite for the maintenance of many forms of human behaviour.
We shall try to answer this question by comparing judges and prosecutors with other problem-solvers in open problem situations. We thought of people who have to assess products which are difficult to measure, such as examiners in artistic examinations, but we do not know of any research into the problem-solving of assessors of this kind. Some studies have, however, been carried out into the "creative" problem-solving of artists themselves. Although it may be going too far to compare a judge or prosecutor, who may deal with, say, twenty police court cases during the course of a morning, with an artist, we believe it is worthwhile to investigate whether there are any *structural* parallels which might help to solve the paradox.
The studies by Enzensberger (1965) and Reitman (1965) of the writing of a poem and the composition of a fugue respectively allow the conclusion to be drawn that the creation of a work of art depends not only on the initial inspiration. Although the basic plan (the first stanza of the poem, the theme of the fugue) is "given", there follows a step-by-step technical production process very similar to the cyclical process we encountered in our discussion of information-processing. The work of art is shaped, step-by-step. Some steps seem very easy, others more difficult. At each intermediate step there is a kind of internal assessment: Is this right? Was this what I wanted to express? Does this conform with my opinion of what a good product should be? This creative process should not be confused, incidentally, with the amount of effort involved: many creative problem-solving processes are carried out effortlessly. Even a judge or prosecutor at a police court hearing, for example, may be doing "creative" work (in between the necessary and unmistakable routine work) despite the fact that it seems as if everything is being dealt with smoothly and in a way that is taken for granted.

The similarities between this artistic "creative" problem-solving and judicial problem-solving can be summarized as follows. First, there is a cyclical process -within a much stricter (legal) working environment*)- in which first the prosecutor**) and then the judge create their product. Each step in the production process involves new tasks and obligations, which restrict the problem-solving process step by step. For example, a decision to demand the remand in custody of a defendant involves both extra work for the prosecutor and a restriction of his freedom, since he can hardly be content subsequently to demand a fine or suspended sentence.
Assessment against an inner yardstick also takes place with prosecutors and judges: "Is the offence serious enough for me to remand the defendant in custody?" (the answer to this question may in turn influence the sentence). "Is the defendant sufficiently unbalanced, in my view, to adjourn the case for further psychiatric reports?"
Lastly, the judge or prosecutor also has to give an affirmative answer to the question "Does this conform with my *job concept*?" This inner test remains as a matter of conscience, a final yardstick. If we now look again at the paradox, it would seem from the point of view outlined that it is indeed solved. In our view prosecutors and judges do not perfom their duties primarily because of a need to achieve certain useful effects; this may of course be an additional important part of their motivation, but we do not believe it is their primary motivation or a final test, which we suggest is more likely to be their feeling for and view of what is just. Judges and prosecutors do not in fact need a knowledge of *external* results as long as they act in accordance with their feeling for justice.***)

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*) The freedom of the artist should not be exaggerated; although not subject to formal rules, he works in a tradition, which may restrict his freedom to varying degrees.

**) The prosecutor is of course the recipient of the product supplied to him by the police.

***) This could be described as "internal feedback", but we hesitate to introduce this concept: as is the case with the concept of information-processing, the distinction between "internal" and "external" feedback is more difficult to make than one might think.

