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ABSTRACT

Basic principles are linked to each step in what is proposed to be the most desirable way of applying knowledge fully to practical problems of the psyche. A model of the provenance of psychical phenomena is at the core of this.

This analysis is used (a) to articulate what should be the roles of psychology and other sources in informing psychical practice fully - psychology is not necessary and never sufficient, and (b) as a standard to compare existing ways of relating practice to knowledge - the most cost effective use of psychology is to be generously eclectic and to take every step in the standard process.

Doing for two practical problems proved feasible and showed that psychology, in the roles it can play and at its best, can provide crucial information for new practitioners, which they would not obtain from non-standard applications or experts in practice.



THE PRACTICAL USE OF PSYCHOLOGICAL INFORMATION: A
THEORY, AND A STUDY IN TEACHER TRAINING.

MICHAEL MALCOLM STONE

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CHAPTER ONE

TOPICS AND THEMES

This chapter deals with (A) a choice of topic and sub-topics, (B) themes linked to the chosen topic, (C) psychology in professional thinking, (D) topics for reflection and research to aid psychical practice, (E) education in psychology to aid psychical practice, (F) giving away psychology, (G) eclectic psychotherapy, and (H) commentary.

1A. A CHOICE OF TOPICS

I propose to study this main topic:

what should be the role in psychical practice of

generic information from psychology

These are appropriate sub-topics: their resolution serves, and is required for, resolution of the main topic:

what the roles are for knowledge/information in psychical practice

which of the roles may and which must be played by generic psychology

which other sources of knowledge/information must or may play roles

how good is generic psychology in roles that it must compete for

1B. THEMES LINKED TO THE CHOSEN TOPIC

The study of the proposed topic and sub-topics takes its point from its potential to throw light on these themes:

(a) What the role of academic disciplines should be in professional thinking - in this case the role of

generic psychology in the thinking of professionals who deal with the psyche, such as schoolteachers, nurses, social workers, and psychotherapists

(b) What subjects should be researched into or reflected upon by psychical practitioners for improvement, directly through knowledge, of their practice.

(c) What the role of academic disciplines should be in education and training for professions - in this case the role of generic psychology in education and training to improve, directly through knowledge, the practice of professions that deal with the psyche, such as schoolteaching, nursing, social work, and psychotherapy.

(e) The best way to 'give away psychology'.

(f) The appropriate way to seek systematic eclecticism in psychotherapy, and the effects to expect of this.

10. PSYCHOLOGY IN PROFESSIONAL THINKING

10.1 PSYCHICAL PRACTICE OTHER THAN PROFESSIONAL

PSYCHOLOGY

There are many occupational groups that engage in psychical practice (that is deal with people's psyches). One would expect psychology to be important in the practice of these professions. But recently this has been increasingly questioned.

Though similar ideas are traceable back to Dewey (1933) and Lewin (1951), most citations at present are of the work of Donald Schon (1983, 1987). In his book *The Reflective Practitioner: How Professionals Think in Action* (1983) he describes some case studies, for example transcripts of a supervision session for a trainee psychotherapist, and an architect discussing a problem raised by a student. Schon offers a characterization of how people like the supervisor and the architect think - and he does not portray a simple process of applying 'research-based theory' as he calls it.

Schon's ideas have caught on quickly, especially quickly in the USA among trainers of schoolteachers, less quickly in the UK, although papers predating Schon (1983) advocated sources of knowledge for professional practitioners other than formal disciplines (e.g. Desforges & McNamara, 1977). Schon has also begun to be mentioned in connection with training for the other psychical professions, for

example nursing (Smith, 1992) and social work (Thyer & Wodarski, 1990).

Schon distinguishes the simple problem and the complex problem, in his words the high hard ground and the swampy lowland. This is a useful distinction. The dictionary of psychology published by English and English (1958) is an example of what was a long prevailing view of applied psychology, that it concerned only the high hard ground: the example they give in their definition of applied psychology is the inspection of ball bearings. The problems of schoolteachers, nurses and social workers are rarely as simple as that.

Schon 'assumes' - his term - that much of the knowledge used by professional practitioners is what Polanyi (1967) identified as tacit knowledge. Schon's own term 'knowing-in-action' seems to be synonymous with 'tacit knowledge'. The point of reflection is to change tacit knowledge. He acknowledges that there may be reflection on action but it is reflection-in-action (his hyphens) that Schon wishes to legitimate and encourage. This occurs before the completion of the action or series of actions.

Reflection-in-action happens when a situation is not only in the swampy lowland but also surprising in

some way to the practitioner. Schon does not seem to have in mind that every situation of that kind will trigger reflection: he acknowledges that there are practitioners who are not reflective enough.

Schon allows that effective use can be made of research-based theory in dealing with the simple problems of the high hard ground but not in the swampy lowland where there are complexity, uncertainty, instability and uniqueness. There is little articulation in this claim - no inventory of what disciplines may offer showing the uselessness in swamp conditions of each offering, no inventory of what swamp conditions require showing the inability of the disciplines to meet each requirement.

Reflecting-in-action is said to use knowledge that the reflector has in a repertoire, but not knowledge of rules or general propositions. Could the disciplines make any contribution to this repertoire - even if not in the form of rules and general propositions? Again Schon has little articulation - no inventory of what disciplines may offer showing the absence of each offering from the repertoire, no inventory of the elements of the repertoire showing the inability of the disciplines to offer each element.

It is said to be characteristic of swamp cases that

the problems they embody have not been identified. Schon's use of the term problem seems to be in the sense of the target to be changed by action, not the question to be answered in the first place; and these could well be different. Therefore he cannot distinguish between cases where it is uncertain what the question to be answered is and cases where the question to be answered is clear but the target to be changed is not. This does not make articulation any easier.

By concentrating on tacit knowledge and reflection-in-action Schon gives the impression that it is the most important form of knowledge influencing action. Certainly there is no articulation of the limits: which knowledge might be and which might not be tacit.

He does not say where tacit knowledge came from, and therefore whether it could be contributed to or changed by information from the disciplines.

Even if it were established that the disciplines make no contribution to tacit knowledge or to reflection-in-action, and that these are the only arenas for knowledge to influence action, Schon would still have to show that what IS the case OUGHT to be the case before he would have made the disciplines conclusively redundant for practitioners. There is

some uncertainty about whether he is describing what is the case or arguing for what ought to be the case.

At one point he states his objective as to increase the legitimacy and encourage the broader, deeper and more rigorous use of the kind of thinking he sees in the subjects of his case-studies. At other points he seems less modest, conveying the impression that what he describes should be the main or the only mode of thinking engaged in by professionals. Before advocating that thinking without disciplines should replace thinking with disciplines, it should be shown that the former is better than the latter.

The evaluation of reflection-in-action advocated by Schon is in terms of whether an action will lead to what the practitioner in question regards as a satisfactory outcome. But if one is going to say what ought to be the case, there should be some more explicit and widely shared criteria of success.

Schon has opponents, who would continue to give an important role in professional practice to academic disciplines. But very often they do little more than assert that information from the disciplines is desirable or necessary: for example 'a good educational theory cannot conceivably arise out of extensive experience...a disciplined theoretical understanding (of human nature) is necessary.' (Barrow, 1990). This does not specify as closely as

is needed exactly what information from the disciplines is desirable or necessary or for exactly what purposes.

Fenstermacher (1986) is perhaps the foremost proponent in the field of education of a view alternative to Schon's. It is interesting that the problems of lack of articulation are seen in the statements by Fenstermacher (1987) that even as a fairly eminent philosopher of education he had believed that research done by a researcher with one basic orientation could not be used by educators who subscribed to another basic orientation. It was his discovery, for example, that he could use information from applied behaviour analysis in what he saw as his liberal humanist practice that turned him to the notion of practical arguments previously advocated by Green (1976). The essence of this is that empirical propositions can be adopted as beliefs, which are then elements along with values in a calculus of decision making. This offers a role for disciplines such as psychology, but how do we know whether it is the only role a discipline can play, and whether there may be any competing players? We still need a systematic inventory of the contributions required and a systematic inventory of the contributions that psychology can make.

McNamara & Pettitt (1991) provide more articulation

than most. They look at how 'research located within a psychological framework' has been applied to schoolteachers' facing pupils who make mistakes in subtraction. The research, originally intended to throw light on cognitive processes, identifies a number of 'buggy algorithms' or faulty procedures which may be used by subtractors and which would yield wrong answers. One buggy algorithm pre-eminently, but also nearly 100 others, account for a third of failures, although children may be inconsistent in their use of the buggy algorithms (Van Lehn, 1990). McNamara and Pettitt doubt the practical use of applying this information because not all failures are accounted for, mere correctness in subtraction is not the teacher's full objective, the teacher needs to know why a bug is used, and will improve more as a teacher of subtraction from guidance on class organization than from the information on buggy algorithms, children are not consistent in their use of the buggy algorithms, there are many different buggy algorithms, the information is not couched in ordinary language, and teachers already know the most common buggy algorithm. In other words this application gives information about the wrong problems, identifies the wrong factors, is not readily comprehensible, and is already largely known. All this and it is uneconomical to produce.

That the problems are wrong says little about the quality of the information applied; but the other accusations are damaging. However they are shown to be damaging only in this one instance. McNamara and Pettitt go on to conclude that social-science based research does not generate information that can be of assistance to the practitioner. They may have shown that applications CAN be useless; but they have not shown that all applications do suffer or must suffer from the deficiencies of the one they describe. An inventory of the possible contributions would allow the work of McNamara and Pettitt (1991) to be built upon.

Following some debate in the British Psychological Society on the relations of psychology and education (not just the application to education of generic psychological information), Tomlinson (1992) concluded that psychology's contributions to education have been unimpressive: they were too exclusively of one paradigm; or they failed EITHER because Schon is right OR because the most useful and recent parts of psychology were not used. To be able to choose between these alternatives we need more analysis.

All the foregoing lines of study would be advanced if they had articulated inventories of the roles for knowledge in psychical practice, and the abilities to

play these roles of generic psychology and competing
sources of information.

10.2. THE SPECIAL CASE OF PROFESSIONAL PSYCHOLOGY

Professional psychologists are a special case: if the essence of their professionalism were the application of generic psychology to psychical practice, no role for generic psychology would mean no role for the professional psychologist.

Furthermore professional psychologists who are would-be consultants are a special case within a special case. Many whose traditional work has been in assessment of individuals wish to have broader roles, usually as consultants on practical problems that are either psychical or have a psychical element. This brings them back to the role of psychology: professional psychologists must presumably be able to offer a distinctive contribution, and that might be thought to be applying generic psychology - in which case, if there were no role for generic psychology, there would be no room for the assessment specialist to become a consultant.

Professional psychologists, therefore, have a vital interest in the debate about the role of psychology in psychical practice. Yet many have recognized the gap that exists between the discipline and its possible fields of application. But naturally,

perhaps, the daughters and sons of the discipline are less ready to abandon it than were the authors mentioned in section 1C.1.

Professional psychologists tend to: (a) claim that the contribution psychology makes is mainly something other than generic information or knowledge; (b) claim that the practical knowledge of psychical practitioners is a member of the same family as generic psychology, or (c) keep their faith in traditional approaches.

Studies of the academics in the professional specialties are rare, but there is one (Walberg, 1990) on patterns of publication and citation in educational psychology. Recent areas of intense research include the use of metacognitive strategies to improve reading comprehension, and the mainstreaming of children with special educational needs. At least the first of these at least involves (inter alia) an application of generic psychology. The study of citations suggests that information in basic psychology journals is frequently referred to in journals concerning practice. On the other hand practitioners are reported to pay little attention to research findings (e.g. Morrow-Bradley & Elliott, 1986).

D'Amato & Dean (1989) and Jones & Frederickson (1990)

represent those who abandon generic information or knowledge as psychology's main contribution to practice. D'Amato & Dean cite knowledge of social scientific methods including multivariate analyses, problem-solving temperament, consultation and counselling skills, and special techniques of assessment and diagnosis among the offerings of the professional psychologist. Jones & Frederickson imagine their being asked where the psychology is in the refocused educational psychology they advocate; and they answer that it is 'everywhere....not the psychology of individual differences, academic educational psychology or behavioural psychology...but primarily aspects of humanistic social and organizational psychology, much of it developed from a basis in the Gestalt tradition' (Jones & Frederickson, 1990). An inventory of the contributions that generic psychology might make would show whether those who would abandon it are justified and what aspects of it are to be found where in the type of refocused practice mentioned here.

Peterson (1991) and Hammond & Polkinghorne (1992) represent those who wish to see practical psychical knowledge and academic psychology as part of the same family. This typically involves rethinking what it is to be scientific and the limits of generalizability, so that academic psychology and

practical psychical knowledge are seen as both serving the purposes of science and both ultimately tied to some set of contexts. In the prospectus of this approach is the desire to link academic psychology and practical psychical knowledge; but lack of articulation hampers this at present. The proposed topic would help by articulating different contributions of knowledge to psychical practice.

1D. RESEARCH AND REFLECTION BY PRACTITIONERS

These are advocated by both the supporters and the opponents of the academic disciplines' participation in professional practice.

As Calderhead (1989) points out in respect of schoolteaching, reflective practice is like mom and apple pie, something that everyone is in favour of; but unlike mom and apple pie, reflective practice has many definitions. Schon (1983) has his notion of reflection-in-action, which he intends as a unique term for a distinctive process. Most accounts of reflective practice say little more than that professionals should think about what they are doing.

It has been an article of faith in professional psychology that practising professional psychologists should be not only clinicians but also researchers, usually but not necessarily of the traditional variety. This 'model of the scientist-practitioner' is still widely subscribed to (O'Sullivan & Quevillon, 1992).

Those who encourage schoolteachers to engage in research, often action research, have usually been more specific about its purposes. In a number of

phases (Horace Mann-Lincoln Study Group, 1948, Corey, 1953, Taba & Noel, 1957, Shumsky, 1958, Stenhouse, 1983, Kemmis, 1982, Tikunoff & Mergendoller, 1983, Cochran-Smith & Little, 1990) various purposes have been expressed, including to make the professionals feel less subservient to their superiors and to academics, to increase the professionals' job satisfaction, to improve their research skills, to enable them to give rationales for their actions, to make them more questioning generally, to encourage them to greater or speedier use of research results, and to encourage them to see their own clients as researchers in their turn.

No-one seems to have developed a position on what the subjects of research and reflection should be if psychical practice is to be improved directly through the knowledge gained. But it would be useful to have a view on this, and to have the methods of research and reflection selected in the light of the subjects to be investigated.

Of course the choice of subject is related to the previous theme: presumably one should be trying to acquire the knowledge that will make a contribution to practice; whether the subject is psychological and what else it might be should depend on the roles that psychology and other sources should have in providing the knowledge to guide psychical practice.

Of course there may be an indirect impact of reflection on practice, through, say, an improved attitude on the part of the practitioner. Whether there was or not is a question about the psyche of the practitioner that could be addressed. But the question identified here is of the direct effect through knowledge of reflecting and researching. And it depends on the roles that knowledge has in guiding practice.

1E. THE ROLE OF FORMAL PSYCHOLOGY IN EDUCATION AND TRAINING FOR THE PSYCHICAL PROFESSIONS

Many psychical professionals have had some form of education in generic psychology. This is reflected in the publication of textbooks. Some of the first of these were works addressed to schoolteachers by Sully (1886), James (1899) and Thorndike (1906). Their recent equivalents include texts in psychology for professionals in the fields of policing (Ainsworth & Pease, 1987), social work (Herbert, 1986), law (Lloyd-Bostock, 1988), general management (Makin et al, 1989), and physical health (Dunkin, 1982).

There have recently been many voices expressing

discontent with the performance of these professions. Members of the professions (e.g. Jefferys, 1975, Fishman & Neigher, 1982) and discontented clients (e.g. Faust & Ziskin, 1988) complain about the quality of the profession or its training. Radical change in the training of professionals is high on the political agenda at least in England.

The positions outlined in the previous sections all have implications for professional education. The position represented by Barrow (1990) would preserve education in disciplines as such, for example 'a disciplined understanding' of human nature for schoolteachers. On the other hand the positions represented by Schon (1987, 1988) and McNamara & Pettitt (1991) would hardly reserve any place for the disciplines.

For Schon the role of education for professionals is to make them better at reflective practice, and those who do the educating of professionals should themselves be reflective practitioners. He has in mind a form of 'coaching' in which advice, criticism, description, demonstration and questioning of and about practice are used in a spirit akin to that of the master class for a musician. This clearly rules out traditional lectures in traditional psychology; but it leaves open the possibility that psychological information might contribute in some way. We still

need to know which contributions are required and which contributions psychology is capable of.

McNamara and Pettit (1991) see professional action as being 'informed by a subtle amalgam of professional skill, intuition and expediency'. The major factor influencing decision making is likely to be professional experience, preferably exposed to reflection and supplemented with professional expertise gained from other professionals. First hand and second hand experience would provide not correct solutions but alternatives open to discussion. It is not entirely clear how decisions between alternatives relate to the notions of skill, intuition and expediency mentioned earlier. But the main instrument of education for professionals is to be 'a collection and codification of professional expertise' (McNamara, 1991). A similar proposal is made for psychology by Van Strien (1987). An inventory of the possible contributions required would help to reveal exactly what needs for information the codified experience of other professionals would meet better than generic psychology, and vice versa.

The ideas about professional psychology represented by Hammond & Polkinghorne (1992) are shown at their most concrete in their proposals for training for professional psychologists:

(a) that the trainees be seen as Piaget saw his subjects - in this they follow Schon, who was evidently impressed by Piaget's conception of the development of knowledge

(b) that the repertoire of non-traditional scientific methods be widened (to include for example 'intense observation and comprehensive description')

(c) that the trainees be taught to learn from their experience without the systematic faults in thinking identified by for example Tversky & Kahneman (1974) and Nisbett & Ross (1980) - Hammond & Polkinghorne recognize, as other proponent of practical thinking do not, the presence of these faults in normal thinking

(d) that training in methods of research and training in methods of practice, often separate, be joined by a vision of both as means of acquiring knowledge

These proposals have not been put into effect and may therefore yet be shown to be not feasible. In any case they would depend on the view that practical knowledge and generic psychology can be part of the same family. As mentioned earlier it would strengthen this view if it were based on articulated inventories of the contributions to psychical

practice of practical knowledge and generic psychology.

Tomlinson (1992) advocated better communication of psychological information so that it influences action, and he mentioned the notion of Gale (1990) that the presentation and use of psychology should be psychologized. But the psychologizing is not actually done - all that Tomlinson offers is a device he has used, talking to practitioners covertly by miniature radio while they are practising.

Again progress demands work on an articulated inventory of the roles of the disciplines and other sources of knowledge in practice.

1F. GIVING AWAY PSYCHOLOGY

Use of psychical information is not confined to the professional. It is given and received in great quantities outside professional practice, in books for those with problems for example the series called Overcoming Common Problems, including Honey (1985). In 1989 there was a special offer on a packet of cornflakes of a book of psychical advice, and there are special telephone services offering psychical advice, in addition to the familiar articles in

popular magazines and newspapers. And it is not a new demand: a magazine called Psychology advertised itself in 1937 as pointing the way to health, happiness and successful achievement.

Practical information has also been furnished by people with one foot in the grove (of Academe). Attempts have been made to write textbooks in which psychological concepts are related to the practical concerns of students, for example Duck (1986). Concern with the practical is clear in a title such as 'Staying Together: a Practical Way to Make Your Relationship Succeed and Grow' (Beech, 1985). In the last few years there has been a resurgence of interest in aligning psychology with important everyday concepts related to the psychical, for example happiness (Argyle, 1987).

If psychology has in principle nothing to offer professional psychical practice, it can hardly have anything to offer in principle for popular psychical advice, though one may in practice make better use of psychology than the other.

Miller (1969, 1980) advocated that psychologists learn how best to "give away Psychology". This seems to imply both that there is something worthwhile to give and that the methods of giving might be problematical. Miller has received, and is still

receiving many citations, mostly approving, e.g. Chavis et al (1987), Gesten et al (1987). And there has been some work on giving away 'psychological skills' (e.g. Davis & Butcher, 1985), but no one has realised Miller's vision. It would help either to realise it or to recognize its impossibility to know exactly which psychology if given away would be practically useful.

1G. ECLECTIC PSYCHOTHERAPY

A decade and a half of meta-analysis (Garfield 1983, Brown 1988, Matt 1989) and even mega-analysis (Carlson & Miller, 1987) has failed to reveal a consistent superiority across a range of cases for one psychotherapeutic technique (Stiles et al, 1986).

Among the responses of practitioners to this are (a) the eclecticism where a therapist uses different approaches on different occasions, (b) the eclecticism where a therapist merges elements with different pedigrees to form hybrid approaches, and (c) the invention of new approaches that are not hybrids. Eclecticism in psychotherapy has become popular (Norcross, 1986) and there have been many exercises in hybridization, for example Messer, 1986.

At the same time new approaches continue to be

invented.

No-one has demonstrated what the best form of eclecticism is or how much better it is than non-eclectic approaches (Goldfried & Safran, 1986). One problem seems to be that there is no framework for discussing eclecticism systematically. Although the process of psychotherapy became a subject of study in the last few years (Hill & O'Grady 1985, Elliott 1985, Orlinsky & Howard 1986), some techniques have been more publicly articulated for example experiential therapy (Greenberg & Goldman, 1988), and studies have begun to relate therapies to the concepts of academic psychology, for example psychoanalysis (Horowitz, 1988), studies have not yet been much directed to identifying the places where knowledge of various kinds might make contributions, and this would be helpful.