7.2 Tautology

The solution of the paradox in the last section still leaves us with the tautology (I act in this way because I believe it is right to act in this way). As we shall see, this tautology poses a tricky problem which lies outside the scope of psychology and which we cannot solve. From the point of view of material equality before the law it is a difficulty which, it seems to us, at best can be overcome on occasion but cannot be permanently solved. The last section ended rather idealistically, but hinting that judges and prosecutors act "according to honour and conscience". Obviously this is a good thing; but is not this "honour and conscience", this job concept, a little too personal? To give this question a little more depth, let us first look at that part of the job concept visible from the outside, to the defendants, the court reporters and the public. Here we can be fairly brief: the answer to this question very much depends on the communication skills of the judge or prosecutor. It can safely be assumed, however, that only very good observers and connoisseurs are able to detect anything of this very important factor, the job concept, and defendants and the public certainly cannot be counted in this category. Demands made by the public prosecutor which can be understood by anyone except the judge, counsel, and experienced journalists are not an everyday occurence, although a distinction should be made here between police court hearings and in camera sessions with more than one judge. As regards reasons for the sentence we can perhaps be even more definite: proper written reasons for the sentence are rarely given.*) Little research has been done so far into the comprehensibility of the reasons for sentences as spoken by judges but it is possible that the situation here too is less than rosy. On several occasions the present writer has been asked for an explanation by a convicted defendant in the corridor outside the court. "When do I have to go in?", was the question asked by a defendant who had just been given two weeks' *suspended* sentence "Why don't I get my scales back?", asked another convicted defendant, who had just been told that he could have back the property which has been confiscated from him. Nor were these isolated incidents. It should be pointed out that this was

*) According to Knigge (1980) it seems that the Supreme Court has been more inclined to examine the decisions and reasons of lower courts for their "reasonableness" since 1974. In the broader context, however, the number of well-argued judgements is still small. See Van Veen's "De witte raaf" (the White Raven - 1977).

not a question of judges who formulated their thoughts carelessly but a fundamental communication problem in the court, the communication gap between defendants and officers of justice.

Let us now return to the problem of differences in sentencing, but from the point of view of the defendant. In view of the communication problem mentioned above it must be poor consolation for a convicted person to know that "according to honour and conscience" court A found that he should serve four months' imprisonment but the court down the road would have given him only two months with just as much "honour and conscience", especially if the reasons given for the judgement are inadequate or they escape him for some other reason. This is the other side of the personal job concept.*)

As we have said, we have no ready answer to the problem outlined here. There remains a conflict between the job concept and the associated sentencing process on the one hand, and material equality before the law on the other. Nevertheless we should like to make a few suggestions which might bring about some improvement in the situation. We base these on the assumption that judges and prosecutors in the *criminal* courts hold *public* office with power over other people's goods and liberty.

This means that their job concepts cannot be protected from observation, attacks and criticism as if they were private "property". On this basis measures could be sought to improve communication and the explicitness of job concepts.

First, *external* communication would seem to be capable of improvement. Here we have mentioned only the problem of giving reasons for the sentence. The fact that in most cases these are confined to a meaningless formulation remains undesirable.**) The standard answer to this criticism is that the judgement may be quashed on appeal because of the reasons given. The question is whether this is not a vicious circle: because so few reasons are given, there is no criterion against which they could actually be tested. Beerling (1973) -in addition to the

*) Another comparison is called for here, this time to do with the passing of time: it must be an equally poor consolation for a person who has just spent fourteen days inside for drunken driving to read in the newspaper that views on short terms of imprisonment are out of date and more fines are to be imposed instead.

**) This, incidentally, is not the only strange thing about court procedure; its is equally strange that the defendant receives no written notification of the judgement unless he asks for it or appeals.

factors of 'plural-chamber" and workload- mentions uncertainty as to the purpose of the punishment or other measure as the prime cause of the normal failure of coming up with reasons. Oomen (1978) makes a similar point, but also points out that "the judge is not prepared for it, he has no experience of it, and when he begins his career in the courts he is not exactly encouraged to deviate from the established pattern in this respect". In other words, giving clear reasons does not seem to be part of the judge's traditional job concept.*)

The argument of the increased workload is more difficult to judge. The most we can do is to turn the argument around and ask whether this objection would also apply if giving reasons for sentences had always been part of a judge's job concept. The danger of the vicious circle should not be ruled out here either.