The present work involves producing inventories of the impacts that knowledge may have on practice and the different kinds of knowledge that may make each impact; and eclecticism in psychotherapy is about the impact of different kinds of knowledge.

Therefore the present work should have something to offer. Even though there will not be time here to follow up all the rich detail and special considerations of psychotherapy, it would not have been appropriate to proceed without signalling the

relation of this matter to the others being considered.

1H. COMMENTARY

Not all the possible questions about applying psychology and practical psychology are being asked here. Just the topic identified in section 1A, which I have argued to be important and which is certainly enough for one piece of work.

CHAPTER TWO

QUESTIONS

This chapter identifies the actual questions to be asked on the topics chosen in chapter 1.

The sections cover (A) definitions, (B) complications, (C) simplifications, (D) desirable characteristics for studies, (E) a list of the actual questions chosen, (F) assumptions, and (G) a note of which subsequent chapters deal with which questions.

2A DEFINITIONS

2A.1 THE PSYCHICAL DOMAIN

In what follows the psychical domain is

-where the subject is: the presence or absence of values of variable properties of personal psyches, or change in the values of such properties

-and where the predicates are: incidence of subjects, coincidence with subjects, and antecedents of subjects, occurring in the past, present or future.

The wording may seem to imply an overly simple or mechanical conception of psychical phenomena. I believe that the foregoing is quite consistent with views that emphasize the spontaneity, the flow, the abundance and the mutual entwining of psychical and related phenomena.

MORE DETAIL

'Values' includes specific values and any value, and 'change' includes specific changes and any change.

'Personal psyches' does not exclude that which is concurrently true of more than one person, or dealing consecutively with different members of a group. For example an unruly class of children could be divided into leaders, followers, those resisting the leaders, and neutral observers. One could then deal with each of these in turn.

'Incidence' means frequency in combination with various circumstances

'Frequency' means occurrence per unit of time

'Circumstances' means everything surrounding, from time of day to the person's immediately past behaviour

PROPERTIES OF ASSOCIATIONS (e.g. how cohesive they are, what makes them form or disband, why they are the size they are) are excluded as subjects but may be included in predicates e.g. if the cohesiveness of an association made a difference to one member's beliefs.

WHAT IS INFLUENCED BY THE SUBJECTS I choose not to include.

THE STUDY OF METHODS I choose not to include: I am thinking of that as a separate discipline, methodology, which is of interest outside as well as inside psychology.

2A.2 PSYCHOLOGY

In what follows psychology will be talk or writing about the psychical domain, and formal psychology

will be psychology that the author claims to be published and belonging to the discipline psychology.

2A.3 APPLYING ETC

It is difficult to draw the line between what is peculiar to a particular setting and what is not. Therefore 'generic information' means towards the more general end of the scale. This rules out much information in the field of professional psychology, for example studies of reading. It is important but it is not what is being questioned at present.

Applied psychology here means psychology that has been used in some way. It is not here a process of finding information but a product which has been used in some way.

By 'academic' I mean to be found in a University or college, by 'clinical' I mean to be found at a bedside, or by extension at the scene of any problem, and by 'popular' I mean to be found in the mass media. By 'professional psychologists' I mean people called psychologists dealing with practical psychical problems.

For clarity I propose to distinguish the deriver of generic information for a practical purpose and the practitioner who uses the derived information. On some occasions the deriver will not be the

practitioner and will therefore be furnishing someone else with the information that has been derived. On other occasions deriver and practitioner will be the same person, and the deriver will furnish herself or himself, so to speak, with the information.

2B. COMPLICATIONS

2B.1 THE PSYCHE OF THE PSYCHICAL PRACTITIONER

This is not only ABOUT psychical practice but also AN EXAMPLE OF psychical practice. It is not just the subject's psyche tht is in question: the practitioner has a psyche, which is being studied, and questions about that psyche are having knowledge applied to them. Of course the applier, the student of practitioners' psyches, also has a psyche - and so one could go on.

Drawing the line at not going back further than the practitioner's psyche still leaves that as a complication.

2B.2 DIFFERENT PRACTICAL PSYCHICAL PURPOSES

There are obviously many different practical purposes concerning psyches. I propose to use a simple

classification of these purposes into treatment, selection, and accommodation.

The crucial distinctions are whether a person is to be changed (treatment) or not (selection and accommodation), and whether one is choosing a person (selection) or dealing with a given person (treatment and accommodation). These distinctions, of course, depend on the notion that there are certain regularities that allow one to talk of a person's being changed or unchanged.

Treatment is what I am calling any case where one tries to produce certain behaviour in given circumstances by changing some existing regularity in a given person. The definition does not require the change to be fundamental: for instance, a change in the frequency of one piece of behaviour would be included. And it is not implied that only the person is changed: the change in the frequency of a piece of behaviour, for instance, could be brought about by operating on the circumstances surrounding the behaviour.

Selection is what I am calling choosing a person to produce certain behaviour in given circumstances. This can be oriented towards the future or the past: future selection is the usual kind, for example, selecting someone who will do a good job; but there can also be past selection, perhaps selecting the

person who committed some crime.

Accommodation is what I am calling the case where, given a person, one arranges a certain behavioural outcome by changing the circumstances not the existing regularities in the person. Using the existing regularities in a person is included, but not altering them. This distinction, of course, depends on the assumption that one CAN at least sometimes use some regularities without altering them.

Treatment, selection and accommodation are abstractions. It may be more often than not in practice that all three are mixed up together.

2B.3 SUBCONTRACTING

Not everyone treats, selects or accommodates directly. Some of the users of information for practical purposes are likely to be subcontractors: for example they may be people who are asked to carry out assessments. In this case what concerns application concerns the subcontractors to the extent that they are free to make decisions, and concerns the main contractors who decide what the subcontractors will do.

2B.4 SECOND HAND APPLICATION

Some of the users of information for practical purposes are likely to be second-hand users, following the decisions made by someone else in a similar case. An example would be administering a formulated assessment instrument (i.e. a 'test'). The present topic concerns anyone who produces something intended for second-hand use, and also concerns the second-hand user: it might make a difference to the deployment of tests what process of application was gone through before the deployment was chosen.

2C. SIMPLIFICATIONS

A number of ways of simplifying the task ahead will be adopted.

Questions that are not psychological will be bypassed, although they may often be mixed with psychological questions. For example a counsellor may find herself discussing how a client is going to afford to go on a holiday - possibly important in the counselling though not a psychological question.

Disciplines other than psychology will be by-passed. This is not to claim that other disciplines are unimportant: it is quite conceivable that the effect of what a psychologist says to a family may be

overwhelmed by the effect of the size of the family's income.

Of the various purposes identified earlier, treatment on its own will be dealt with in detail, then selection and accommodation will be considered.

2D. DESIRABLE CHARACTERISTICS FOR STUDIES

As far as I am aware there is no existing work on the topic that meets all these criteria.

2D.1 USING A STANDARD

A standard is required.

In general terms a standard allows different studies to be related to each other, and this encourages the programme of research rather than the one-off study.

2D.2 SEEKING THE BEST PRACTICABLE

The standard should be of the best practicable by existing unaided practitioners.

This is primarily to allow researchers to deal with first things first e.g. 'are actual applications are

as good as they could be?' should be asked before 'are actual applications good?' And if the greatest contribution that psychology is capable of making to practice turns out to be small, it will not matter very much practically what appliers are actually doing.

The standard should be practicable. Psychology is being applied now. The best that psychology can do means the best it can do at the moment.

The present interest is in the practitioner who is unaided by calculations other than those in her own head - not using statistical prediction, for example.

2D.3 LINKING GOODNESS TO FUNDAMENTALS

'Best' should be defined in terms of fundamental desiderata, so that refinements can be made by subsequent students of the same topic in a systematic way.

2D.4 BEING ARTICULATED

There should be enough articulacy to link each step to one fundamental desideratum, subject to the foregoing requirement of practicability.

This is to facilitate the refinement mentioned in the previous section.

2E THE QUESTIONS TO BE ASKED

1. What process of applying generic information would
(i) produce the best result possible - assuming the
information furnished was used as intended, (ii) be
linked explicitly with the most fundamental
principles?

(a) for the purpose of treatment

(b) for the purpose of selection

(c) for the purpose of accommodation

2. What are the roles for knowledge/information be in
applications to psychical practice?

3. Which of the roles must and may be played by
generic psychology?

4. what sources other than generic psychology must
or may play the roles?

5. How should the standard be used as a tool for
analysing applications at large?

6. What can generic psychology offer to compete with
non-psychology?

7. What members of the categories of possible antecedents would give a good eclectic psychology for applying?

8. What additions to the standard process, and changes to the answers to questions 2-5, would be required to ensure that information was such as to ensure its own use?

9. What are the relative merits in a case study of new practitioners of the information they might obtain from a best standard application of a good eclectic psychology, non-standard applications, and expert practitioners?

10. What are the implications of the foregoing for the themes identified in chapter 1?

2F ASSUMPTIONS

Positions on the themes identified in chapter 1 are often associated with other positions in clusters. For example the refocused educational psychology of Jones & Frederickson (1990) involves all of these changed foci:

-holism rather than reductionism,

- the meaning behaviour has for actors and interactors rather than what people do and don't do

- the psychologist as involved co-worker rather than external neutral observer

- learning in school as the development of a range of higher order competencies within a social context rather than the acquisition of skilled behaviour

- intrinsic rather than extrinsic motivation

- qualitative rather than quantitative methods

- action research rather than experimental design

- application of psychology rather than theoretical pragmatism

There is a danger that if a study diverges from any one of the positions in a cluster, it may be seen as having a closed mind on all the others. Even use of the word 'apply' can be seen as committing one to a particular set of attitudes and beliefs. That is why I try to spell out some of the assumptions in what follows.

If a psychological standard application is produced and other are found wanting by comparison, they will be being judged in terms of the standard. That is of

the nature of the exercise.

Where matters are said to be impervious to analysis there is a difficulty: it may be that just attempting to analyse will be said to show failure to understand. This cannot be accepted if any progress is to be made. The appropriate stance I believe is to try to take analysis as far as it will go.

There is no wish to belong unequivocally to a camp such as positivism or interpretivism.

Non-traditional methods of generating knowledge are recognized, some form of public scrutiny is believed to be useful, and validity of argument is believed to be a desirable thing. It is not intended to deny the importance of the meanings of action from the actors' point of view, to ignore values, to assume billiard-ball causality or stability over time, or to deny the existence or importance of the social, political and other contexts in which the practical use of psychology occurs (though these contexts are not studied here). The choice of questions and methods is intended to imply nothing about the relation of variables to reality, the ability of practitioners to learn from their practice, or the ability of this learning to influence academic psychology.

20 WHERE THE QUESTIONS APPEAR IN SUCCEEDING CHAPTERS

Question 1 (a) is addressed in chapters 3 to 8. I propose fundamental principles in chapter 3, and derive from them certain properties that the process of application should have. This embryonic list of properties is fleshed out in chapters 4, 5, 6 and 7, and realized in a proposed process in Chapter 8.

How the answers to questions 1(b) and (c) compare to the answer for 1(a) is part of chapter 8.

Questions 2, 3 and 4 are dealt with in chapter 9. Questions 5 and 6 are dealt with in chapters 10 and 11 respectively.

Question 7 is covered in chapter 12 and question 8 in chapters 13 and 14.

Chapter 15 outlines the design of the case study answering question 9, and chapters 16 - 24 report this case study.

Question 10 is addressed in chapter 25 by way of conclusion.

CHAPTER THREE

A CHOICE OF DESIRABLE PROPERTIES

The purpose of this chapter is to propose a list of the fundamental properties desirable in the best possible process of applying generic information to the solution of practical psychical problems.

The properties of the process should be derived from the properties of the product. Therefore the chapter starts by proposing properties desirable in the information produced by a process of applying generic knowledge to psychical practice. This sections are (A) properties desirable in the product of an application, (B) notes on the choice of properties, (C) properties desirable in a process of application, and (D) next steps.

3A. PROPERTIES DESIRABLE IN THE PRODUCT OF AN
APPLICATION

These nine properties are proposed:

(a) Consonant with events

(b) As full as is consistent with the other
properties, and any local requirements

(c) Relevant to any practical problem

(d) Relevant to the receiving practitioner

(e) Coherent

(f) Morally acceptable to everyone concerned

(g) Costing receiver and deriver as little as
possible

(h) Of a cost acceptable to the receiver

(i) Doing as much as possible to ensure its own use

3B. NOTES ON THE PROPERTIES

These properties are so fundamental that justifying them is hardly more than defining them. But I offer some notes on their definition.

(a) Consonant with events

This is roughly the same as 'proved right', but the phrase 'consonant with events' maintains the notion that there are alternative ways of construing events, not only one way that is right.

Information that will be proved wrong cannot be the best possible foundation for effective practice.

This matter is the subject of debate by philosophers.

The purpose here is not to take part in that debate, or to do any philosophy, but to make clear what the position being adopted is. One cannot wait until there is wide agreement among philosophers before taking up a position.

To call for 'consonance with events' is not trite: it may quite possibly be absent.

(b) As full as is consistent with the other properties, and any local requirements

Failure to be full means ignoring a better

alternative, or ignoring what would hinder or facilitate. If the information is made not as full as is consistent with the other properties, ignorance of relevant information is being preferred to knowledge.

'As full as is consistent with the other properties' is not trite: many elements may be involved in practical situations. A worker's punching a supervisor one afternoon could owe something to many factors at the same time: sarcasm from the supervisor, high temperature in the workshop, worry about the firm's declared intention to diminish its workforce, a row with a girlfriend, and too much to drink at lunchtime. If the supervisor reports the offending worker to the management, this could have many effects including the worker's resolving to be less quick_tempered in future, and other workers' throwing a brick through the supervisor's kitchen window. When so many different elements may be involved, it is not trite to say that information should be as full as is consistent with the other properties.

(c) Relevant to any practical problem

Irrelevancies may mean diseconomies or distractions.

'Relevant to a practical problem' is not trite:

generic information is by definition not specific, and may therefore conceivably be irrelevant to the specific.

(d) Relevant to the receiving practitioner

This is not trite because there may be many related but different practitioners in a situation, for example the workers and the managers in a company, and it would be easy to recommend to one the actions that can be taken only by another.

(e) Coherent

Incoherence means having components that do not stick together.

'Coherent' is not trite: there are many different paradigms in formal psychology, which are not explicitly connected to each other.

(f) Morally acceptable to everyone concerned

Apart from anything else, that which is unacceptable to the receiving practitioner is presumably not accepted and therefore goes no further.

'Morally acceptable' is not trite, because there are many instances of people regarding as morally

unacceptable the publication of information and proposed solutions to psychical problems.

(g) Costing receiver and deriver as little as possible

If by a change of practice one can have exactly the same impact for less cost, it is good to make the change, other things remaining equal.

(h) Of a cost acceptable to the receiver

Practicability does not arise for the receiver in the sense that the impossible is just that which costs more to get done (for example by commissioning help).

Acceptability of cost does not arise for the deriver in the same way as for the receiver, because it is a question of accepting or not accepting a commission.

That which is unacceptable and hence unaccepted by the practitioner cannot be good for practice.

There have been proposed some very costly solutions to psychical problems.

(i) Doing as much as possible to ensure its own use

If the information is not used, its raison d'etre is denied. 'Doing as much as possible to ensure its own

use' is not trite: there is a distinct danger that the use will be not as intended. The circumstances of receiving the information and of using it are likely to be different, the latter circumstances may offer distractions, and behaviour is probably seldom solely dependent on the information possessed.

3C. FROM PRODUCT TO PROCESS

In this section properties of the process of application are inferred from the foregoing list (a - i) of properties of the product of application.

From the original briefing for this particular exercise there also come two more properties:

(j) addressed to a psychical problem

and an addition to (h)

(h) ..and practicable for the driver.

Here is a list of the process properties implied by the product properties.

The following is implied by (c):

1. Furnishing only information that is relevant to any practical problem (where 'relevant to any practical problem' remains to be defined)

The following is implied by (d):

2. Furnishing only information that is relevant to the receiving practitioner (where 'relevant to the receiving practitioner' remains to be defined)

The following is implied by (b):

3. Addressing problems that are as full as commissioned

The following are implied by (e):

4. Using terms that encompass in one system as much psychical information as is needed (where the system of terms remains to be put forward)

5. Furnishing only information that is coherent

The following is implied by (b) and (e) - (b) because the weight of factors is important information not to be missed, and (e) because the relative weight of factors is important:

6. Excluding factors that the deriver can appropriately infer to be insufficiently weighty (where weight remains to be defined)

The following are implied by (a):

7. Drawing psychical conclusions that are admissable (where what is admissable remains to be defined)

8. Making psychical inferences that are admissable (where what is admissable remains to be defined)

9. Employing arguments that are valid

The following is a second implication of (b):

10. Using and furnishing information as fully as is consistent with having the other properties and meeting any local requirements

The following is implied by (h):

11. Furnishing recommendations that incur costs acceptable to the receiver and being practicable for the deriver

The following is implied by (g):

12. Minimizing costs for receiver and deriver

The following is implied by (j):

13. Dealing only with problems that are psychical

The following is implied by (f):

14. Selecting only that which is morally
acceptable to everyone concerned

The following is implied by (i):

15. Furnishing information so that it will be used
as intended (when the furnisher is not the
receiver).

3D. NEXT STEPS

There is now a list of 15 fundamental properties proposed to be desirable in the best possible process of applying generic information to practical psychical problems. This list is embryonic: there are certain points that later chapters will have to develop because they raise questions that must not be unexplored.

In chapter 4 I shall try to amplify the notions of relevance, practicability, coherence and cost. Chapter 5 looks at some meta questions about the psychical domain. Chapters 6 and 7 look respectively at antecedents and change of antecedents of psychical phenomena. Chapter 8 will then return to the list of process properties and amplify it in the light of the intervening chapters.

CHAPTER FOUR

RELEVANCE, PRACTICABILITY, COHERENCE AND COST

This chapter looks at chapter 3's list of desirable properties, at parts that need to be better articulated but will not be covered by the meta questions of chapter 5 or the psychical questions of chapters 6 and 7. These matters are (A) practicality (relevance to practice), (B) relevance to receivers, (C) practicability, (D) coherence, and (E) cost. Then (F) notes the impact on chapter 3's list of desirable properties.

4A. PRACTICALITY

It was stated in chapter 3 that 'relevant to any

practical problem' remained to be defined. I propose to do some defining here.

We are considering the relevance of FURNISHED information: the following definition of relevance does not apply to information that might be used in the process of arriving at the information to be furnished.

I propose to define practicality as limited to the following:

(a) Change. Because there would be no practical problem if there were not some unsatisfactory state of affairs - in other words a state of affairs that someone somewhere wishes to change.

(b) Change that constitutes the introduction of something desired. This is true by definition of change in practical work as the moving from the unsatisfactory to the satisfactory.

(c) Change in the future. Because one can do nothing about the past or the present (strictly defined as no more than the existing moment).

(d) Factors of change. Because we are talking about PRODUCING change.

(e) Factors in the future. Because one can do nothing about the past - or the present (strictly defined as no more than the existing moment).

(f) Factors that are enough to produce the desired effect. Because that which produces less than the desired change is unsatisfactory.

(g) Factors constituting changes in existing conditions. If there are any conceivable cases in which a change occurs without any antecedent change in circumstances, it is not relevant to practice. Also, one can seldom hope to be able to identify all the antecedents of something: there are too many, as Mackie (1974) points out with his concept of 'causal field'. Specifying only the changes and taking the rest for granted offers a solution to the problem this poses.

(h) Factors that are in terms of the action (or refraining from action) of a practitioner, where the practitioner may be the subject in question, and the action may include commissioning a helper. By definition a factor that is not in these terms will have no controlled occurrence.

With the subjects and predicates in the psychical domain - as defined in chapter 2 - there may be different types of question, for example: (1) is F an

antecedent of G, (2) what are the antecedents of G, (3) what are the consequents of F. Questions of the first and third types should be looked at through the second type. For instance, if there is a question of the consequences of changing a child's school (type 3), one should ask what one wants to achieve and look for antecedents of those (type 2) then compare change of school with that list of antecedents - see also section 4B (c).

4B. RELEVANCE TO THE RECEIVING PRACTITIONER

Another property on chapter 3's list of properties desirable in a process of application is relevance to the receiving practitioner or receiver. Four aspects of this are useful to separate:

(a) Not including a different (even a slightly different) case

Relevance to the receiver means furnishing information to a practitioner only about a problem and subjects that will be dealt with by that practitioner.

This may be simple in most cases but it may be worth noting the possible confusion between cases where the

task is to stop the undesired happening and cases where the task is to prevent the undesired happening.

The changes sought may be (i) termination of an element that is existing at the time the psychological information is used, or (ii) prevention/avoidance of an element that is not in existence at the time the information is used. It complicates matters slightly that an element may be not only a state, but also the regular recurrence of an event: therefore an element may be called 'existing' that is not always present but is somewhere in a regular cycle of recurrence.

A furnisher should ascertain whether the undesired Y has already happened at the time of application: it is necessary to know to what extent prevention as well as termination of elements will be possible.

(b) Not including a different receiver's action

Information about practitioner's action should be furnished only to a practitioner that the action applies to. Because otherwise the person who is going to do something will not have the information and someone will have the information who is not going to do anything.

(c) Dealing with limited possibilities for action

It could happen that a practitioner has a limited menu of actions available, for example whether to send a child to one school or another. To follow the best possible process of application such a practitioner should collect all the information available about the case and then compare the recommendations (many of which may not be possible) against the two actions possible and take whichever of the two allows more of the full list of recommendations to be followed.

4C. PRACTICABILITY

One of the properties listed in chapter 3 as desirable in a process of application is practicability for the driver.

One important element of this is not going beyond the degree of complication that the mind can comprehend - the bounds of rationality (Simon, 1957).

This implies an unusual approach to the debate on statistical versus clinical prediction (Meehl, 1954, 1986). Instead of bemoaning that clinicians will not use statistical methods that are known to be superior to unaided clinical judgement, I make sure that my

system is within the limits of the clinician's comprehending. This approach follows naturally from the fact that the over-riding questions of the present exercise concern the thinking of practitioners relying on their own calculations.

It may become impracticable for the deriver if too much complication arises. One source of complication that can be readily avoided is where the process or part of it needs to be applied separately to different aspects of problems. It would save confusion if such separate applications were consecutive rather than concurrent. I propose to adopt a rule of thumb that all such separate applications should be consecutive.

4D. COHERENCE

Coherence is another of the desirable properties of a process of application according to chapter 3.

I propose that a coherent piece of information is one in which it is clear which elements are identical, which unrelated, which contradictory, and which complementary.

It has been suggested in section 4A that the

information to be furnished will concern actions of the receiver. This requires a distinction between how actions are related and how effects are related. In a sense all the actions in furnished information will be complementary in effect; but it is vital to know whether actions are contradictory in themselves and whether actions are contradictory in their effects.

Therefore furnished information should make clear which recommended actions are identical, which complementary in performance, which unrelated, which contradictory in themselves, and which contradictory in effect.

I propose that contradictory actions and threats of contradictory effects should be removed from furnished information. (This is not self-evident: it would be possible to argue that receivers be told where the application process has produced contradictions.)

There is always more than one way of removing contradiction; but here one of the other desirable properties, fullness, can be the guide. To meet the requirement of fullness one should remove contradictions and threats of contradictory effects by deleting as little information as possible.

When some action is taken against a target, there can be side effects. The side-effects of interest here are effects on other targets making them more difficult to remove or terminate. This is covered by the requirements to identify and deal with agents that are contradictory in effect.

4E. COSTS

Chapter 3 proposed that the best process should minimize costs for the deriver and receiver, and propose agents of change that incur costs acceptable to the receiver.

4E.1 MINIMIZING COSTS

A number of ways of minimizing costs are useful to identify separately.

(a) There may be times when it would be wasteful to complete the process of application. An extreme case of this would be where a desired phenomenon is presently available just for the asking. It would not be appropriate to incur the cost of an investigation in this case.

(b) There are likely to be certain points in any process of application, where the alternatives of going ahead or not going ahead depend on the answer to a question. As a general rule such crucial questions should be asked at the earliest opportunity, so that trains of thought that will eventually be abandoned take up no more time and thought than necessary.

(c) One may be faced with a choice of potential factors. It will save costs if the least costly alternative is considered first. If it is accepted, no unnecessary time will have been spent and the receiver will be provided with the least costly possible action. If the first considered potential factor is rejected, less time will have been spent than had another potential factor been considered and rejected.

(d) Section 4A suggests that there may be subject's action, receiver's action or commissioned helper's action. This presents choices which may be exercised to reduce costs: between subject's action and commissioned helper's action; between receiver's action and subject's action; and between helper's action and receiver's action.

(e) There may well be more than one way of achieving a certain effect. Obviously it will save costs if no

more than one way if recommended to a receiver in the first instance - another way may be considered if the first way turns out in practice to be ineffective.

4E.2 ACCEPTABILITY OF COST

This is a different matter from minimizing cost: clearly one could make costs as small as possible and yet have them too big for someone to accept.

For simplicity in the present exercise I propose to use a three-point scale of cost - great, moderate and small.

Assessing the acceptability of cost to a receiver can be thought of in terms of finding which dimensions have ranges unacceptable for the receiver, then finding what the thresholds of unacceptability are on each of the identified dimensions.

4E.3 COST EFFECTIVENESS

This is sometimes equated with efficiency - how to reduce costs while keeping the same effect. That has been dealt with in foregoing sections. Here the question is of the trade-off that might be contemplated between effect and cost: one might be

willing to forego some effect or improvement in effect in order to save costs. This is an aspect of acceptability of cost - it may be that an additional cost would be acceptable to gain an additional effect or it may be that a lesser effect would be acceptable if accompanied by less cost.

This does not arise in the creation of a best possible application process, but once this were established as a standard it could be used to measure the cost-effect trade-off in other non-standard processes of application.

4F OUTCOMES

Property 1 - FURNISHING ONLY INFORMATION THAT IS RELEVANT TO ANY PRACTICAL PROBLEM (WHERE 'RELEVANT TO ANY PRACTICAL PROBLEM' REMAINS TO BE DEFINED) - becomes

Furnishing only information that concerns

change

change that constitutes the introduction of something desired

change in the future

factors of change

factors in the future

factors that are enough to produce the desired effect

factors constituting changes in existing conditions

factors that are in terms of the action (or refraining from action) of a practitioner,

where the practitioner may be the subject in question, and the action may include commissioning a helper

Property 2 - FURNISHING ONLY INFORMATION THAT IS RELEVANT TO THE RECEIVING PRACTITIONER (WHERE 'RELEVANT TO THE RECEIVING PRACTITIONER' REMAINS TO BE DEFINED) - becomes

Furnishing information to a practitioner only about a problem and subjects that will be dealt with by the practitioner. Finding whether the undesired has already happened

Furnishing information about practitioner's action only when the action is of the receiving practitioner

Recommending, if there is a limited menu of actions available to a receiver, the one that is closest to the best

Considering potential factors and accepting only those that are actual factors in the case in question

Property 5 - MAKING THE COHERENCE OF CONSTITUENTS APPARENT - becomes

Making clear whether factors recommended are identical, complementary in performance, unrelated, contradictory in performance or contradictory in effect

Removing contradictions and threats of contradictory effects

Removing contradictions and threats of contradictory effects by deleting as little information as possible

Property 11 - FURNISHING RECOMMENDATIONS THAT INCUR COSTS ACCEPTABLE TO THE RECEIVER AND BEING PRACTICABLE FOR THE DERIVER - becomes

Rejecting all agents that incur costs that are (a) normal or (b) greater than normal, when the receiver can accept only costs that are, respectively, (a) less than normal or (b) normal

Not including more complication than any deriver would be able to comprehend

Considering one thing at a time when there may be confusion

Property 12 - MINIMIZING COSTS FOR RECEIVER AND DERIVER - becomes

Doing things in an order that allows abandonment of unproductive applications at the earliest stage possible

Abandoning unnecessary stages

Considering possible recommendations in the order easiest to implement first

Where there are alternatives, choosing the least costly

Seeking no more than one factor for each effect

CHAPTER FIVE

ALLOWED AND PREFERRED TYPES OF PSYCHICAL INFORMATION

The purposes of this chapter are

- (a) to define some of the points about psychical information that were left undefined in the list of fundamental properties desired in the process of application, as proposed in chapter 3,
- (b) to produce definitions that while true do not militate against the other desired properties such as practicability and fullness,
- (c) not to do philosophy in the sense of second-order examination of positions, but to make clear the positions adopted and to show their implications for the standard process,

(d) to expose the articulation points explicitly so that others can look at the implications of adopting other definitions.

The sections are: (A) what types of conclusion about psychical phenomena should be sought, (B) how the relative weight of influences on the psyche should be defined, (C) how psychical conclusions should be related to knowledge, and (D) commentary.

These notations are used: P = any psychical phenomenon, and Y = a particular psychical phenomenon, the procuring of which is the practical problem in question.

5A WHAT TYPES OF CONCLUSION ABOUT PSYCHICAL PHENOMENA SHOULD BE SOUGHT

According to the ideal, one must seek only conclusions of admissable types. Therefore this section is first about what is admissable for psychical phenomena.

Within what is admissable there may be some choice, and that should be exercised in such a way as to make the fullest use possible of the available information, according to another part of the ideal.

Therefore this section is secondly about which of the admissable options is preferable.

5A.1 WHAT CONCLUSIONS ABOUT PSYCHICAL PHENOMENA ARE ADMISSABLE

From the definition of the psychological domain in chapter 1, conclusions may describe the incidence of P or antecedents of P.

I propose to adopt the position that conclusions about antecedents of P may, with some exceptions, describe values of variables that are necessary or sufficient conditions of the presence or absence of P, or that have an association with the presence of P.

It is not admissable to seek the conclusion that something is a sufficient condition of the presence of P, a necessary condition of the absence of P; and it is not admissable to seek the conclusion that a degree of future incidence of a psychical phenomenon is certain. If it is ever acceptable to draw these types of conclusions about any phenomenon, it is certainly not acceptable where the phenomenon is psychical: in principle human beings can behave in such a way as to disconfirm predictions of how they will behave. Manis (1976) is among those who have

made this point.

5A.2 RESTRICTIONS

When one seeks the conclusion that something is a sufficient condition of the absence of P, there should be two restrictions, the first for practical purposes and the second for logical purposes.

The first restriction is that, for practical purposes, P should be expectable. When a sufficient condition of the absence of P is identified and removed, the presence of P does not inevitably follow. But if P is expectable, there is some hope that it will appear when the obstacles have been taken away. The definition of expectable will be raised again in section 5C.

The second restriction is that P should be expressed not as a negation but in affirmative language. If a desideratum is expressed as a negation, for example 'no inattention', sufficient conditions of the absence of P will be sufficient conditions of the absence of no inattention, in other words sufficient conditions of attention, which it is not admissable to identify. This problem would be avoided if the desideratum were expressed as 'attention'. One has to be careful about the use of words here: the

foregoing is about things that are necessarily opposite (P and not-P), and would not apply to every apparent opposite: for instance, in this connection the opposite of 'no disrespect' would not be 'respect' but 'neutrality between respect and disrespect'. (I assumed in the previous example that there was no neutral ground between attention and inattention.)

Therefore conclusions about sufficient conditions of the absence of P are admissible for the present purposes where P is expectable and expressed in affirmative language.

5A.3 POSSIBILITIES

It may be inadmissible to conclude that a degree of future incidence of a psychical phenomenon is certain; but it is admissible to conclude that it is POSSIBLE.

To furnish a practitioner with information about possibilities implies a recommendation to engage in trial and error; but the trial and error need not be completely in the dark. While people CAN act so as to be unpredictable, presumably they do not always do so. Being predictable is socially useful. And there may be expected to be a reasonableness about

behaviour, which gives a degree of predictability even when the reasoning is faulty. While circumstances remain unchanged, behaviour will often remain unchanged, especially if it is established behaviour and if there is no reason for the behavior to want to prove an observer's predictions wrong.

5A.4 THE POLICY ADOPTED

To use all information as fully as is consistent with the other ideals, for antecedents one should seek conditions before associates, even with the restrictions mentioned in 5A.2.

One of these restrictions, that the desired phenomenon be expressed in affirmative language has an advantage, in ensuring that the problem dealt with is as full as commissioned. A desideratum may be expressed as a negation (for example 'to procure not-P') in the unspoken or unconscious assumption that the procurement of that will inevitably lead to something else (say, the procurement of G). Hence, for example, the presenter who put forward 'no disrespect' as a desideratum, faced with the translation 'neutrality' might realize that she had not fully expressed what she wanted.

5A.6 OUTCOMES

The impact of the foregoing on the list of fundamental properties desired in the process of application is as follows.

Property 1 - FURNISHING ONLY INFORMATION THAT CONCERNS CHANGE, ETC - can now have added

change that constitutes removal or prevention of sufficient conditions of the absence of desired psychical phenomena

Property 3 - ADDRESSING PROBLEMS THAT ARE AS FULL AS COMMISSIONED - becomes

Changing to positive expression any problem that is negatively expressed

Property 7 - DRAWING PSYCHICAL CONCLUSIONS THAT ARE ADMISSABLE (WHERE WHAT IS ADMISSABLE REMAINS TO BE DEFINED) - becomes

Seeking the conclusion that one has found sufficient conditions of only the absence not the presence of a psychical phenomenon

Seeking the conclusion that one has found sufficient conditions of the absence of only an affirmatively expressed, not a negatively expressed psychical phenomenon

Seeking the conclusion that one has found only the possibility not the certainty of some future incidence of a psychical phenomenon

Property 10 - USING AND FURNISHING INFORMATION AS FULLY AS IS CONSISTENT WITH HAVING THE OTHER PROPERTIES AND LOCAL REQUIREMENTS - can now have added

Seeking factors from sufficient conditions of the absence of a psychical phenomenon

Property 12 - MINIMIZING COSTS FOR RECEIVER AND DERIVER can now have added

Not proceeding with psychical phenomena that are not expectable

5B HOW THE WEIGHT OF INFLUENCES ON THE PSYCHE SHOULD BE DEFINED

In chapter 3's list of fundamental properties desired of a process of application, 'weight' remained undefined. This section develops a definition for use when looking for factors affecting the absence of a desired psychological phenomenon.

5B.1 CANDIDATES IDENTIFIED

I propose that where P is a function of O , the weight of O depends on (a) the nature or magnitude of P , (b) the relations between O and P and (c) the incidence of O . In other words in general terms weight could be defined in terms of (a), (b) or (c).

5B.2 CANDIDATES REJECTED

According to chapter 4, in the cases of interest the magnitude and nature of P are given - the question is to bring about a specified magnitude and nature of P . Therefore the relative weight of factors cannot be defined in terms of the magnitude or nature of P .

One might have thought of defining the weight of O in terms of how close it came to producing P or what it had to be combined with to produce P. But these will not apply in the cases of interest here: in such cases the relations in question are where O is a sufficient condition of the absence, a necessary condition of the presence, of P, and where there is a previously specified degree of association between O and P. Where O is a sufficient condition, it does not make sense to talk of how near O comes to producing P or what it must be combined with to produce P. Where O is an associate, by earlier decision it must be a 'complete' associate, which also rules out talk of how near O comes to producing P and what it must be combined with to produce P.

5B.3 CANDIDATE SELECTED

That leaves the incidence of O as the only sources of a definition of the weight of O.

Following section A of this chapter, we must talk of POSSIBLE future incidence. And talking of POSSIBILITY gives us a way of distinguishing more from less weighty Os, and means that relative weight is still relevant to the application

process. Weight might be held to vary with the strength of the possibility.

Much choice has been eliminated by the preliminary considerations. I propose to eliminate some more by choosing not to distinguish different degrees of future incidence. For simplicity I propose to ask only whether or not there is ANY future incidence. This rules out the possibility of relating weight to degrees of future incidence.

In the process of application the relative weight of a factor boils down to the relative strength of the possibility of any incidence of the factor in future circumstances of interest.

5B.4 OUTCOMES

The impact of the foregoing on chapter 3's list - fundamental properties desired of a process of application - is as follows.

Property 6 - EXCLUDING FACTORS THAT THE DERIVER CAN APPROPRIATELY INFER TO BE OF INSUFFICIENT WEIGHT (WHERE WEIGHT REMAINS TO BE DEFINED) - becomes

Excluding factors that the deriver can appropriately infer to have an insufficiently strong possibility of any future incidence in the circumstances in question

Property 10 - USING AND FURNISHING INFORMATION AS FULLY AS IS CONSISTENT WITH HAVING THE OTHER

PROPERTIES AND LOCAL REQUIREMENTS - can now have added

Indicating in the furnished information the strength of the possibility of any future incidence of any proposed factor

5C HOW TO RELATE PSYCHICAL CONCLUSIONS APPROPRIATELY TO KNOWLEDGE

5C.1 WHAT IS ADMISSABLE AND PREFERABLE

The conclusions one draws may be (i) true because it would be self-contradictory for them to be untrue, for instance that P is essentially part of P+Q, or (ii) true as far as observation goes, for example that Q is contingently an associate of P.

One may not often be in the position of choosing between these as approaches to the same question, but if there were a choice, the first would be preferable because it gives fuller information.

5C.2 FINDING ANTECEDENTS

This is one of the places where there is a choice: the search for potential sufficient conditions of the absence of Y could be based on knowledge of what are essentially or what are contingently sufficient conditions of the absence of P.

The former is preferable: - the search should be based as far as possible on an argument identifying what are ESSENTIALLY sufficient conditions of the absence of P.

5C.3 ASSESSING PRESENT INCIDENCE

This must be done by observation.

5C.4 ASSESSING FUTURE INCIDENCE

Assessment of the strength of a possibility of future incidence must depend on observation.

The strength of the possibility of future incidence of a psychical phenomenon should be calculated from past occurrences and non-occurrences of the phenomenon with people and circumstances of known similarity to the people and circumstances in question - and where knowledge of non-occurrence is not the same as ignorance of occurrence.

The dimensions that comprise similarity can be identified from the list of criteria for evaluating experiments and similar studies

proposed by Campbell & Stanley (1966) and updated by Cook & Campbell (1979). These can include the insights of others, from Harre & Secord (1972) on the whole notion of studying other people, through Edwards (1957) on 'social desirability', and Orne (1962) on 'demand characteristics', to Webb et.al.(1966) on 'unobtrusive measures'.

5C.5 CHOICE OF WEIGHT SETTINGS

The follower of a process of application, enjoined to exclude unweighty factors, will have to decide which strength of possibility to regard as defining sufficient weight. This decision should be made in the light of the data that will be required to make certain inferences.

The demands of practicability and the inadequacy of current knowledge suggest that it would be foolhardy to try to distinguish many different values.

A feasible possibility would be to have three ordinal values of the variable - strength of possibility of any incidence of a factor in given future circumstances - related to observations in the following ways:

Most ambitious setting:

the possibility of any incidence of O in future given circumstances is sufficiently weighty when

(i) when there is knowledge of one and only one occurrence, and any number of non-occurrences, of O with the same person (as is being studied) in highly similar circumstances (highly similar to the future given circumstances), or

(ii) when there is knowledge of one and only one occurrence, and any number of non-occurrences, of O with a highly similar person in the same circumstances, or

(iii) when there is knowledge of two or more occurrences, and any number of non-occurrences, of O with highly similar persons in highly similar circumstances

Moderately ambitious setting:

the possibility of any incidence of O in future given circumstances is sufficiently weighty when

when there is knowledge of one and only one occurrence of O, and any number of non-occurrences, with highly similar persons, in

highly similar circumstances

when there is knowledge of two or more occurrences
and any number of non-occurrences with any persons
in highly similar circumstances

Least ambitious setting:

the possibility of any incidence of O in future given
circumstances is sufficiently weighty when

when there is knowledge of one and only one
occurrence and any number of non-occurrences with
any persons in highly similar circumstances

The foregoing assumes that 'degree of similarity' is
a variable with a number of possible values including
'high'. Where to draw the line? An answer could be
given by identifying the dimensions comprising
similarity and measuring for each the distance
between identity and as different as can be. I
shall simply define 'highly similar' as not departing
from identity on any dimension known to be relevant.

5C.6 OUTCOMES

What is the impact of this section on the list of
fundamental properties desired in a process of

application?

Property 8 - MAKING PSYCHICAL INFERENCES THAT ARE ADMISSABLE (WHERE WHAT IS ADMISSABLE REMAINS TO BE DEFINED) becomes

Inferring the identities of receivers and whether they will deal with problems from the actions of possible receivers

Inferring from the actions of the person in question whether dimensions of cost have unacceptable ranges for a receiver, what the threshold of unacceptability is, and moral acceptability

Inferring the following from numbers of past occurrences and non-occurrences, and the similarity of the persons and circumstances in question: (a) whether an action is expectable, and (b) whether an action is presently available at will or on request

Defining the criterion of acceptable weight of a factor in terms of its past occurrences and non-occurrences and the similarity of the persons and circumstances in question

Part of property 10 - Seeking factors from sufficient conditions of the absence of a psychical phenomenon - can now become

Seeking sufficient conditions of the absence of a particular psychical phenomenon as far as possible on the basis of argument identifying what are essentially sufficient conditions of the absence of any psychical phenomenon.

5D. COMMENTARY

Many approaches to weight were rejected as bases for considering weight only because they were already built in to the application process by earlier decisions.

The hay-seed approach to methodology adopted here

is adopted for a purpose - to allow everyday findings to be used as well as the findings recorded in formal psychology.

The precise definitions of the three strengths of possibility and of 'high similarity' are somewhat arbitrarily chosen. Another set of definitions would make little difference to the argument.

CHAPTER SIX

ALLOWED AND PREFERRED TYPES OF CONSEQUENT AND ANTECEDENT

The search for ways of introducing Y should start with the possible provenance of P. This chapter looks at psychical phenomena and their provenance.

Chapter 5 suggested that the search for potential factors of the introduction of Y should be for sufficient conditions of the absence of P.

Chapter 5 also suggested that as far as possible the search should be for what are by argument ESSENTIALLY sufficient conditions of the absence of P.

Accordingly this chapter will be looking for a classification of possible factors that is an exhaustive, classification with the classes mutually exclusive.

Chapter 3's list of fundamental properties desired in processes of application includes 'using terms that encompass in one system as much information as is needed (where the system of terms remains to be put forward)'. Therefore there should be one classification only, and it should not have so much differentiation that it cannot accommodate concepts from formal psychology and elsewhere.

Another desired property, fullness, is relevant here; and it requires that the classification should have as much differentiation as the other requirements will allow.