Lastly, it must be doubted whether reasons, particularly for the severity of the sentence, really would have to be so long, complicated and therefore time consuming. Our study of decision-making by judges and prosecutors in fact confirmed the findings of another study of problem-solving, which were that the number of factors taken into account in decision-making is relatively small.**) The length of time a person can concentrate, the active memory is very limited and resists attempts to overtax it. Having regard to these findings it ought not to be impossible to give simple reasons for the severity of sentences; this, after all, is what most concerns a defendant who has confessed his guilt. A brief comment on the judge's spoken reasons (and the prosecutor's demand). We have pointed out the enormous communication problem between the convicted defendant, who with insecurity and great tension hears what awaits him, and the judge, master of the situation, who can only be contradicted by a higher court. In a situation like this everything depends on the didactic skills of the judge (and the prosecutor in his demand) to explain his judgement and his reasons in a form which is comprehensible. Here too it seems to us that tradition is the most important factor: the argument we have heard so often that "we can't let

*) We would point to the procedure in Breda, where such a tradition has arisen and reasons *are* given for sentences. Van den Plas, Trema, 1978.

**) Elstein and others (1978).

our language descend to the defendants' level of understanding" seems at least to point in this direction.*)

Second, internal communication within and between the courts and public prosecutors' office is of great importance. Although little is known about this yet, it may at least be questioned whether there is sufficient communication, sufficient comparison of the various job concepts. If we look first at what takes place during the hearing, we notice that the judge rarely deals with the point the prosecutor has put forward in his demand, even when giving detailed reasons for his judgement. This seems to happen only if the judge deviates radically from the prosecutor's demand.

The need for more consultation on sentencing between prosecutors is one of the points made by Van der Kaaden and Steenhuis (1976). It is doubtful, however, whether this consultation is used to form a common approach from the various job concepts of the public prosecutors in an office; or, as a prosecutor recently expressed it at a symposium held at the Ministry of Justice**):"meetings of public prosecutors are usually taken up with organizational matters, and the discussion of sentencing policy takes on too much of the character of negotiations on the severity of sentences, so that we don't get round to discussing basic principles". Without investigation a statement of this kind cannot of course be regarded as typical of the situation throughout the country, but this seems to us to be an undesirable state of affairs for which allowances should be made.

Still less is known about the situation as regards judges. Judges are independent and are not required -except when sitting together- to compare views. Nevertheless the independence of judges does not mean, in our view, that they or the Public Prosecutions Department should remain ignorant of the individual judge's approach.

*) The idea that comprehensible language would not be the suitable "dignified" language of the law is incorrect in our opinion. As an experiment we recorded a few spoken judgements on tape and transcribed them: we found the biggest difficulty was not the dignity of the language but the length and complexity of the sentences. Grammatical simplification does not have to detract from the "dignity" of the language, however. It would be worthwhile to repeat this small experiment on a larger scale.

**) The subject of the symposium, which took place on November, 7, 1980, research into the formulation of criminal law.

Lastly, we should consider whether greater internal and external communication is likely to lead to harmonization of sentencing. Without research this question cannot be answered. At any event this does not seem to us to be an approach which would provide results *quickly* in this respect (although improved communication in itself would be an important result of such an experiment).

On the other hand, the approach we have put forward would be more in conformity with what prosecutors and judges think and feel than a harmonization measure such as the *guidelines* for criminal procedure, at least insofar as these are to be regarded as *binding* (Hoekema, 1978). Binding guidelines could have the psychological effect of changing problem-solving behaviour into a fixed routine, as already pointed out by Van Doorn in 1974. They could remove the uncertainty inherent in open problem-solving, but this could also drive out personal responsibility, action on the basis of a conscious job concept. What we have called the tautology of personal action would become the tautology of the guidelines: "I demand a fortnight's imprisonment because the guidelines require me to demand a fortnight". Apart from the psychological effects outlined, this state of affairs would seem in our view to have little favourable effect on external communication. It would be different if the guidelines were to act not as a hierarchical check on the sentencing policy of public prosecutors but as basic principles from which a prosecutor could deviate *if he had reason to do so*. He would be questioning not only the guidelines from which he wished to deviate but also his own hob concept, and in our approach there is no reason for him not to do this: if the decision is made according to "honour and conscience" on the basis of the job concept, and if the person of the prosecutor really is so important in this respect, it is essential for him to stand up and be counted.

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