The purpose here is to produce only superordinate variables. At a later stage users of the process of application may choose how to find subordinates of those variables.

What is envisaged is that in a particular case potential factors will be found consisting of one or more variables. These can be assessed for relevance to Y. Then the particular values that contingently match the definition of the potential factor will have to be identified and the future incidence of those values considered.

This chapter will therefore look at (A) categories of phenomena that may be consequents in the

psychological domain - it is not ruled out that they could be antecedents as well, (B) implications for the standard process, (C) categories of antecedents of behaviour (D) moving from any behaviour to the behaviour in question, (E) revisions in the standard process, and (F) commentary.

6A CATEGORIES OF CONSEQUENT

6A.1 EFFECT VERSUS BEHAVIOUR

It would be helpful to distinguish (i) what is brought about only by the thoughts words deeds and feelings of the behavior and circumstances under the behavior's control, and (ii) that which requires circumstances not under the behavior's control to be brought about. I propose to call (i) behaviour and (ii) effect.

Being top of the class in a test is not a behaviour, because the behavior's thoughts, words, deeds and feelings need to have other factors added to them, for example the performance of other people taking the same test. Similarly pleasing the neighbours is not a behaviour because the likes and dislikes of the neighbours are factors alongside the thoughts words deeds and feelings of the behavior. Throwing water

over the neighbour's cat is a behaviour.

The point of making this distinction is that the same effect can be produced by different behaviour, and the same behaviour can have different effects.

6A.2 BEHAVIOUR AND EFFECT VERSUS MOTIVE

By motive I mean the destination or end being moved toward, for example 'to frighten the neighbour's cat'. The same motive may give rise to different outcomes, and different motives may give rise to the same outcome. Therefore it is appropriate to distinguish motive from behaviour and effect, and it is not helpful to try to define or describe behaviour in terms of the motive of the behavior, for example 'I want her to stop trying to frighten the neighbour's cat'. Trying to frighten the neighbour's cat and trying to throw water over the neighbour's cat are motives. The behaviour is throwing water over the neighbour's cat, and it could come from various motives including some that had nothing to do with the neighbour's cat.

6A.3 MOTIVE VERSUS STATE

Where motives are events or things that happen, states are things that exist, for example dispositions. Dislike of the neighbours is a state.

States are introduced on the same grounds as before: the same state can give rise to different motives and different states can give rise to the same motive. E.g. the state 'dislike of the neighbours' may or may not give rise to the motive to frighten the neighbours' cat.

6A.4 COMMENTARY

The foregoing account of consequents may appear to neglect many familiar terms. But many terms do not offer additions to the classification: they merely describe particular incidence patterns. For instance a complaint about someone's 'personality' is likely to be a complaint that a behaviour, effect motive or state occurs often in many circumstances.

6B IMPLICATIONS FOR THE STANDARD PROCESS

6B.1 EXPRESSION OF PROBLEMS

Practical problems that the standard process can be applied to may be expected to be expressable in terms of behaviour, effect, motive, or state.

If a problem is expressed in vague terms, it will be helpful to try to express it in terms of behaviour, effect, motive or state: apart from anything else this will make it easier to decide whether the problem is one to which the ideal process may be applied.

Incidentally, not all the vague terms are outside formal psychology. For example, quite a lot of psychological studies have been done on what those studies call 'job involvement'. This is a very vague term because it is a metaphor: to say that people's job involvement is high is to say no more than that they are wrapped up in their jobs. This can be further defined; but the point is that it needs to be further defined.

6B.2 STARTING WITH BEHAVIOUR

If the problem is described in terms of effect, it will be helpful to identify the behaviour complained of, to ensure that all relevant behaviours are considered.

If a problem is described in terms of motive or state, it will be helpful to translate this into terms of behaviour, because that will reduce the scope for the receiver and the deriver to be at cross purposes.

Behaviour here means thoughts, words, deeds or feelings but not expressed in terms of the motive of the behavior, and not encompassing the effects of circumstances that are outwith the control of the behavior.

The emphasis on behaviour does not signify the dismissal of everything other than behaviour. In this case, once behaviour is identified, the 'reasons' for that behaviour will be sought. For example if some behaviour is done to achieve a certain effect, that will be brought out, and that motive is what will be treated. The argument is that behaviour has certain advantages as a starting point - not that only behaviour can be treated. Behaviour is seen as near the beginning not the end of the

exploration of the nature of problems.

The way to discover the behavioural manifestation of a presented problem is to ask what is the actual behaviour involved. To aid thought, one could also look for behaviour necessary for the effect, or behaviour associated with effect, motive or state (according to section A of chapter 5).

The process of finding a behavioural manifestation of a problem may stimulate further thought and perhaps lead to redefining the problem.

Any translation into behavioural terms would have to meet the same criteria of acceptability as any other description of a problem (for example acceptability to the receiver).

6C POTENTIAL SUFFICIENT CONDITIONS FOR THE ABSENCE OF
ANY BEHAVIOUR

Now it is clear that what is required is a
classification of potential sufficient conditions of
any BEHAVIOUR.

I shall assume (a) that the conditions apply at a
given moment, (b) that the behaviour is not done by
accident, and (c) that it will have been attended to
by the person in question - a reasonable assumption
because the behaviour of interest is stipulated to be
expectable in the circumstances of interest, and its
absence is explicitly complained of.

6C.1 THE POTENTIAL SUFFICIENT CONDITIONS IN THE
BROADEST TERMS

I propose that the potential sufficient conditions of
the absence of any behaviour, P, in a person are

(a) that the person is motivated not to do P,

(b) that the person is motivated to do Q (something
incompatible with P), and

(c) that the person is motivated but unable to do P.

This statement subsumes the states and motives that section A of this chapter claimed might be antecedents as well as consequents.

6C.2 SUBCLASSES OF 'DOING P' AND 'MOTIVATED'

The first move towards subcategories will be to divide 'doing P' and 'motivated' into divisions.

The most basic ideas about attention inform these divisions and require them to be made. Much is built on the idea that at some times behaviour is more considered and at other times it is less considered. Many references in 6C.6 attest to this.

The first implication is that one should distinguish (a) doing P after giving it relatively much consideration, which I shall call for short 'deciding to do P' and (b) doing P after giving it relatively little consideration, which I shall call for short 'doing P inconsiderately'. Hence 'be motivated to do something' is divided into 'decide to do something' and 'do something inconsiderately'.

The list of conditions set out in section 6C.1 can now become: it is a potential sufficient condition of the absence of P for the person to

(a) decide not to do P,

(b) decide to do Q,

(c) do Q inconsiderately, or

(d) decide but be unable to do P

(discounting the possibility of 'not doing P
inconsiderately')

The second implication is that there should be a distinction between doing something and considering something. One could go back and back - from doing P to considering P to considering 'considering P'. I suggest that it is enough to say that doing P may be preceded by considering P, and that considering P must be preceded by recognizing P. Hence 'doing P' is divided into 'doing P', 'considering P' and 'recognizing P'. Both 'considering P' and 'recognizing P' can be regarded as behaviours, and hence the list of conditions in 6C-1, as amended above, can be applied to them.

In terms of 'considering P' the list is as follows:
it is a potential sufficient condition of the absence of considering P for the person to

(a) decide not to consider P,

(b) decide to do Q,

(c) do Q inconsiderately, or

(d) decide but be unable to consider P.

The idea of being motivated not to recognize something does not raise an eyebrow so long as there is little consideration involved; but can it make sense to talk of thinking about 'recognizing P' without recognizing P? I propose to disregard this as a possibility. Hence applying the list of conditions to 'recognizing P' yields the following: it is a potential sufficient condition of the absence of recognizing P for the person to

(a) decide to do Q, or

(b) do Q inconsiderately.

6C.3 ANTECEDENTS RETYPED

Now we can have a better list of potential sufficient conditions, taking on board the distinctions concerning attention. It is a potential sufficient condition of the absence of P -



(1) if the person does Q inconsiderately (where Q is something incompatible with doing P or considering P or recognizing P), or

(2) if the person (i) forms the intention to do P but then (ii) cannot do P, or

(3) if the person cannot recognize P or consider P, or

(4) if (i) the person recognizes P but (ii) the person decides not to consider P or not to do P, or

(5) if (i) the person considers P but (ii) considers also Q, and (iii) decides to do Q.

6C.4 SUBCLASSES OF 'DECIDE'

The next notion to be divided is 'decide'. I propose to adopt a model in which there are (a) expectancies or beliefs and (b) values. Of course beliefs and values are not confined to religious beliefs or moral values - belief means any expectation and value means attraction or aversion.

There are many such models in the literature: in connection with level of aspiration (Lewin et al, 1944), achievement motivation (Atkinson 1957, 1960)

where the terms expectancy and value were introduced, Feather (1959), Edwards (1954) and MacCorquodale & Meehl (1951).

I shall think of value in terms of attraction and aversion, used as merely descriptive terms reflecting the extent to which someone approaches or avoids an object. I envisage that a typical object will have some value in its own right and some value depending on its connection with other objects. ('Depending' here means currently depending: the value that an object now holds in its own right may have previously depended on a connection with another object). Here I shall use 'aversion to F' to mean aversion to F in its own right, net of any connection with concomitants.

These models can be quite complicated, indeed MUST be complicated when the attempt is to predict a behaviour from certain specified factors. I must attempt to simplify.

It would be a sufficient condition of the absence of P (a) if an aversion to P itself were strong enough to prevent the decision to do P, or (b) if P were believed to be connected to some object of aversion, and the connection and the aversion to P and its concomitants were strong enough to prevent the decision to do P.

If there were no aversion to P, it would be a sufficient condition of the absence of P (a) if an attraction to Q were strong enough to outweigh the attraction of P and its concomitants, or (b) if Q were believed to be connected to some object of attraction, and the connection and the attraction of Q and its concomitants were strong enough to prevent a decision to do P (because any attraction to P and its concomitants was weaker).

(In the foregoing an object of aversion or attraction may be a behaviour or a state brought about by a behaviour - in other words the behaviour can be a means to an end or an end in itself.)

For these to operate, the beliefs must be salient. It is quite possible that a belief be in some sense possessed or held but not called to mind at a particular time - back to the importance of attention.

I am not saying that this covers the whole story of the provenance of behaviour but it gives a few occasions to look for.

6C.5 ANTECEDENTS RETYPED AGAIN

(1), (2) and (3) in the list are the same as before; but (4) and (5) are restated in the light of the previous section:

It is a potential sufficient condition of the absence of P -

(1) if the person does Q inconsiderately (where Q is something incompatible with doing P or considering P or recognizing P), or

(2) if the person (i) forms the intention to do P but then (ii) cannot do P, or

(3) if the person cannot recognize P or consider P, or

(4) if the person recognizes P, but aversions to P and any salient concomitants, and the connections with concomitants are together strong enough to prevent a decision to do P, or

(5) if the person considers P but also Q, and attractions to Q and any salient concomitants, and the connections with concomitants are together strong enough to prevent a decision to do P.

6C.6 SUBCLASSES OF 'DOING Q INCONSIDERATELY'

'Doing Q inconsiderately' was short for doing Q after giving it relatively little consideration.

'Relatively little consideration' must be defined now in relation to the beliefs and values mentioned in the previous section.

There may be many reasons why one would do something after giving it relatively little consideration. One reason might be the arousal of sufficient emotion, where emotion mediates responses as in Berkowitz & Heiner's (1989) account of aggressive behaviour. A model of less considered behaviour might allow a number of emotions each to be elicitable by different stimuli, the effects to be cumulative, and a threshold to exist above which the emotion triggers the little considered adoption of an end.

There need not be an emotion involved. A person may often do Q when certain conditions are present and little emotion is elicited. There is some literature on what happens when behaviour requiring skill is practised. There seems to be wide agreement that after practice more than before practice attention can be paid to things other than the behaviour in question (Stelmach & Hughes, 1983). There is less agreement (Cheng, 1985) about how to account for this

and indeed how to describe it: one common description, automatization (Fitts, 1964, Shiffrin & Schneider, 1977), begs the question. In any case these findings suggest that behaviour is sometimes 'run off' with little consideration given to it.

Comparable phenomena are noted by theorists who approach the cognitive provenance of action from very different directions, from the study of lapses (e.g. Norman, 1981, Reason & Mycielska, 1982) to the construction of models such as the 'model human processor' (Card et al, 1983). Long-lived structures of knowledge have been investigated by a number of theorists - networks (McClelland & Rumelhart, 1985), production rules (Anderson, 1982), scripts, (Schank and Abelson, 1976), or frames (Minsky, 1975), not to mention the schemas of Bartlett (1932). Again the notion is that some behaviour can be 'run off' without receiving full consideration. And the basic point that full consideration is not always given is in harmony with work in social psychology for example by Langer (1978, 1989) on 'mindlessness', where there is conscious attention to only a few cues that come to represent a scenario, and recently summarized (Fazio, 1990) work by Fazio on attitudes and the roles of different modes of thinking (including a mode that is less considered). These concepts are all different but they all suggest ways in which behaviour may be performed inconsiderately.

I propose to deal with all of these under the heading 'habits' using the term descriptively to mean doing something often when certain conditions are present and little emotion is involved. (It is the proper purpose of the theorists just mentioned to emphasize the differences between them and others, but it is the present purpose to emphasize what is the same.)

While attempting to be simple I have not adopted the ideas that used to exist that there are two categories, reflexes and voluntary behaviour, and that these are categories of behaviour as well as categories of provenance.

6C.7 ANTECEDENTS RETYPED FINALLY

Number (1) in the previous list is replaced by numbers (1) and (2) in this list. The other entries are the same as before but with each of their numbers greater by one.

The potentially sufficient conditions of the absence of P are -

(1) if the existing level of an emotion and the emotional reaction to a current event are together such as to elicit the adoption of Q as an end or lead

to the adoption of Q as a means to an elicited end (where Q is something incompatible with doing P or considering P or recognizing P),

(2) if Q is done out of habit,

(3) if the person (i) forms the intention to do P but then (ii) cannot do P,

(4) if the person cannot recognize P or consider P,

(5) if the person recognizes P, but aversions to P and any salient concomitants, and the connections with concomitants are together strong enough to prevent a decision to do P, and

(6) if the person considers P but also Q, and attractions to Q and any salient concomitants, and the connections with concomitants are together strong enough to prevent a decision to do P.

6C.8 LAYING OUT THE VARIABLE ELEMENTS

This section lays out each of the five entries in the list of potential sufficient conditions in such a way as to expose the variable elements in each case.

(1) The first condition is present when the existing

level of an emotion and the emotional reaction to a current event are together such as to elicit the adoption of a less considered end (LCE.)

It is convenient to combine the variables whose additive effect is the crucial factor.

Thus the elements seen as variables are:

L = the belief (if Q is not the LCE) that Q is the best way of achieving the LCE, the height of the threshold for adopting the LCE, and the degree of indifference to Q

E = the existing level of emotion, and the current degree of Q

(2) The second condition is present when: the degree of some variable Q that is followed by Q is lower than the degree of Q that is present.

Thus the elements seen as variables are:

L = the degree of Q that is followed by a habitual Q

E = the current degree of Q

(3) The third condition is present when: the level of

ability to do P in certain circumstances is lower than required for effectiveness, and those circumstances are present.

Thus the elements seen as variables are:

A = the degree of ability possessed

E = the degree of ability currently required to do P

(4) The fourth condition is present when: the level of ability to recognize and consider P in certain circumstances is lower than required for effectiveness, and those circumstances are present.

Thus the elements seen as variables are:

A = the degree of ability possessed

E = the degree of ability currently required to recognize P or to consider P

(5) The fifth condition is present when: the person recognizes P, but (a) an aversion to P is so strong that it prevents a decision to do P, or (b) considering or doing P is believed to be connected to some concomitant, the belief is salient in certain circumstances, those circumstances are present, and the strength of the connection and the aversion to P

and the concomitant are such as to prevent a decision to do P. (It will be convenient to take one possible concomitant at a time.)

Thus the elements seen as variables are:

AV = the degree of aversiveness of P and N

B = the degree of connection believed to exist between P and N

C = the degree of Q that is followed by salience of the connection between P and PN

E = the current degree of Q

(6) The sixth condition is present when: P is recognized but at some point so is Q, (a) an attraction to Q is strong enough to prevent a decision to do P, or (b) Q is believed to be connected to some concomitant, the belief is salient in certain circumstances, the circumstances were present, and the strength of the connection and the attraction to Q and concomitant are such as to prevent a decision to do P. Again it is convenient to consider one possible concomitant at a time.

Thus the elements seen as variables are:

ATT = the degree of attractiveness of Q and N

B = the degree of connection believed to exist
between Q and N

C = the degree of Q that is followed by salience
of the connection between Q and QN

E = the current degree of Q

6C.9 COMMENTARY

In each case there is an E variable, which may be
a property of the physical or the psychical
environment. Every occasion is the coincidence of
an E with something else.

6D. FROM ANY BEHAVIOUR TO THE BEHAVIOUR IN QUESTION

To be involved in a potential antecedent of a particular behaviour in question (Y), a variable will have to meet three requirements: (1) it will have to be related as a subordinate to one of those in section 6C.8; (2) it will have to be relevant to Y; and (3) it will have to be accompanied by other variables to form one of the occasions of absence of P shown in section 6C.8.

And the set of variables will have to meet a fourth requirement: (4) the values of the variables will have to be related so as to form an occasion of the absence of P.

6D.1 How is one to assess whether a variable is related as a subordinate to one of those in 6C.8? By simple argument - this is not likely to be problematical.

6D.2 How is one to assess whether a variable is relevant to Y?

This varies for different categories of test-variable: less considered motivation, ability, aversions and attractions.

In the case of less considered motivation the judgment is whether the pursuit of the LCE involves behaviour incompatible with Y.

In the case of ability the task is to assess whether the test-variables refer to a component of the task of performing a particular Y.

In the case of aversions the task is to judge whether there is a reasonable belief involving Y and the object of aversion.

In the case of attractions the task is to judge whether there is a Z that could have been attended to as well as Y, and that is involved in a reasonable belief with the object of attraction.

Reasonable belief means a belief that is known to have been held, or that it would be reasonable to hold in the light of other beliefs known to have been held.

6D.3 How is one to find the other variables required to accompany a given one to form a potential occasion of the absence of P? For example in the case of aversions and attractions how is one to find what E is required for salience of the belief in question? By simple argument from the given variable and the lists in section 6C.5.

6D.4 How is one to assess whether actual values of variables are related in such a way as to form an occasion of the absence of Y? Easily if the variables are related so that the same scale can be used for all, for example N miles an hour the top speed of the athlete and N+5 miles an hour the lowest speed demanded by the behaviour. In other cases, it is more difficult.

For practicability I shall use a simple scale for every variable, with three points - low, moderate and high, and the notion that they are approximately equivalent for any variables likely to be part of the same occasion of absence of P. That and the breadth of the bands will make it acceptably risky for the moment to say, for example: it is a sufficient condition of the absence of P that the demand for performing power be high while the performing power possessed is moderate or low.

6E. OUTCOMES

What is the impact of the foregoing on the list of fundamental properties desired in a process of application?

Property 4 - USING TERMS THAT ENCOMPASS IN ONE SYSTEM AS MUCH INFORMATION AS NEEDED (WHERE THE SYSTEM OF TERMS REMAINS TO BE PUT FORWARD) can now partly become

Proposing antecedents only in the terms of chapter 6

Property 9 - EMPLOYING VALID ARGUMENTS - can now have added

Assessing the relevance of proposed antecedents as follows: (a) ability/difficulty factors by whether they refer to a component of Y or attending to Y; (b) an aversion by whether it could be involved with Y in a reasonable belief; (c) an attraction by whether there is a behaviour incompatible with Y (Z) that could have been attended to as well as Y and that could be involved in a reasonable belief with the attraction; (d) an LCE by whether the behaviour required for the LCE is incompatible with Y

Property 10 - USING AND FURNISHING INFORMATION AS FULLY AS IS CONSISTENT WITH HAVING THE OTHER PROPERTIES AND MEETING LOCAL REQUIREMENTS - can now have added

Seeking the relevant behaviour if a problem refers to effect, motive or state

Adding to a relevant variable as necessary to form a group of variables that together make sufficient conditions of the absence of a behaviour

Assessing a full range of possible antecedents, subject to having the other desired properties and meeting local requirements

Property 11 - FURNISHING RECOMMENDATIONS THAT INCUR COSTS ACCEPTABLE TO THE RECEIVER AND BEING PRACTICABLE FOR THE DERIVER - can now have added

Regarding 'high' 'low' and 'moderate' as equivalent values for any variable

6F. COMMENTARY

What is the position adopted on causes and reasons? Much ink has been spilled on this, not only by philosophers but also by psychologists,

for example in the dialogue between Buss (1978) and Kruglanski (1979). The position adopted here is (a) that purposes are antecedents in the sense that, while they refer to the future, they must be adopted before the behaviour that is designed to serve them is performed, (b) that there can be occasions on which behaviour serves deliberate purposes, and also occasions on which behaviour is unconsidered and in this sense 'caused' - by a combination of environmental event and psychical state.

In chapter 2 it was claimed that the adopted conception of the psychological domain would be able to encompass the spontaneity, the flow, the abundance and the mutual entwining of psychical and related phenomena. But is the model of the provenance of behaviour emerging in this chapter over-simple or biased? Certainly the foregoing analysis may have given the implied model an image problem in the following areas; but I believe that it is quite consistent with the presence of all of these:

(a) high-minded motives, not just reflexes and unenlightened self-interest

(b) motives that owe as much to feeling as to thinking

(c) the activation of more than one motive simultaneously, and hence all the phenomena of conflict

(d) the converging of more than one motive on the same behaviour

(e) the same behaviour's coming on different occasions from different motives

(f) the same behaviour's being on different occasions less considered and more considered

(g) unconscious motivation and repression

(h) the simultaneous existence of contradictory beliefs

(i) rapid changes in psychical states and physical environments

(j) intercorrelation between antecedents

(k) strings of behaviour, where the performance of one behaviour is the environmental element in the occasioning of another behaviour

(l) catastrophe-type changes

(m) the ability of people to consider their own behaviour and motives (including their ability to deceive themselves)

(n) so-called spontaneous behaviour (as long as regular antecedents for it can be traced - in which case it is not really spontaneous, hence the use of 'so-called')

Of course it is not enough for the model to be consistent with the foregoing if it drowns or explains away phenomena that need to be highlighted. I believe that subsequent chapters will demonstrate that the right amount of highlighting has been given for the present purpose.

CHAPTER SEVEN

CONCERNING AGENTS OF CHANGE

This chapter seeks to identify agents of change for all the psychological elements that could be selected for change as part of the process of application. The sections cover (A) preliminary considerations, (B) the targets for which agents are needed, (C) the types of change-agents applicable to each target, (D) notes on these, (E) the cost of change-agents, (F) the implications for the standard process, and (G) commentary.

7A. PRELIMINARY CONSIDERATIONS

Agents of change must be in terms of action of receiver or subject or helper. More specifically,

after chapter 6, we are talking about effects following from the behaviour of receiver (RB), subject (SB), or helper (HB).

The effects are the termination or prevention of onset of elements in the types of occasion identified in chapter 6. Some of the effects are to the environment, others are to psyches. This chapter discusses the changing of psychical factors. The E factors are listed but just as 'whatever necessary'.

The agents to terminate elements in the future or to prevent the onset of element in the future are not necessarily related to the agents that introduced or would introduce the element.

To minimise cost, it was decided in a previous chapter to select the less costly when SB and HB, RB and SB, or HB and RB are alternatives:

-when R is not S, the first choice is RB alone, but some SB may be necessary or better than RB alone

-when R is not S and SB is necessary or better than RB alone, one plans SB except where HB is necessary or better than SB alone

-when R is S, one plans R/SB except where HB is necessary or better than R/SB alone

-when R is not S and HB is necessary or better than SB alone, one plans HB except where RB is necessary or better than HB alone

This chapter needs to bear these conditions in mind.

7B. THE TARGETS FOR WHICH AGENTS ARE NEEDED

To see for which targets agents of change are needed, a number of points must be considered.

7B.1 Termination and prevention are required, not maintenance or initiation

7B.2 All elements identified in chapter 6 should be on the first list of targets:

- (a) The current level of emotion
- (b) The degree of indifference to Q
- (c) The current degree of Q
- (d) The height of the threshold for adopting the LCE
- (e) The belief (if Q is not the LCE) that Q is the best means to achieve the LCE
- (f) The degree of Q that is followed by a habitual Q
- (g) The current degree of Q
- (h) The degree of ability possessed
- (i) The degree of ability currently required to perform recognize or to consider P

- (j) The degree of aversiveness of P
- (k) The degree of aversiveness of PN
- (l) The degree of connection believed to exist between P and PN
- (m) The degree of Q that is followed by salience of the connection between P and PN
- (n) The current degree of Q
- (o) The attractiveness of Q
- (p) The attractiveness of QN
- (q) The strength of the connection believed to exist between Q and QN
- (r) The degree of Q that is followed by salience of the connection between Q and QN
- (s) The current degree of Q

7B.3 The element degree of ability needs to be divided because different processes of change apply to each of these components:

- (h/i) capacity
- (h/ii) vigour
- (h/iii) perceptuo-motor proficiency
- (h/iv) ability to concentrate
- (h/v) change an expected connection or a construct

7B.4 Some elements can be taken together:

- the current degree of Q: (c), (g), (n), and (s)
- beliefs: (e), (h/v), (l) and (q)
- attractiveness: (o) and (p)
- aversiveness: (j) and (k)
- reactions to Q: (b), (f), (m), and (r)

That leaves these on their own:

- current level of emotion: (a)

height of the threshold for adopting an LCE: (d)

capacity: (h/i)

vigour: (h/ii)

perceptuo-motor proficiency: (h/iii)

ability to concentrate: (h/iv)

degree of ability currently required: (i)

7B.5 Which direction of change is required? That which makes things better, and that is as follows:

Increasing or maintaining these:

the height of the threshold for adopting an LCE

the degree of indifference to Q

the degree of capacity

the degree of vigour

the degree of perceptuo-motor proficiency

the degree of power of concentration

obstacles to recognizing, considering or performing Q

the degree of attractiveness of P or PN

Lowering or avoiding the heightening of these:

the current level of emotion

the current degree of Q

obstacles presented to recognizing, considering or performing P

the degree of attractiveness of Q or QN

It is inappropriate to talk of raising or lowering when one is changing an expected connection or concept

7C. THE TYPE OF CHANGE AGENTS APPLICABLE TO EACH TYPE OF TARGET

Now for each target on the list derived in section 7B, this section identifies agents of change.

1. TO INCREASE OR MAINTAIN THE HEIGHT OF A THRESHOLD FOR ADOPTING AN LCE OR LCB

SB (i) performing the offending LCE or LCB with deinfforcer contingent

AND performing a more acceptable reaction with reinforcer contingent

SB will be sufficient on its own, but encouragement to produce SB is quite likely to be needed

HB (i) introducing a reinforcer of the more acceptable reaction and a deinfforcer of the offending reaction

HB will not be sufficient on its own.

Notes:

What are in mind here are (a) removing the offending reaction by some kind of 'aversion therapy' and (b) introduction of an alternative reaction.

For simplicity self-reinforcement is not regarded as a possibility.

2. TO INCREASE OR MAINTAIN THE DEGREE OF
INDIFFERENCE TO O

SB (i) not reacting when exposed to O a number of
times

This SB will be sufficient on its own.

HB - giving encouragement or managing SB

Obviously HB will not be sufficient on its own.

Note: exposure to O without reaction is the goal. How to get the non-reaction remains to be seen - some kind of systematic desensitization might be envisaged, but other means might be envisaged as well. In any case the point here is merely to identify non-reaction as the desired SB. (I say 'non-reaction' for simplicity: any weakening of reaction from the current level may be acceptable.)

Changing how one reacts to some O could mean one of two things - changing what the reaction is and changing how readily it occurs. This distinction needs to be made in dealing with these three elements - location of threshold for specific LCEs, degree of O that is followed by habitual LCEs, degree of O that is followed by salience of belief.

3. TO LOWER OR AVOID HEIGHTENING A CURRENT LEVEL OF
EMOTION

SB (i) avoiding pleasure, omission of pleasure,
insult, signals of these

(ii) taking physical exercise

(iii) ingesting psychoactive substances

SB will be sufficient on its own on some
occasions, not on other occasions.

HB (i) preventing pleasure, omission of pleasure,
insult, signals of these

(ii) procuring psychoactive substances

HB will be sufficient on its own on some
occasions, not on other occasions.

Note: what is in mind here is the subject (or the helper) keeping out of the way of experiences that if they are allowed to accumulate will bring the subject to boiling over point.

4. TO LESSEN OR AVOID GREATENING THE CURRENT DEGREE OF O

where O is, for example, (a) in cases of emotion: pleasure, omission of pleasure, insult, signals of these, (b) in cases of distraction: unexpectedness, intensity, relation to affect, weaker versions of the previous list, (c) in cases of deliberation: significant events, physical deficit

SB (i) whatever (to be identified on the particular occasion) will reduce O

SB will be sufficient on its own on some occasions, not on other occasions.

HB (i) whatever (to be identified on the particular occasion) will reduce O

HB will be sufficient on its own on some occasions, not on other occasions.

Note: in most cases O will not be psychological.

5. TO GREATEN OR MAINTAIN CAPACITY

SB (i) imitating a model

(ii) IF capacity to produce a behaviour is required and imitating a model does not work, THEN producing a component of the behaviour that cannot be performed often enough so that it is secure but not resistant to being added to AND performing a further component linked to the first often enough so that it is secure but not resistant to being added to AND repeating the latter as necessary

(iii) practice

SB will usually be sufficient on its own.

HB (i) presenting a model

HB will not be sufficient on its own.

Note: what is in mind at (ii) is the procedure normally called 'shaping'
- reinforcement is not mentioned here because that belongs to the the targetting of the subject's willingness to produce the behavioural components- a slightly different matter.

6. TO GREATEN OR MAINTAIN VIGOUR

SB

- (i) avoiding physical and psychical stressors
- (ii) putting oneself in the way of boosts to self-esteem
- (iii) allowing time to recover from physical and psychical stressors
- (iv) exposing oneself to volatility of stimulation
- (v) ingesting psychoactive substances

SB will often be sufficient on its own.

HB (i) providing boosts

- (ii) forcing the allowance of time
- (iii) help with procuring of substances and volatility of stimulation

HB will not often be sufficient on its own.

Note: circadian rhythms could be represented here (Moore-Ede et al, 1982, Folkard & Monk, 1985)

7. TO GREATEN OR MAINTAIN PERCEPTUO-MOTOR PROFICIENCY

- SB (i) attempting the performance repeatedly (practising)
AND IF fine judgement is involved, THEN recognizing the results of the behaviour
SB will be sufficient on its own.

HB - warding off distractions

HB will obviously not be sufficient on its own.

Note: what is in mind in the latter part of (i) is knowledge of results (Balzer et al, 1989).

8. TO GREATEN OR MAINTAIN POWER OF CONCENTRATION

- SB (i) allowing time to recover from physical and psychical stressors
- (ii) ingesting psychoactive substances
 - (iii) IF arousal too low, exposing oneself to volatility of stimulation
 - (iv) IF arousal is too high, exposing oneself to monotony of stimulation

SB will often be sufficient on its own.

HB (i) providing boosts

(ii) forcing the allowance of time

(iii) help with procuring of substances and volatility of stimulation

(iv) help with avoidance of stressors

HB will not usually be sufficient on its own.

Note: it is assumed along with Yerkes & Dodson (1908) that level of arousal can be both too low and too high for concentration.

9. TO CHANGE A CONSTRUCT OR AN EXPECTED CONNECTION

This applies to knowledge and belief.

SB (i) exposing oneself to an instructive experience or message (where experience may be what happens to oneself or what one witnesses happening to another)

AND (ii) acquiring the appropriate conclusion from the experience or from the message

AND (iii) retaining the expectation or refined concept when misleading experiences or messages are encountered

SB will often be sufficient on its own.

HB (i) arranging instructive experiences (including producing messages that hold back from making the point directly)

(ii) producing an appropriate message, including inoculation

HB will not usually be sufficient on its own.

Notes:

Vicarious reinforcement makes an appearance here, as does work on attributions.

Of course this sidesteps the question of what would be an appropriate instructive experience or message. The psychologies of persuasion and instruction have something to say on messages (and this will be expanded upon in chapter 14). In particular there may be need for inoculation against the misleading experiences and messages that may be met later.

A message should not just weaken existing beliefs but introduce/strengthen more acceptable ones (taking account of the likelihood that there will be an effort to understand).

There may be a choice of expectation to change for -

there will often be a nest of expectations depending on each other. In general one should go for that which it is easiest to change, normally the most particular one. For example it will be easier (and more appropriate) to change the belief that a specific person is inexperienced (a more particular belief) than the belief that one should not take advice from inexperienced sources (a more general belief).

10. TO DIMINISH OR AVOID INCREASING THE DEGREE OF ABILITY CURRENTLY REQUIRED TO RECOGNIZE, CONSIDER OR PERFORM P

SB (i) introducing tools

(ii) removing obstacles

(iii) altering the circumstances in whatever other way will make doing Q harder or impossible

SB will sometimes be sufficient on its own and sometimes not.

HB (i) introducing tools

(ii) removing obstacles

(iii) altering the circumstances in whatever other way will make doing Q harder or impossible

HB will sometimes be sufficient on its own and sometimes not.

11. TO INCREASE OR MAINTAIN THE DEGREE OF ABILITY CURRENTLY REQUIRED TO RECOGNIZE, CONSIDER OR PERFORM Q

SB (i) removing tools

(ii) introducing obstacles

(iii) altering the circumstances in whatever other way will make doing Q harder or impossible

SB will sometimes be sufficient on its own.

HB (i) removing tools

(ii) introducing obstacles

(iii) altering the circumstances in whatever other way will make doing Q harder or impossible

HB will sometimes be sufficient on its own.

12. TO INCREASE OR MAINTAIN THE ATTRACTIVENESS OF P
OR PN

SB (i) producing the target behaviour with
reinforcement contingent

SB may not be sufficient on its own.

HB (i) applying reinforcement to the target behaviour

HB will not be sufficient on its own.

Note: what is in mind here is traditional
reinforcement

13. TO DIMINISH OR AVOID INCREASING THE
ATTRACTIVENESS OF Q OR QN

SB (i) producing the target behaviour

(ii) IF the attraction is a physical need, e.g.
(a) where a psychical attraction or dependency has
led to physical addiction, or (b) for something
ordinary like food, THEN taking appropriate
measures

SB will not be sufficient on its own.

HB (i) applying deinfocement to the target behaviour

(ii) IF the attraction is a physical need - see SB
(ii), THEN taking appropriate measures

HB will not be sufficient on its own.

Note: how to diminish a physical attraction is not a
psychological question, and it may not be appropriate
to take any measures.

7D. NOTES

7D.1 DEFINITIONS

a. The terms 'reward' and 'punishment' are to be avoided: they are confusing because they are defined in terms of the intentions of those administering them. We need terms to describe other characteristics including effects. Reinforcer is common and useable in this way; but it is difficult to find a partner for it, to substitute for 'punishment'. 'Weakener' is a possibility, but because I have used that already for a slightly different purpose, I hope to be excused for coining 'deinforcer'.

b. Reinforcers and deinforcers are to be defined in terms of their effects and how they achieve them, I propose, as follows. A reinforcer is something (i) that has come to seem contingent on a behaviour, and (ii) that has thereby increased the incidence of the behaviour. A deinforcer is something (i) that has come to seem contingent upon the behaviour, and (ii) that has thereby reduced its incidence.

c. One can distinguish positive and negative reinforcers and deinforcers. In the positive case what is contingent on the target behaviour is the

introduction of something, in the negative case the removal of something. Thus a negative reinforcer would reinforce a behaviour by making the removal of something contingent upon it, which is negative in the sense of 'removing' but still having a reinforcing effect.

d. Attractiveness is a combination of intrinsic and extrinsic attractiveness. I define intrinsic attractiveness as that which does not currently depend on contingency (though it may have arisen through reinforcement in the past). Extrinsic attractiveness is that which is not intrinsic, which depends on expected connections between the object of intrinsic attraction and some other objects, which have their own attractiveness and in a sense lend some of it to associated objects. The same applies, mutatis mutandis to aversiveness. Changing attraction/aversion means changing strength of expected connection and changing intrinsic attractiveness, aversiveness.

7D.2 ASSUMPTIONS

a. There may be contingencies with things that are not reinforcers or deinceforcers.

b. Reinforcers, deinceforcers and other contingencies may occur naturally or be deliberately arranged.

c. Reinforcers (positive and negative), deinformers (positive and negative), intrinsic attractiveness and intrinsic aversiveness all exist. (This is arguable - that is why I make the assumption explicit.) I do not mean that a reinforcer or deinformers will be found in every case or that every object has an intrinsic attractiveness or aversiveness. But I shall assume that in the cases dealt with in later chapters if intrinsic attractiveness or aversiveness, reinforcers or deinformers are sought hard enough, they will be found.

7D.3 The targets of reinforcement/deinformers

a. In my simplification, two things happen with reinforcement: (i) increased intrinsic attractiveness of the target behaviour, and (ii) increased strength of the connection expected between the behaviour and whatever the behavior sees as the reinforcer. (There are some references to support the plausibility of linking reinforcement with change of expectation, for example Adams & Dickinson, 1981).

b. What happens with deinformers is: (i) increased intrinsic aversiveness of the target behaviour; (ii) increased strength of the connection expected between the behaviour and whatever the behavior sees as the deinformers.

c. With removal of a reinforcer's contingency upon the target behaviour what happens is reduced strength of the connection expected between the behaviour and the reinforcer. I do not envisage by this means reduced intrinsic attractiveness of the target behaviour - otherwise it would not be intrinsic. If this was desired it would have to be approached as increasing the intrinsic aversiveness of that behaviour.

d. With removal of a deinjector's contingency upon the target behaviour, what happens is reduced strength of the connection expected between the behaviour and the deinjector.

7D.4 EFFECTIVE USE OF REINFORCERS/DEINFORCERS

a. Reinforcers may be regarded as by definition more attractive and deinjectors less attractive than what they reinforce, and deinjectors less attractive than what they deinject. For the present purpose it does not matter how or why intrinsic attractiveness or aversiveness, reinforcers or deinjectors came to be as they are or why the phenomena of reinforcement and deinjectment occur.

b. Different things can be reinforcing or deinjecting for the same person in different circumstances or for

different persons in the same circumstances.

c. Many things may be reinforcers or deinformers.

The 'things' that are reinforcing can include activities of the behavior. For example an activity that is more attractive can be a reinforcer of an activity that is less attractive.

d. It is effective when reinforcing a behavior to make the association between the smallest reinforcers possible and the greatest amount of behaviour possible.

e. There can be reactions to very aversive or attractive events or signals as seen in the work of Gray (1967). These may have to be considered as unwelcome side effects. For example interference with interpersonal relations is a possible side effect of deinforming with personal aggression.

f. The use of token reinforcers solves some of the practical problems of manipulating reinforcers, but raises others in the settings with which later chapters will be concerned. The circumstances of the ordinary classroom prevent using a very elaborate system of tokens. In some establishments like residential schools where there is more generous staffing than in ordinary schools, quite elaborate systems of tokens have been used with some success.

That kind of system can work; but it is probably out of the reach of the ordinary class teacher. Unless they have some help I cannot see ordinary teachers being able to manage the office work involved, keeping records of what tokens everyone has, how many they have cashed in, and so on. Their use of reinforcers will probably have to be simpler. Maybe one could say to the whole class: 'Everyone who hands in the homework tomorrow and gets at least 12 out of 20 marks for it will be allowed to work on anything they like for an hour in the afternoon' Or something along these lines.

g. The effect of removal of reinforcement may be slow: it may take a long time for the lack of contingency to be interpreted as the end of the connection (especially if the contingency has been intermittent). Indeed the first effect of withdrawal of reinforcement may be an increase in the behaviour as if the connection were being tested.

h. There is a vogue for attention/ignoring. A number of investigators, for example Allen et.al.(1964), have shown attention from another person being reinforcing. That means that attention has been and therefore can be reinforcing. It does not mean that attention from any other person will always be reinforcing. It does not even reveal how often attention is reinforcing. Ignoring (withdrawing

attention) may not work because it was not the reinforcer. Even if it is the reinforcer, removing it may be slow to have an effect. And in classrooms and similar situations if lack of attention goes on for some time, that could be interpreted by other people present as allowing them to perform the undesired behaviour.

7E. THE COST OF CHANGING DIFFERENT TYPES OF TARGET

As articulated in chapter 4, the requirement to minimize costs indicates that no more than one element should be targetted at any one time.

The requirement of fullness indicates that if the first chosen potential target for an occasion is not realizable, another one should be tried.

Minimizing cost requires that elements be considered as potential targets in the order of least cost to the receiver.

The E element in an occasion will often be changeable quickly. One does not often change attractions or aversions, abilities, reactivity, or height of thresholds quickly.

The speed of change of B depends on how far the learner has to move from existing knowledge, and on the form of the agent of change: for instance, second hand experience in the form of messages can be quite quick.

It seems justifiable to save the applier's time by having a rule of thumb: for any occasion test the E element first as a potential target, failing that the B element where it exists, and failing that the other element(s). In the case of emotion, where there are two E variables, one should consider the degree of O that is present before current nearness to threshold.

7F. OUTCOMES

Property 4 - USING TERMS THAT ENCOMPASS IN ONE SYSTEM AS MUCH INFORMATION AS IS NEEDED (WHERE THE SYSTEM OF TERMS REMAINS TO BE PUT FORWARD) can now partly become

Proposing agents of change only in the terms of chapter 7

Property 9 - EMPLOYING VALID ARGUMENTS can now have added

Considering only the types of agent of change proposed in chapter 7

Property 12 - MINIMIZING COSTS FOR RECEIVER AND DEERIVER- can now have added

Having both antecedents and agents of change of antecedents

Seeking potential targets until all the elements in a particular occasion have been eliminated or

one has been chosen

Applying the full process of application to any agent of change that is expectable and not presently available

Part of property 12 - When there are alternative possible recommendations, choosing the least costly - can now become

When there are alternative agents of change, choosing what chapter 7 indicates to be the least costly alternative

Part of property 12 - Considering possible recommendations in the order of least costly to implement first - can now become

Considering as potential targets for any occasion first the E element, then the B element where it exists, then the other element(s)

7G. COMMENTARY

It is noteworthy that as well as the agents familiarly found in psychology textbooks, the following are included in the foregoing in the same system:

-physical agents of psychical change (from taking drugs to putting on a hearing aid)

-psychical agents of physical change (such as monotony affecting level of arousal)

-removal of the opportunity for undesired behaviours

-unusual phenomena (such as trying to make oneself tired)

-reprehensible agents - which may fall at the hurdle of having to be morally acceptable, but which are still agents (such as removing someone's wheelchair)

The decisions here are based on more empirical work and may be more transitory than the categories in chapter 6.

CHAPTER EIGHT

A PROCESS OF APPLICATION PROPOSED TO BE SUITABLE AS A STANDARD

This chapter (A) restates the desired properties proposed in chapter 3 as changed by chapters 4-7, (B) brings selection and accommodation, omitted since chapter 2, back in, (C) sets out more algorithmically a process embodying the properties, and (D) comments.

The important changes were noted along the way as they were made. Where chapters 4-7 implied minor changes in vocabulary, these were not noted at the time but are noted here.

This is provisional because property 15 'furnishing information so that it will be used as intended (when

the deliverer is not the receiver)' has not been explored. But how to get a person to use the received information as intended is itself a problem to which the process is relevant, and I intend to apply the process to this problem in chapter 13.

8A THE DESIRED PROPERTIES OF CHAPTER 3
AS DEVELOPED IN CHAPTERS 4-7

1. FURNISHING ONLY INFORMATION THAT IS RELEVANT TO ANY PRACTICAL PROBLEM (WHERE 'RELEVANT TO ANY PRACTICAL PROBLEM' REMAINS TO BE DEFINED) becomes

1. Furnishing only information that concerns

1.1 change

1.2 change that constitutes the introduction of something desired

1.3 change in the future

1.4 agents of change

1.5 agents in the future

1.6 agents that are enough to produce the desired effect

1.7 agents constituting changes in existing conditions

1.8 agents that remove or prevent a sufficient condition of the absence of a behaviour

1.9 agents that are in terms of the action (or refraining from action) of a practitioner, where the practitioner may be the subject in question, and the action may include commissioning a helper

2. FURNISHING ONLY INFORMATION THAT IS RELEVANT TO THE RECEIVING PRACTITIONER (WHERE 'RELEVANT TO THE RECEIVING PRACTITIONER' REMAINS TO BE DEFINED) becomes

2.1 Furnishing information to a practitioner only about a problem and subjects that will be dealt

with by the practitioner. Finding whether the undesired has already happened

2.2 Furnishing information about practitioner's action only when the action is of the receiving practitioner

2.3 Recommending, if there is a limited menu of actions available to a receiver, the one that is closest to the best

2.4 Considering potential factors and accepting only those that are actual factors in the case in question

3. ADDRESSING PROBLEMS THAT ARE AS FULL AS COMMISSIONED becomes

3.1 Changing to positive expression any problem that is negatively expressed

4. USING TERMS THAT ENCOMPASS IN ONE SYSTEM AS MUCH INFORMATION AS IS NEEDED (WHERE THE SYSTEM OF TERMS REMAINS TO BE PUT FORWARD) becomes

4.1 Proposing antecedents only in the terms of chapter 6

4.2 Proposing agents of change only in the terms of chapter 7

5. FURNISHING INFORMATION THAT IS COHERENT becomes

5.1 Making clear whether the items on the final list of agents are identical, complementary in performance, unrelated, contradictory in performance or contradictory in effect

5.2 Removing contradictions and threats of contradictory effects

5.3 Removing contradictions and threats of contradictory effects by changing agents, failing that changing targets, and failing that abandoning the smallest possible number of agents

6. EXCLUDING FACTORS THAT THE DERIVER CAN APPROPRIATELY INFER TO BE OF INSUFFICIENT WEIGHT (WHERE WEIGHT REMAINS TO BE DEFINED) becomes

6.1 Excluding occasions that the deriver can appropriately infer to have an insufficiently strong possibility of any future incidence in the circumstances in question

7. DRAWING PSYCHICAL CONCLUSIONS THAT ARE ADMISSABLE (WHERE WHAT IS ADMISSABLE REMAINS TO BE DEFINED) becomes

7.1 Seeking the conclusion that one has found sufficient conditions of only the absence, not the presence, of a psychical phenomenon

7.2 Seeking the conclusion that one has found sufficient conditions of the absence of only an affirmatively expressed, not a negatively expressed psychical phenomenon

7.3 Seeking the conclusion that one has found only the possibility, not the certainty, of some future incidence of a psychical phenomenon

8. MAKING PSYCHICAL INFERENCES THAT ARE ADMISSABLE
(WHERE WHAT IS ADMISSABLE REMAIN TO BE DEFINED)
becomes

8.1 Inferring the identities of receivers and whether they will deal with problems from the behaviour of possible receivers

8.2 Inferring whether dimensions of cost have unacceptable ranges for a receiver, what the threshold of unacceptability is, moral acceptability, and the behaviour associated with a motive or state from the behaviour of the person in question

8.3 Inferring the following from numbers of past occurrences and non-occurrences, and the similarity of the persons and circumstances in question: (a) whether an action is expectable, and (b) whether an action is presently available at will or on request

8.4 Defining the criterion of acceptable weight of an antecedent in terms of its past occurrences and non-occurrences and the similarity of the persons and circumstances in question

9. EMPLOYING VALID ARGUMENTS
becomes

9.1 Considering only the types of antecedents proposed in chapter 6

9.2 Considering only the types of agents of change proposed in chapter 7

9.3 Assessing the relevance of proposed antecedents as follows: (a) ability/difficulty factors by whether they refer to a component of the desired behaviour (Y) or attending to Y; (b) an aversion by whether it could be involved with Y in a reasonable belief; (c) an attraction by whether there is a behaviour incompatible with Y that could have been attended to as well as Y and

that could be involved in a reasonable belief with the attraction; (d) a less considered end (LCE) by whether the behaviour required for the LCE is incompatible with Y

9.4 Otherwise employing valid arguments

10. USING AND FURNISHING INFORMATION AS FULLY AS IS CONSISTENT WITH HAVING THE OTHER PROPERTIES AND MEETING LOCAL REQUIREMENTS becomes

10.1 Considering as many problems, subjects and receivers as are contained in a commission

10.2 Seeking the relevant behaviour if a problem or sub-problem refers to effect motive or state

10.3 Proposing behaviours that cover as much as is consistent with the other requirements

10.4 Having both antecedents and agents of change of antecedents

10.5 Seeking sufficient conditions of the absence of a particular psychical phenomenon as far as possible on the basis of argument identifying what are essentially sufficient conditions of the absence of any psychical phenomenon.

10.6 Adding to a relevant variable as necessary to form a group of variables that together make sufficient conditions of the absence of a behaviour

10.7 Assessing a full range of possible antecedents, subject to having other desired properties and meeting local requirements

10.8 Seeking potential targets until all the elements in a particular occasion have been eliminated or one has been chosen

10.9 Including in the furnished information every agent of change that conforms to the other desired properties

10.10 Applying the full process of application to any agent of change that is not very likely to be producible at will or on request

10.11 Checking the results if possible and, if they are unsatisfactory, reconsidering the problem and deriving different agents of change

10.12 Indicating as much in the furnished information if there is no element in a particular occasion that can be changed

10.13 Indicating in the furnished information the strength of the possibility of any future incidence of proposed agents of change

FURNISHING RECOMMENDATIONS THAT INCUR COSTS ACCEPTABLE TO THE RECEIVER AND BEING PRACTICABLE FOR THE DERIVER - becomes

11.1 Rejecting all agents that incur costs that are (a) normal or (b) greater than normal, when the receiver can accept only costs that are, respectively, (a) less than normal or (b) normal

11.2 Not including more complication than any deriver would be able to comprehend

11.3 Considering one thing at a time where there may be confusion (receivers' having different costs, or different relations with the subjects, termination and prevention both required, more than one subject or type of subject)

11.4 Regarding 'high', 'low' and 'moderate' to be equivalent values for any variable

12. MINIMIZING COSTS FOR RECEIVER/PRACTITIONER AND DERIVER becomes

12.1 Doing things in an order that allows abandonment of unproductive applications at the earliest stage possible. Assessing as soon as any desired behaviour of subject, receiver or helper is identified, whether it is presently available at will or on request and whether it is expectable. Assessing the relevance of proposed antecedents as soon as possible

12.2 Abandoning unnecessary stages. Not proceeding with a behaviour that is not expectable or that is presently available at will or on request - except to include the latter in the furnished information. Abandoning a proposed antecedent as soon as its irrelevance to the desired behaviour becomes apparent

12.3 Considering as potential targets for any occasion first the E element, then the B element where it exists, then the other element(s)

12.4 When there are alternative agents of change, choosing what chapter 7 indicates to be the least costly alternative

12.5 Seeking no more than one agent of change for each occasion

12.6 Including only presently available agents of change in the furnished information

13. DEALING ONLY WITH PROBLEMS THAT ARE PSYCHICAL
becomes

13.1 Furnishing only information about antecedents
of psychical change

14. SELECTING ONLY THAT WHICH IS MORALLY ACCEPTABLE
TO EVERYONE CONCERNED becomes

14.1 Ensuring that employing the agents and
changing the targets are morally acceptable to
everyone concerned

15. FURNISHING INFORMATION SO THAT IT WILL BE USED AS
INTENDED (WHEN THE DERIVER IS NOT THE RECEIVER)

This is the property that will be expanded later.

8B. THE RELATION OF SELECTION AND ACCOMMODATION TO THE IDEAL

Chapter 2 distinguished treatment, selection and accommodation as practical purposes, and the other chapters concentrated on treatment. Now there are questions about whether the ideal is relevant to selection and accommodation.

8B.1 SELECTION

Selection I am defining as choosing a person who will produce, or who has produced, certain behaviour in given circumstances. It differs from treatment in that treatment (as defined in chapter 2) is trying to change the person. Briefly, selection can be divided into four main questions, as follows:

(i) What is desired of the selected person after selection? Addressing this might be called performing a job analysis and selecting a criterion. It is akin to seeking a question in the standard process.

(ii) What assessable qualities of persons are connected to the criteria or desiderata? Addressing this might be called seeking predictors. It is akin to seeking relevant variables in the standard

process.

(iii) How are the qualities identified in (ii) involved in the selection policy? (One might, for example, adopt a policy of discrimination between those above and below a benchmark, or of discriminating the finest differences in degree possible.) Addressing this is akin to part of seeking a question in the standard process, though in the treatment case the policy is not usually made explicit, presumably because it is always the same - to find whether a person is above or below a benchmark.

(iv) How do particular people score with respect to the characteristics assessed? Addressing this is akin to seeking values worth considering in the standard process - assessing the possibility of occurrence in particular cases of the relevant sets of values of selected variables.

Therefore all the main parts of the selection process are coverable by the ideal process. (Of course, the converse is not true - for example, in selection one does not seek agents of change.)

8B.2 ACCOMMODATION

Accommodation is what I am calling the case where, given a person, one arranges a certain behavioural outcome by changing the circumstances not the existing regularities in the person. Using the existing regularities in a person is included, but not altering them.

I suggest that the standard process applies to finding out what circumstances to change. The only big difference between accommodation and treatment is that in accommodation one would stop short of trying to change psychical elements of occasions. Therefore while accommodation cannot cover the whole of the ideal process, the ideal process can cover the whole of accommodation.

8C. THE PROPOSED STANDARD PROCESS

Properties were proposed earlier in this chapter for a standard process of application. This section sets out in a more algorithmic format a standard process embodying the properties proposed earlier.

The fundamentals from which the steps are derived are indicated.

A. APPLICATEE

A.1 TRY TO PROCEED ONLY BY ADDRESSING PROBLEMS

For relevance to a practical problem, as developed in chapters 4 and 5A

A.2 SUCCESSFULLY PROCEED ONLY BY ADDRESSING PROBLEMS

For validity of argument, as developed in chapters 6 and 7

A.3 TRY TO PROCEED WITH A PROBLEM ONLY IF IT IS PSYCHICAL

For dealing only with the psychical

A.4 SUCCESSFULLY PROCEED WITH A PROBLEM ONLY IF IT IS PSYCHICAL

For validity of argument, as developed in chapters 6 and 7

A.5 TRY TO PROCEED WITH A PROBLEM ONLY IF IT CONCERNS FUTURE CHANGE INTRODUCING SOMETHING DESIRED

For relevance to a practical problem, as developed in chapters 4 and 5A

A.6 SUCCESSFULLY PROCEED WITH A PROBLEM ONLY IF IT CONCERNS FUTURE CHANGE INTRODUCING SOMETHING DESIRED

For validity of argument, as developed in chapters 6 and 7

A.7 TRY TO PROCEED WITH A PROBLEM ONLY IF IT IS

WITHIN THE PRACTICE OF SOMEONE

For relevance to a practical problem, as developed in chapters 4 and 5A

A.8 SUCCESSFULLY PROCEED WITH A PROBLEM ONLY IF IT IS WITHIN THE PRACTICE OF SOMEONE

For validity of argument, as developed in chapters 6 and 7

A.9 TRY TO PROCEED WITH A PROBLEM ONLY IF IT IS PRESENTED BY THE CLIENT IN POSITIVE TERMS

For fullness and admissability of psychical conclusions, as developed in chapter 5A

A.10 SUCCESSFULLY PROCEED WITH A PROBLEM ONLY IF IT IS EXPRESSED IN POSITIVE TERMS

For validity of argument, as developed in chapters 6 and 7

A.11 TRY TO PROCEED WITH A PROBLEM ONLY IF IT IS CLEARLY EITHER OF TERMINATION OR OF PREVENTION

For minimal cost, as developed in chapters 4, 5A, 6 and 7

A.12 SUCCESSFULLY PROCEED WITH A PROBLEM ONLY IF IT CLEARLY EITHER OF TERMINATION OR OF PREVENTION

For validity of argument, as developed in chapters 6 and 7

A.13 TRY TO PROCEED WITH A PROBLEM ONLY IF THERE ARE IDENTIFIED PEOPLE WHOSE PSYCHES ARE THE SUBJECTS OF THE PROBLEM

For B.2

A.14 SUCCESSFULLY PROCEED WITH A PROBLEM ONLY IF THERE ARE IDENTIFIED PEOPLE WHOSE PSYCHES ARE THE SUBJECTS OF THE PROBLEM

For validity of argument as developed in chapters 6 and 7, and admissability of psychical inferences as developed in chapter 5C

A.15 TRY TO PROCEED WITH AS MANY ACCEPTABLE SUBJECTS FOR A PARTICULAR PROBLEM AS ONE IS COMMISSIONED FOR

For fullness, as developed in chapters 5A, 5B, 5C and 6

A.16 SUCCESSFULLY PROCEED WITH AS MANY ACCEPTABLE SUBJECTS FOR A PARTICULAR PROBLEM AS ONE IS COMMISSIONED FOR

For validity of argument, as developed in chapters 6 and 7

A.17 TRY TO PROCEED WITH AS MANY ACCEPTABLE PROBLEMS AS ONE IS COMMISSIONED FOR

For fullness, as developed in chapters 5A, 5B, 5C and 6

A.18 SUCCESSFULLY PROCEED WITH AS MANY ACCEPTABLE PROBLEMS AS ONE IS COMMISSIONED FOR

For validity of argument, as developed in chapters 6 and 7

B. RECEIVER

B.1 TRY TO PROCEED ONLY WITH RECEIVERS WHO WILL DEAL WITH THE PROBLEMS AND SUBJECTS IN QUESTION

For relevance to the receiver, as developed in chapter 4

B.2 SUCCESSFULLY PROCEED ONLY WITH RECEIVERS WHO WILL DEAL WITH THE PROBLEMS IN QUESTION

For admissability of psychical inferences as developed in chapter 5C, and validity of argument as developed in chapters 6 and 7

B.3 TRY TO PROCEED WITH AS MANY ACCEPTABLE RECEIVERS AS ONE IS COMMISSIONED FOR

For fullness, as developed in chapters 5A, 5B, 5C and 6

B.4 SUCCESSFULLY PROCEED WITH AS MANY ACCEPTABLE RECEIVERS AS ONE IS COMMISSIONED FOR

For validity of argument, as developed in chapters 6 and 7

B.5 TRY TO PROCEED WITH RECEIVERS ONLY IF THEIR ABILITY TO ACCEPT COSTS (THRESHOLDS OF UNACCEPTABILITY ON THE COST DIMENSIONS THAT FOR THE CLIENT INCLUDE UNACCEPTABLE RANGES) IS KNOWN TO BE USUAL OR UNUSUALLY GREAT OR KNOWN OR ASSUMED TO BE UNUSUALLY SMALL

For B.8

B.6 SUCCESSFULLY PROCEED WITH RECEIVERS ONLY IF THEIR ABILITY TO ACCEPT COSTS (THRESHOLDS OF UNACCEPTABILITY ON THE COST DIMENSIONS THAT FOR THE CLIENT INCLUDE UNACCEPTABLE RANGES) IS KNOWN TO BE USUAL OR UNUSUALLY GREAT OR KNOWN OR ASSUMED TO BE UNUSUALLY SMALL

For admissability of psychical inferences as developed in chapter 5C, and validity of argument as developed in chapters 6 and 7

B.7 TRY TO PROCEED AT ANY ONE TIME ONLY WITH RECEIVERS WHO SHARE THE ABILITY TO ACCEPT COSTS

For minimal cost, as developed in chapters 4, 5A, 6 and 7

B.8 SUCCESSFULLY PROCEED AT ANY ONE TIME ONLY WITH RECEIVERS WHO SHARE THE ABILITY TO ACCEPT COSTS

For validity of argument, as developed in chapters 6 and 7

B.9 TRY TO PROCEED AT ANY ONE TIME ONLY WITH RECEIVERS WHO SHARE THEIR RELATIONS WITH ACCEPTED SUBJECTS

For minimal cost, as developed in chapters 4, 5A, 6 and 7

B.10 SUCCESSFULLY PROCEED AT ANY ONE TIME ONLY WITH RECEIVERS WHO SHARE THEIR RELATIONS WITH ACCEPTED SUBJECTS

For validity of argument, as developed in chapters 6 and 7

C. FOCUS

C.1 TRY TO PROCEED ONLY WITH BEHAVIOURS

For fullness as developed in chapters 5A, 5B, 5C and 6, and relevance to the receiver as developed in chapter 4

C.2 SUCCESSFULLY PROCEED ONLY WITH BEHAVIOURS

For validity of argument, as developed in chapters 6 and 7

C.3 TRY TO PROCEED WITH A BEHAVIOUR ONLY IF IT IS TIED TO IDENTIFIED CIRCUMSTANCES

For E.9

C.4 SUCCESSFULLY PROCEED WITH A BEHAVIOUR ONLY IF IT IS TIED TO IDENTIFIED CIRCUMSTANCES

For validity of argument, as developed in chapters 6 and 7

C.5 TRY TO PROCEED WITH A BEHAVIOUR ONLY IF IT IS TIED TO A SUBJECT WHO IS ONE PERSON OR TYPE OF PERSON

For minimal cost, as developed in chapters 4, 5A, 6 and 7

C.6 SUCCESSFULLY PROCEED WITH A BEHAVIOUR ONLY IF IT IS TIED TO A SUBJECT WHO IS ONE PERSON OR TYPE OF PERSON

For validity of argument, as developed in chapters 6 and 7

C.7 TRY TO PROCEED WITH A BEHAVIOUR ONLY IF IT IS PART OF THE PROBLEM IN QUESTION

For relevance to the receiver, as developed in chapter 4

C.8 SUCCESSFULLY PROCEED WITH A BEHAVIOUR ONLY IF IT IS PART OF THE PROBLEM IN QUESTION

For validity of argument as developed in chapters 6 and 7, and admissability of psychical inferences as developed in chapter 5C

C.9 TRY TO PROCEED WITH A BEHAVIOUR ONLY IF IT IS EXPECTABLE

For minimal cost, as developed in chapters 4, 5A, 6 and 7

C.10 SUCCESSFULLY PROCEED WITH A BEHAVIOUR ONLY IF IT IS EXPECTABLE

For admissability of psychical inferences, as developed in chapter 5C

C.11 TRY TO LIST BEHAVIOUR THAT IS PRESENTLY AVAILABLE AND PROCEED WITH INTERMEDIATE STEPS ONLY FOR BEHAVIOUR THAT IS NOT PRESENTLY AVAILABLE

For minimal cost, as developed in chapters 4, 5A, 5 and 7

C.12 SUCCESSFULLY LIST BEHAVIOUR THAT IS PRESENTLY AVAILABLE AND PROCEED WITH INTERMEDIATE STEPS ONLY FOR BEHAVIOUR THAT IS NOT PRESENTLY AVAILABLE

For admissability of psychical inferences, as developed in chapter 5C

C.13 TRY TO PROCEED WITH ALL THE ACCEPTABLE BEHAVIOURS CONSISTENT WITH LOCAL REQUIREMENTS

For fullness, as developed in chapters 5A, 5B, 5C and 6

C.14 SUCCESSFULLY PROCEED WITH ALL THE ACCEPTABLE

BEHAVIOURS CONSISTENT WITH LOCAL REQUIREMENTS

For validity of argument, as developed in chapters 6 and 7

D. INFORMATION APPLIED

D.1 TRY TO PROCEED ONLY WHEN THERE ARE PROPOSED BOTH ANTECEDENTS OF THE ABSENCE OF BEHAVIOUR AND ALSO AGENTS OF CHANGE OF THE ANTECEDENTS

For fullness, as developed in chapters 5A, 5B, 5C and 6

D.2 SUCCESSFULLY PROCEED ONLY WHEN THERE ARE PROPOSED BOTH ANTECEDENTS OF THE ABSENCE OF BEHAVIOUR AND ALSO AGENTS OF FUTURE CHANGE, ENOUGH TO REMOVE THE ANTECEDENTS

For validity of argument, as developed in chapters 6 and 7

E. ANTECEDENTS

E.1 TRY TO PROCEED ONLY WITH PROPOSED ANTECEDENT VARIABLES THAT ARE RELEVANT TO THE BEHAVIOUR IN QUESTION. I.E. (A) ABILITY/DIFFICULTY FACTORS IF THEY REFER TO A COMPONENT OF THE BEHAVIOUR IN QUESTION (Y) OR ATTENDING TO Y; (B) AN AVERSION IF IT COULD BE INVOLVED WITH Y IN A REASONABLE BELIEF; (C) AN ATTRACTION IF THERE IS A BEHAVIOUR INCOMPATIBLE WITH Y THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y AND THAT COULD BE INVOLVED IN A REASONABLE BELIEF WITH THE ATTRACTION; (D) AN LCE IF THE BEHAVIOUR REQUIRED FOR THE LCE IS INCOMPATIBLE WITH Y

For validity of argument, as developed in chapters 6 and 7

E.2 SUCCESSFULLY PROCEED ONLY WITH ANTECEDENT VARIABLES THAT ARE RELEVANT TO THE BEHAVIOUR IN QUESTION

For validity of argument, as developed in chapters 6 and 7

E.3 TRY TO PROCEED ONLY WITH PROPOSED ANTECEDENTS THAT ARE ACCORDING TO CHAPTER 6 OF THE FORM TO BE SUFFICIENT CONDITIONS OF THE ABSENCE OF BEHAVIOUR (AS PART OF THIS TRY TO FIND THE E THAT IS FOLLOWED BY SALIENCE OF B WHERE B IS INVOLVED)

For fullness as developed in chapters 5A, 5B, 5C and 6, and one system, as developed in chapter 6

E.4 SUCCESSFULLY PROCEED ONLY WITH PROPOSED ANTECEDENTS THAT ARE ACCORDING TO CHAPTER 6 OF THE

FORM TO BE SUFFICIENT CONDITIONS OF THE ABSENCE OF BEHAVIOUR

For validity of argument as developed in chapter 6, and admissability of psychical inferences as developed in chapter 5C

E.5 TRY TO PROCEED WITH PROPOSED ANTECEDENTS ONLY IF THEY ARE SUFFICIENT CONDITIONS OF THE ABSENCE OF THE BEHAVIOUR IN QUESTION

For fullness and admissabiity of psychical conclusions, as developed in chapter 5A

E.6 SUCCESSFULLY PROCEED WITH PROPOSED ANTECEDENTS ONLY IF THEY ARE SUFFICIENT CONDITIONS OF THE ABSENCE OF THE BEHAVIOUR IN QUESTION

For validity of argument, as developed in chapter 6

E.7 TRY TO PROCEED WITH ANTECEDENTS ONLY IF THEY CAN BE APPROPRIATELY INFERRED TO HAVE A SUFFICIENTLY STRONG POSSIBILITY OF ANY FUTURE INCIDENCE IN THE CIRCUMSTANCES IN QUESTION

For admissability of psychical conclusions as developed in chapter 5A, weight as developed in chapter 5B, and admissability of psychical inferences as developed in chapter 5C

E.8 SUCCESSFULLY PROCEED WITH ANTECEDENTS ONLY IF THEY CAN BE APPROPRIATELY INFERRED TO HAVE A SUFFICIENTLY STRONG POSSIBILITY OF ANY FUTURE INCIDENCE IN THE CIRCUMSTANCES IN QUESTION

For admissability of psychical inferences, as developed in chapter 5C

E.9 TRY TO PROCEED WITH ALL, SUBJECT TO LOCAL REQUIREMENTS, OF THE ACCEPTABLE ANTECEDENTS FOR ANY BEHAVIOUR IN QUESTION

From fullness, as developed in chapters 5A, 5B, 5C and 6

E.10 SUCCESSFULLY PROCEED WITH ALL, SUBJECT TO LOCAL REQUIREMENTS, OF THE ACCEPTABLE ANTECEDENTS FOR ANY BEHAVIOUR IN QUESTION

For validity of argument, as developed in chapters 6 and 7

F. AGENTS OF CHANGE AND NEW SUB-PROBLEMS

F.1 TRY TO PROCEED WITH PROPOSED AGENTS OF CHANGE ONLY IF THEY ARE IN THE TERMS OF CHAPTER 7 AND ACCORDING TO CHAPTER 7 EFFECTIVE REMOVERS OR TERMINATORS OF OCCASIONS OF THE ABSENCE OF THE BEHAVIOUR IN QUESTION

For one system and validity of argument, as developed in chapter 7

F.2 SUCCESSFULLY PROCEED WITH PROPOSED AGENTS OF CHANGE ONLY IF THEY ARE IN THE TERMS OF CHAPTER 7 AND ACCORDING TO CH 7 EFFECTIVE REMOVERS OR TERMINATORS OF OCCASIONS OF THE ABSENCE OF THE BEHAVIOUR IN QUESTION

For validity of argument as developed in chapter 7

F.3 TRY TO PROCEED WITH AGENTS ONLY IF THEY ARE IN TERMS OF THE BEHAVIOUR OF THE RECEIVING PRACTITIONER, SUBJECT OR HELPER IN THE LEAST COSTLY APPROPRIATE COMBINATION ACCORDING TO CHAPTER 7

For relevance to the receiver as developed in chapter 4, and minimal cost as developed in chapters 4, 5A, 6 and 7

F.4 SUCCESSFULLY PROCEED WITH AGENTS ONLY IF THEY ARE IN TERMS OF THE BEHAVIOUR OF THE RECEIVING PRACTITIONER, SUBJECT OR HELPER IN THE LEAST COSTLY APPROPRIATE COMBINATION ACCORDING TO CHAPTER 7

For validity of argument, as developed in chapters 6 and 7

F.5 TRY TO PROCEED WITH AGENTS ONLY IF THEY ARE FOR ALL CONCERNED MORALLY ACCEPTABLE AGENTS TARGETTING ELEMENTS THAT IT IS MORALLY ACCEPTABLE TO TARGET

For moral acceptability to all concerned

F.6 SUCCESSFULLY PROCEED WITH AGENTS ONLY IF THEY ARE FOR ALL CONCERNED MORALLY ACCEPTABLE AGENTS TARGETTING ELEMENTS THAT IT IS MORALLY ACCEPTABLE TO TARGET

For admissability of psychical inferences, as developed in chapter 5C

F.7 TRY TO PROCEED WITH AGENTS ONLY IF THEY WILL INVOLVE COSTS ACCEPTABLE FOR THE CLIENT

For acceptability in cost to the receiver, as developed in chapters 4 and 6

F.8 SUCCESSFULLY PROCEED WITH AGENTS ONLY IF THEY WILL INVOLVE COSTS ACCEPTABLE FOR THE CLIENT

For validity of argument, as developed in chapters 6 and 7

F.9 TRY TO PROCEED WITH AGENTS ONLY IF THEY ARE BEHAVIOUR THAT IS EXPECTABLE

For minimal cost, as developed in chapters 4, 5A, 6 and 7

F.10 SUCCESSFULLY PROCEED WITH AGENTS ONLY IF THEY ARE BEHAVIOUR THAT IS EXPECTABLE

For admissability of psychical inferences, as developed in chapter 5C

F.11 TRY TO PROCEED WITH NO MORE THAN ONE AGENT PER OCCASION

For minimal cost, as developed in chapters 4, 5A, 6 and 7

F.12 SUCCESSFULLY PROCEED WITH NO MORE THAN ONE AGENT PER OCCASION

For validity of argument, as developed in chapters 6 and 7

F.13 TRY TO PROCEED ONLY WITH THE FIRST AVAILABLE AND ACCEPTABLE OF THE FOLLOWING: AGENTS FOR CHANGING E, AGENTS FOR B, AGENTS FOR OTHER TARGETS

For minimal cost, as developed in chapters 4, 5A, 6 and 7

F.14 SUCCESSFULLY PROCEED ONLY WITH THE FIRST AVAILABLE AND ACCEPTABLE OF THE FOLLOWING: AGENTS FOR CHANGING E, AGENTS FOR B, AGENTS FOR OTHER TARGETS

For validity of argument, as developed in chapters 6 and 7

F.15 TRY TO PROCEED WITH ALL THE ACCEPTABLE AGENTS, SUBJECT TO LOCAL REQUIREMENTS

For fullness, as developed in chapters 5A, 5B, 5C and 6

F.16 SUCCESSFULLY PROCEED WITH ALL THE ACCEPTABLE AGENTS, SUBJECT TO LOCAL REQUIREMENTS

For validity of argument, as developed in chapters 6 and 7

F.17 TRY TO LIST ONLY THE PRESENTLY AVAILABLE AGENTS AND DECLARE ALL THE OTHERS TO BE SUB-PROBLEMS FOR FURTHER PROCESSING

For minimal cost as developed in chapters 4, 5A, 6 and 7, and fullness as developed in chapters 5A, 5B, 5C and 6

F.18 SUCCESSFULLY LIST ONLY THE PRESENTLY AVAILABLE AGENTS AND DECLARE ALL THE OTHERS TO BE SUB-PROBLEMS FOR FURTHER PROCESSING

For admissability of psychical inferences, as developed in chapter 5C

F.19 TRY TO LIST ALL THE PRESENTLY AVAILABLE AGENTS AND DECLARE ONLY THE OTHERS TO BE SUB-PROBLEMS FOR FURTHER PROCESSING

For fullness as developed in chapters 5A, 5B, 5C and 6, and minimal cost as developed in chapters 4, 5A, 6 and 7

F.20 SUCCESSFULLY LIST ALL THE PRESENTLY AVAILABLE AGENTS AND DECLARE ONLY THE OTHERS TO BE SUB-PROBLEMS FOR FURTHER PROCESSING

For admissability of psychical inferences, as developed in chapter 5C

G. RELATIONS AMONG AGENTS

G.1 TRY TO PROCEED ONLY WITH AGENTS THAT ARE CORRECTLY IDENTIFIED AS IDENTICAL, COMPLEMENTARY IN PERFORMANCE, UNRELATED, CONTRADICTORY IN PERFORMANCE OR CONTRADICTORY IN EFFECT

For coherence, as developed in chapter 4

G.2 SUCCESSFULLY PROCEED ONLY WITH AGENTS THAT ARE CORRECTLY IDENTIFIED AS IDENTICAL, COMPLEMENTARY IN PERFORMANCE, UNRELATED, CONTRADICTORY IN PERFORMANCE OR HAVING CONTRADICTORY EFFECT

For validity of argument, as developed in chapters 6 and 7

G.3 TRY TO PROCEED ONLY WITH CONTRADICTIONS AND THREATS OF CONTRADICTORY EFFECTS REMOVED

For coherence, as developed in chapter 4

G.4 SUCCESSFULLY PROCEED ONLY WITH CONTRADICTIONS AND THREATS OF CONTRADICTORY EFFECTS REMOVED

For validity of argument, as developed in chapters 6 and 7

G.5 TRY TO REMOVE CONTRADICTIONS AND THREATS OF CONTRADICTORY EFFECTS BY CHANGING AGENTS, FAILING THAT CHANGING TARGETS, FAILING THAT ABANDONING THE

SMALLEST NUMBER OF AGENTS POSSIBLE

For fullness as developed in chapters 5A, 5B, 5C and 6, and coherence as developed in chapter 4

G.6 SUCCESSFULLY REMOVE CONTRADICTIONS AND THREATS OF CONTRADICTIONARY EFFECTS BY CHANGING AGENTS, FAILING THAT CHANGING TARGETS, FAILING THAT ABANDONING THE SMALLEST NUMBER OF AGENTS POSSIBLE

For validity of argument, as developed in chapters 6 and 7

G.7 TRY TO ADD INFORMATION INDICATING THE WEIGHT OF INCLUDED AGENTS AND WHICH ARE THE EXCLUDED OCCASIONS

For fullness, as developed in chapters 5A, 5B, 5 and 6

G.8 SUCCESSFULLY ADD INFORMATION INDICATING THE WEIGHT OF INCLUDED AGENTS AND WHICH ARE THE EXCLUDED OCCASIONS

For validity of argument, as developed in chapters 6 and 7

H. CHANGES OF PLAN AFTER UNSUCCESSFUL ACTION

H.1 AFTER ACTION IS TAKEN, TRY TO PROCEED ONLY WHEN IT IS KNOWN WHETHER ALL DESIRED BEHAVIOURS OF SUBJECTS APPEARED, WHETHER EACH OCCASION APPEARED, WHETHER EACH AGENT WAS PERFORMED

For fullness, as developed in chapters 5A, 5B, 5C and 6

H.2 AFTER ACTION IS TAKEN, SUCCESSFULLY PROCEED ONLY WHEN IT IS KNOWN WHETHER ALL DESIRED BEHAVIOURS OF SUBJECTS APPEARED, WHETHER EACH OCCASION APPEARED, WHETHER EACH AGENT WAS PERFORMED

For validity of argument, as developed in chapters 6 and 7

H.3 IF ALL DESIRED BEHAVIOURS OF SUBJECTS APPEARED, TRY TO PROCEED ONLY TO A NEW PROBLEM, A NEW CLIENT OR RETIREMENT

For minimal cost, as developed in chapters 4, 5A, 6 and 7

H.4 IF ALL DESIRED BEHAVIOURS OF SUBJECTS APPEARED, SUCCESSFULLY PROCEED ONLY TO A NEW PROBLEM, A NEW CLIENT OR RETIREMENT

For validity of argument, as developed in chapters 6 and 7

H.5 IF A BEHAVIOUR OF A SUBJECT DID NOT APPEAR AND AN AGENT WAS PERFORMED INCORRECTLY, TRY TO DECLARE ITS CORRECT PRODUCTION TO BE A SUB-PROBLEM FOR FURTHER PROCESSING

For fullness, as developed in chapters 5A, 5B, 5C and 6

H.6 IF A BEHAVIOUR OF A SUBJECT DID NOT APPEAR AND AN AGENT WAS PERFORMED INCORRECTLY, SUCCESSFULLY DECLARE ITS CORRECT PRODUCTION TO BE A SUB-PROBLEM FOR FURTHER PROCESSING

For validity of argument, as developed in chapters 6 and 7

H.7 IF A BEHAVIOUR OF A SUBJECT DID NOT APPEAR AND THE AGENT WAS PERFORMED CORRECTLY BUT THE OCCASION WAS NOT REMOVED, TRY TO RE-RUN THE PROCESS FROM STAGE F

For fullness, as developed in chapters 5A, 5B, 5C and 6

H.8 IF A BEHAVIOUR OF A SUBJECT DID NOT APPEAR AND AGENT WAS PERFORMED CORRECTLY BUT THE OCCASION WAS NOT REMOVED, SUCCESSFULLY RE-RUN THE PROCESS FROM STAGE F

For validity of argument, as developed in chapters 6 and 7

H.9 IF A BEHAVIOUR OF A SUBJECT DID NOT APPEAR BUT THE OCCASION WAS REMOVED, TRY TO DELETE THE AGENTS IN QUESTION AND RE-RUN THE PROCESS FROM STAGE D

For fullness, as developed in chapters 5A, 5B, 5C and 6

H.10 IF A BEHAVIOUR OF A SUBJECT DID NOT APPEAR BUT THE OCCASION WAS REMOVED, SUCCESSFULLY DELETE THE AGENTS IN QUESTION AND RE-RUN THE PROCESS FROM STAGE D

For validity of argument, as developed in chapters 6 and 7

8D. COMMENTARY

The proposed process is not what everyone must use: it is a standard against which to evaluate various strategies - there may be justifiable short-cuts. For example by a kind of naive analysis of variance one might rule out a number of possibilities right at the start of an application. The purpose of the standard is to assess what this short-cut would gain and lose in costs and effects compared with a fuller procedure.

The proposed standard process envisages providing possibilities with no guarantees.

It is intended to be comprehensible by the human mind, and this gives it a different angle from attempts to bring constellations of factors together statistically in causal modelling or policy capturing.

The process concerns itself with one isolated problem, which in real life may be part of something bigger. The process tries to help a receiver with a problem. Someone else might come along and think that it is not in that receiver's best interests to be helped with problem. That could be seen as another question with another receiver (the person

who came along) and another subject (the original receiver). In principle the standard process could address it.

Distinguishing marks of the proposed standard include these: it does not overemphasize motive at the expense of means and opportunity; it does not include the notion of syndromes or symptoms; it does not search for one causal well-spring; it runs little risk: if it picks a wrong agent there will rarely be severely adverse consequences or other heavy costs.

A number of simplifications, which should be listed: it looks only for ANY future incidence; it avoids precise quantification; it looks for aversions or attractions that are strong enough to overwhelm other current considerations; it adopts the notion that high, moderate and low values of different variables are equivalent; it adopts a rule of thumb for the order in which elements of occasions should be considered as targets.

It is difficult to find other examples of standard processes to compare this one with. Nye (1982) has a 'model of applied research'. This amounts to his advocating that literature searches be conducted on issues of concern to a large public and that special efforts be made to communicate the results of the

searches. This is fine as far as it goes; but he take the conventional academic literature as the only source of information, he does not consider the weight of reported effects, and he does not define practical problems more finely than by the names of topics in his literature.

The nearest things available to be compared with the proposed standard are strategies recommended to professional psychologists, the problem-oriented strategy and the system-oriented strategy. They share part of the brief for the proposed standard, that it should be the best practicable by existing unaided practitioners. But they could not be expected to share the part of the brief that required enough articulacy to link each step to a fundamental desideratum.

PROBLEM-ORIENTED STRATEGY

This strategy appears in a number of formulations, lately by Cameron & Stratford (1987).

1. List problems until none remain
2. Select one problem to be given priority
3. Specify the selected problem operationally

4. Obtain a measure of how frequently the selected problem occurs

5. Identify probably controlling conditions

6. Specify a desired outcome

7. Formulate and agree possible intervention

8. Implement intervention

9. Record and monitor intervention

10. If the intervention is successful, select the next problem to be given priority or agree that no further intervention is necessary. If the intervention is unsuccessful, agree a new intervention and repeat stages 4 - 9.

Although the strategy has broad features in common with the process proposed here, it does not spell out the detail. It is left to the particular operator of the strategy where in psychology or elsewhere ideas for possible obstacles and agents might come from, how relevance might be judged, what the term 'probably' might implies for how weight is dealt with, whether criteria of moral acceptability, cost or coherence might have to be met, how sub-problems

might be dealt with, and whether a trade-off between cost and effect might be contemplated.

This strategy does not articulate the various places where psychological knowledge might make a contribution nor the various bits of psychology that might make contributions. Presumably it was not its purpose to do so. On the other hand the strategy does not suggest any additions to be made to the proposed standard.

SYSTEM-ORIENTED STRATEGY

An example of this is the 'soft systems methodology' as developed by Checkland (1981). It uses the notion of system as a tool, and the softness is in the fact that systems are not imposed but rather used to raise issues for discussion.

A system is for the purpose of transforming some input into some output. A consultant addresses a situation. S/he collects much information about it, identifies various purposes that play a part in it, compares what actually happens with what would be the systematic way of fulfilling each purpose, and invites the people in the situation to discuss the places where the reality is not systematic. The sought outcome is that a number of action points are agreed.

What is the equivalent of chapter's 8's identifying a problem? The last stage, producing agreed action points, is identifying solutions, and therefore the problems must be identified at an earlier stage.

The first stage is not identifying problems either: it is just collecting information. The identification of the problems seems to come from the idea that some purpose could be part of the situation: this implies that any failure to be systematic in fulfilling this purpose is a problem, though with the rider that it must be agreed to be a problem by the people in the situation.

This way of identifying problems would seem to be most useful when there is likely to be some difficulty, for example when numbers of people with different agenda are necessarily involved in each other's problems: everyone can have some agenda attended to and has a veto; therefore cooperation necessary to the solution of another's problem may be forthcoming that would not be forthcoming otherwise

Checkland describes this approach as suitable for the mess in a phrase akin to Schon's (1973) 'swampy lowground' referred to in chapter 1; but soft systems methodology does not seem on its own to be

the solution to Schon's problem of unique, conflicted situations dealt with by one person

The approach also fights shy of identifying a receiver, or at least of identifying a single receiver/commissioner. Each system has an 'owner' who could abolish it. The point is that where there are many people, they can jointly receive the information concerning all the problems. This is not a departure from the standard if one thinks of the action as being taken by all the receivers together, for example the whole staff of a school.

Selecting agents of change is not seen as problematical. This may be appropriate where the identified problem is not psychical, as in many cases it may not be. But for psychical problems there is still the question of deciding what to do, and soft systems methodology appears to leave that to the unadvised practitioner, just as Cameron & Stratford (1987) do.

Acceptability of cost and morality are covered by the requirement that receivers agree to the steps to be taken. But there is no mention of the balance between costs and effects, perhaps because there is little scope for shortcircuiting the strategy.

Examination of this strategy does not suggest any

additions to the proposed standard. Nor any subtractions - the degree of articulation here is much lower than that required for the standard, but may be attributable to the difference in purpose between the standard and the strategy.

CHAPTER NINE

ROLES FOR KNOWLEDGE IN PSYCHICAL PRACTICE

This chapter uses the best practicable standard as proposed in chapter 8 to derive what the roles for knowledge ought to be in psychical practice, and then goes on to ask which of these roles must or may be played by formal psychology and which other kinds of information must or may be involved.

The sections cover (A) roles for knowledge, (B) roles for generic psychology, (C/D) other sources of information that must or may have roles, and (E) commentary.

9A ROLES FOR KNOWLEDGE

The knowledge required depends on the use to be made of the process of application: different users can

be distinguished.

There is the user whose practice is intended to be the solving of recognized problems using given applied information - the simple solver.

There are those whose practice is intended to involve deriving some of their own solutions to problems which may be as yet unrecognized. This group can be divided into the type who might follow a given process of application to address a new problem, and the type who might update a given process - the process follower and the process updater.

There is also the practitioner (though this could be more often an academic's task) who might design a new process given a certain brief - the designer.

9A.1 DECISIONS MADE BY THE SIMPLE SOLVER

A practitioner who addresses problems with given applied information, that is by following recommendations, having decided to follow the recommendations need only make further decisions if the recommendations specify conditions - then the decision will be needed of whether the specified conditions exist.

9A.2 QUESTIONS TO BE ANSWERED BY FOLLOWERS OF THE CHAPTER 8 PROCESS

A practitioner who addresses a problem by applying knowledge according to the proposed standard process will need to make the following decisions:

- what may be an acceptable problem
- whether something is a problem
- whether a problem is psychical
- whether a problem concerns future change in terms of thresholds introducing something desired
- whether a problem is within the practice of any person
- whether a problem is presented in positive terms
- whether a problem is clearly of termination or prevention
- whether a problem is commissioned
- who may be people whose psyches are the subject of the problem
- whether someone is a person whose psyche is the subject of a problem
- whether someone is commissioned for as a subject
- who may be people who will deal with a given problem
- whether someone is a person who will deal with a given problem
- whether someone is a commissioned receiver
- whether a person's sensitivity to cost is usual, unusually great, or unusually small
- whether two or more receivers share their sensitivity to cost
- whether two or more receivers share their relationships with subjects
- what may be an acceptable behaviour
- whether something is a behaviour
- whether a behaviour is tied to identified

circumstances

-whether a behaviour is tied to one person or type of persons

-whether a particular behaviour is relevant to a particular motive or state

-whether a particular behaviour is relevant to a particular event

-whether a particular behaviour is expectable of a particular person in particular present or future circumstances

-whether a particular behaviour is available at will or on request of a particular person in particular present or future circumstances

-what behaviour is required for a particular LCE

-whether one behaviour (including the behaviour required for a particular LCE) is incompatible with another

-whether a particular behaviour could reasonably have been attended to in particular circumstances

-whether ability/difficulty variables refer to components of particular behaviour

-whether a particular aversion or attraction could be linked to a particular behaviour in a reasonable belief in someone's mind

-whether particular proposed antecedents are according to chapter 6 of the form to be sufficient conditions of the absence of behaviour

-which E might be followed by salience of a particular belief

-whether particular proposed antecedents are sufficient conditions of the absence of a particular behaviour

-whether an occasion is of sufficient weight by a rule based on its past occurrences and non-occurrences and similarity of persons and circumstances

-whether a particular proposed agent is in terms of chapter 7

-whether a particular proposed agent is effective according to chapter 7

-whether a particular agent is in terms of the behaviour of a particular receiver

whether a particular agent is the least costly

alternative allowed by chapter 7

-whether an element of an antecedent is the one that is supposed to have priority as a target

-what would be a particular manifestation of a generally expressed agent

-whether something is a particular manifestation of a generally expressed agent

-what might be agents of termination or prevention of an E target that is not psychical

-whether something is an agent of termination or prevention of an E target

-what the introduction of a change-agent requires of the receiver of information

-what may be agents morally unacceptable to use or directed to targets that it is morally unacceptable to target

-whether an agent is morally acceptable to use or directed to a target that it is morally acceptable to select as a target

-whether an agent is acceptable in cost to a particular person (the receiver)

-whether there is more than one agent per target

-whether agents are identical, unrelated, complementary in performance or contradictory in performance

-whether agents are contradictory in effect

-whether desired behaviour appears when recommendations are implemented

-whether occasions are removed when recommendations are implemented

-whether agents are performed correctly when recommendations are implemented

9A.3 QUESTIONS TO BE ANSWERED BY UPDATERS OF THE CHAPTER 8 PROCESS

A practitioner who updates the standard process of application will need to make the following decisions:

-what may be additional acceptable members of given categories of antecedent

-whether a proposed additional member of given category of antecedent is acceptable

-what might be a desirable change in the criterion of acceptable weight

-whether a proposed change in the criterion of acceptable weight is desirable

-what might be desirable changes in the order of priority for elements of antecedents to be targetted

-whether a proposed change in the order of priority for elements of antecedents to be targetted is desirable

9A.3 QUESTIONS TO BE ANSWERED BY THE DESIGNER OF A JUSTIFIED BEST PROCESS

Someone who designs a process of application, given a brief similar to the present one, will need to decide:

-what may be fundamental product desiderata

-what fundamental product desiderata to have

-what may be process desiderata implied by the product desiderata

-what proposed process desiderata are implied by the product desiderata

-what may be operational definitions of the desiderata that require them (e.g. cost, relevance to practice, admissability of psychical conclusions, weight, admissability of data for psychical inferences and sources of those data, coherence)

-what proposed operational definitions are acceptable

-what may be desirable criteria of acceptable weight

-which proposed criterion of acceptable weight is desirable

-what may be acceptable categories of antecedent

-what proposed categories of antecedent are acceptable

-what members of categories of antecedent may be acceptable

-what proposed members of categories of antecedent are acceptable

-what may be acceptable change-agents in general terms

-what proposed change-agents in general terms are acceptable

-what order of priority are elements of antecedents to be targetted in

9B. THE ROLE OF PSYCHOLOGY

This section asks about the role of generic psychology in answering the foregoing questions: (1) in which MUST formal psychology be involved, (2) in which MAY it be involved, and in which can it NOT be involved?

It depends to some extent on one's definition of psychology. Here it is regarded as not including the disciplines of methodology or philosophy, though questions of the definition of behaviour and of the admissability of psychical conclusions are allowed to be in psychology as well as philosophy.

9B.1 WHERE PSYCHOLOGY MUST BE INVOLVED

Which of the foregoing questions could not be adequately answered without knowledge of formal psychology?

None - this list has no entries

9B.2 WHERE PSYCHOLOGY MAY OFFER ONE ALTERNATIVE

Which of the questions in 9A could be answered at least partly on some occasions by formal psychology?

The answer: in concluding -

FOLLOWERS' QUESTIONS

- whether someone is a person whose psyche is the subject of a problem
- whether someone is a person who will deal with a given problem
- what may be an acceptable behaviour
- whether something is a behaviour
- whether a particular behaviour is relevant to a particular motive or state
- whether a particular behaviour is relevant to a particular event
- whether a particular behaviour is expectable of a particular person in particular present or future circumstances
- whether a particular behaviour is available at will or on request of a particular person in particular present or future circumstances
- what behaviour is required for a particular LCE

-whether one behaviour (including the behaviour required for a particular LCE) is incompatible with another

-whether a particular behaviour could reasonably have been attended to in particular circumstances

-whether a particular aversion or attraction could be linked to a particular behaviour in a reasonable belief in someone's mind

-whether particular proposed antecedents are according to chapter 6 of the form to be sufficient conditions of the absence of behaviour

-which E might be followed by salience of a particular belief

-whether particular proposed antecedents are sufficient conditions of the absence of a particular behaviour

-whether an occasion is of sufficient weight by a rule based on its past occurrences and non-occurrences and similarity of persons and circumstances

-what the introduction of a change-agent requires of the receiver of information

-whether agents are contradictory in effect

UPDATERS' QUESTIONS

-what may be additional acceptable members of given categories of antecedent

-whether a proposed additional member of given category of antecedent is acceptable

-what might be a desirable change in the criterion of acceptable weight

-whether a proposed change in the criterion of acceptable weight is desirable

-what might be desirable changes in the order of priority for elements of antecedents to be targetted

-whether a proposed change in the order of priority for elements of antecedents to be targetted is desirable

DESIGNERS' QUESTIONS

-what may be operational definitions of

- admissability of psychical conclusions
- what proposed operational definitions are acceptable
- which proposed criterion of acceptable weight is desirable (depends to some extent on what data are likely to be available)
- what may be acceptable categories of antecedent
- what proposed categories of antecedent are acceptable
- what members of given categories of antecedent may be acceptable
- what proposed members of categories of antecedent are acceptable
- what may be acceptable change-agents in general terms
- what proposed change-agents in general terms are acceptable
- what order of priority are elements to antecedents to be targetted in

9B.3 WHERE PSYCHOLOGY CANNOT BE INVOLVED

Which of the questions in section 9A could be answered without ever appropriately using a contribution from formal psychology?

The answer: in concluding

FOLLOWERS' QUESTIONS

- what may be an acceptable problem
- whether something is a problem
- whether a problem is psychical
- whether a problem concerns future change in terms of thresholds introducing something desired
- whether a problem is within the practice of any person

- whether a problem is presented in positive terms
- whether a problem is clearly of termination or prevention
- whether a problem is commissioned
- who may be people whose psyches are the subject of the problem
- whether someone is commissioned for as a subject
- who may be a person who will deal with a given problem
- whether someone is a commissioned receiver
- whether a person's sensitivity to cost is usual, unusually great, or unusually small
- whether two or more receivers share their sensitivity to cost
- whether two or more receivers share their relationships with subjects
- whether a behaviour is tied to identified circumstances
- whether a behaviour is tied to one person or type of persons
- whether ability/difficulty variables refer to components of particular behaviour
- whether a particular proposed agent is in terms of chapter 7
- whether a particular proposed agent is effective according to chapter 7
- whether a particular agent is in terms of the behaviour of a particular receiver
- whether a particular agent is the least costly alternative allowed by chapter 7
- whether an element of an antecedent is the one supposed to have priority as a target
- what would be a particular manifestation of a generally expressed agent
- whether something is a particular manifestation of a generally expressed agent
- what might be agents of termination or prevention of an E target that is not psychical

- whether something is an agent of termination or prevention of an E target
- what may be agents that are morally unacceptable to use or directed to targets that are morally unacceptable to target
- whether an agent is morally acceptable to use or directed to a target that it is morally acceptable to select as a target
- whether an agent is acceptable in cost to the receiver
- whether there is more than one agent per target
- whether agents are identical, unrelated, complementary in performance or contradictory in performance
- whether desired behaviour appears when recommendations are implemented
- whether occasions are removed when recommendations are implemented
- whether agents are performed correctly when recommendations are implemented

UPDATERS' QUESTIONS

None

DESIGNERS' QUESTIONS

- what may be fundamental product desiderata
- what fundamental product desiderata to have
- what may be process desiderata implied by the product desiderata
- what proposed process desiderata are implied by the product desiderata
- what may be operational definitions of the desiderata that require them (e.g. cost, relevance to practice, weight, admissability of data for psychical inferences and sources of those data, coherence)
- what proposed operational definitions are acceptable
- what may be desirable criteria of acceptable weight

9C/D SOURCES OTHER THAN GENERIC PSYCHOLOGY

Where psychology is not involved in answering the foregoing questions, what sources ARE involved?

The following classification of the 'other' sources seems to be required by the data, as will be seen below: (1) common intelligence, knowledge of the commission, knowledge of the subject, knowledge of the receiver, knowledge of the particular conditions, knowledge of similar conditions and people, and knowledge of specialised techniques.

9C. WHERE NON-PSYCHOLOGY MUST BE INVOLVED

9C.1 QUESTIONS CALLING FOR COMMON INTELLIGENCE

FOLLOWERS' QUESTIONS

- what may be an acceptable problem
- whether something is a problem
- whether a problem is psychical
- whether a problem concerns future change in terms of thresholds introducing something desired
- whether a problem is within the practice of any person
- whether a problem is presented in positive terms

- whether a problem is clearly of termination or prevention
- whether a behaviour is tied to identified circumstances
- whether a behaviour is tied to one person or type of persons
- whether a particular proposed agent is in terms of chapter 7
- whether a particular proposed agent is effective according to chapter 7
- whether a particular agent is in terms of the behaviour of a particular receiver
- whether a particular agent is the least costly alternative allowed by chapter 7
- whether an element of an antecedent is the one supposed to have priority as a target
- what would be a particular manifestation of a generally expressed agent
- whether something is a particular manifestation of a generally expressed agent
- what might be agents of termination or prevention of an E target that is not psychical
- whether something is an agent of termination or prevention of an E target
- whether there is more than one agent per target
- whether agents are identical, unrelated, complementary in performance or contradictory in performance
- whether desired behaviour appears when recommendations are implemented
- whether occasions are removed when recommendations are implemented
- whether agents are performed correctly when recommendations are implemented

DESIGNERS' QUESTIONS

- what may be fundamental product desiderata
- what fundamental product desiderata to have

-what may be process desiderata implied by the product desiderata

-what proposed process desiderata are implied by the product desiderata

-what may be operational definitions of the desiderata that require them (e.g. cost, relevance to practice, weight, admissability of data for psychical inferences and sources of those data, coherence)

-what proposed operational definitions are acceptable

-what may be desirable criteria of acceptable weight

9C.2 QUESTIONS CALLING FOR KNOWLEDGE OF THE COMMISSION

FOLLOWERS' QUESTIONS

-whether a problem is commissioned

-whether someone is commissioned for as a subject

-whether someone is commissioned as a receiver

9C.3 QUESTIONS CALLING FOR KNOWLEDGE OF THE SUBJECT

FOLLOWERS QUESTIONS

-whether two or more receivers share their relationships with subjects

-what may be agents that are morally unacceptable to use or directed to targets that are morally unacceptable to target

-whether an agent is morally acceptable to use or directed to a target that it is morally acceptable to select as a target

9C.4 QUESTIONS CALLING FOR KNOWLEDGE OF THE RECEIVER

FOLLOWERS' QUESTIONS

-whether a person's sensitivity to cost is usual, unusually great, or unusually small

-whether two or more receivers share their sensitivity to cost

-whether two or more receivers share their relationships with subjects

-what may be agents that are morally unacceptable to use or directed to targets that are morally unacceptable to target

-whether an agent is morally acceptable to use or directed to a target that it is morally acceptable to select as a target

-whether an agent is acceptable in cost to the receiver

9C.5 QUESTIONS CALLING FOR KNOWLEDGE OF THE PARTICULAR CONDITIONS

FOLLOWERS' QUESTIONS

-what may be agents that are morally unacceptable to use or directed to targets that are morally unacceptable to target

-whether an agent is morally acceptable to use or directed to a target that it is morally acceptable to select as a target

9C.6 QUESTIONS CALLING FOR KNOWLEDGE OF COMMON CONDITIONS AND PEOPLE

FOLLOWERS' QUESTIONS

-what may be acceptable problems

-who may be people whose psyches are the subject of the problem

-who may be a person who will deal with a given problem

-what would be a particular manifestation of a generally expressed agent

-whether something is a particular manifestation of a generally expressed agent

-what might be agents of termination or prevention of an E target that is not psychical

-whether something is an agent of termination or prevention of an E target

-what may be agents that are morally unacceptable to use or directed to targets that are morally unacceptable to target

-whether an agent is morally acceptable to use or directed to a target that it is morally acceptable to select as a target

9C.7 QUESTIONS CALLING FOR KNOWLEDGE OF SPECIALIZED TECHNIQUES

FOLLOWERS' QUESTIONS

- what may be agents that are morally unacceptable to use or directed to targets that are morally unacceptable to target (ethics)
- whether an agent is morally acceptable to use or directed to a target that it is morally acceptable to select as a target (assessment techniques)

DESIGNERS' QUESTIONS

- what may be fundamental product desiderata
- what fundamental product desiderata to have
- what may be operational definitions of the desiderata that require them (e.g. cost, relevance to practice, weight, admissability of data for psychical inferences and sources of those data, coherence)
- what proposed operational definitions are acceptable
- what may be desirable criteria of acceptable weight

9D. WHERE NON-PSYCHOLOGY CONTRIBUTES WHEN PSYCHOLOGY IS ANOTHER CONTRIBUTOR OR COMPETITOR

9D.1 QUESTIONS CALLING FOR COMMON INTELLIGENCE

FOLLOWERS

- whether someone is a person whose psyche is the subject of a problem
- whether someone is a person who will deal with a given problem
- whether something is a behaviour
- whether a particular behaviour is relevant to a particular motive or state
- whether a particular behaviour is relevant to a particular event
- what behaviour is required for a particular LCE
- whether one behaviour (including the behaviour required for a particular LCE) is incompatible with

another

-whether a particular behaviour could reasonably have been attended to in particular circumstances

-whether ability/difficulty variables refer to components of particular behaviour

-whether a particular aversion or attraction could be linked to a particular behaviour in a reasonable belief in someone's mind

-whether particular proposed antecedents are according to chapter 6 of the form to be sufficient conditions of the absence of behaviour

-which E might be followed by salience of a particular belief

-whether particular proposed antecedents are sufficient conditions of the absence of a particular behaviour

-whether something is an effective agent of change in general terms for a given target

-what the introduction of a change-agent requires of the receiver of information

-whether agents are contradictory in effect

UPDATER'S QUESTIONS

-what may be additional acceptable members of given categories of antecedent

-whether a proposed additional member of given category of antecedent is acceptable

-what might be a desirable change in the criterion of acceptable weight

-whether a proposed change in the criterion of acceptable weight is desirable

-what might be desirable changes in the order of priority for elements of antecedents to be targetted

-whether a proposed change in the order of priority for elements of antecedents to be targetted is desirable

DESIGNERS' QUESTIONS

-which proposed criterion of acceptable weight is desirable

-what members of given categories of antecedent may

be acceptable

-what proposed members of categories of antecedent are acceptable

-what may be acceptable change-agents in general terms

-what proposed change-agents in general terms are acceptable

-what order of priority are elements to antecedents to be targetted in

9D.2 QUESTIONS CALLING FOR KNOWLEDGE OF THE COMMISSION

none

9D.3 QUESTIONS CALLING FOR KNOWLEDGE OF THE SUBJECT

FOLLOWERS' QUESTIONS

-whether a particular behaviour is expectable of a particular person in particular present or future circumstances

-whether a particular behaviour is available at will or on request of a particular person in particular present or future circumstances

-whether an occasion is of sufficient weight by a rule based on its past occurrences and non-occurrences and similarity of persons and circumstances

-whether an agent is morally acceptable to use or directed to a target that it is morally acceptable to select as a target

-whether an agent is acceptable in cost to a particular person (the receiver)

9D.4 QUESTIONS CALLING FOR KNOWLEDGE OF THE RECEIVER

FOLLOWERS' QUESTIONS

-whether a particular behaviour is expectable of a particular person in particular present or future circumstances

-whether a particular behaviour is available at will or on request of a particular person in particular present or future circumstances

-whether an agent is morally acceptable to use or directed to a target that it is morally acceptable to select as a target

9D.5 QUESTIONS CALLING FOR KNOWLEDGE OF THE PARTICULAR CIRCUMSTANCES

FOLLOWERS QUESTIONS

-whether a particular behaviour is expectable of a particular person in particular present or future circumstances

-whether a particular behaviour is available at will or on request of a particular person in particular present or future circumstances

-whether an occasion is of sufficient weight by a rule based on its past occurrences and non-occurrences and similarity of persons and circumstances

9D.6 QUESTIONS CALLING FOR KNOWLEDGE OF COMMON CONDITIONS AND PEOPLE

FOLLOWERS QUESTIONS

-whether a particular behaviour is expectable of a particular person in particular present or future circumstances

-whether a particular behaviour is available at will or on request of a particular person in particular present or future circumstances

-whether an occasion is of sufficient weight by a rule based on its past occurrences and non-occurrences and similarity of persons and circumstances

-whether a particular aversion or attraction could be linked to a particular behaviour in a reasonable belief in someone's mind

-whether a particular behaviour could reasonably have been attended to in particular circumstances

-what may be agents morally unacceptable to use or directed to targets that it is morally unacceptable to target

UPDATERS' QUESTIONS

-what may be additional acceptable members of given categories of antecedent

-whether a proposed additional member of given category of antecedent is acceptable

-what might be a desirable change in the criterion of acceptable weight

-whether a proposed change in the criterion of acceptable weight is desirable

-what might be desirable changes in the order of priority for elements of antecedents to be targetted

-whether a proposed change in the order of priority for elements of antecedents to be targetted is desirable

DESIGNER'S QUESTIONS

-what members of given categories of antecedent may be acceptable

9D.7 QUESTIONS CALLING FOR KNOWLEDGE OF SPECIALIZED TECHNIQUES

FOLLOWERS' QUESTIONS

-whether someone is a person whose psyche is the subject of a problem

DESIGNERS' QUESTIONS

-what may be operational definitions of admissability of psychical conclusions

-what proposed operational definitions are acceptable

-what may be acceptable categories of antecedent

9E. COMMENTARY

There is nothing that psychology offers uniquely.

There are some questions that psychology can never answer - the applier of psychology who is a process follower needs, beside the psychology, things like local knowledge and common intelligence.

There are many instances in which psychology is an alternative source. Psychology could be the

preferable alternative, but quite possibly not.

Psychology can obviously produce ideas for possible antecedent variables. As for weight, psychology may well be able to produce records of the occurrence of O with any persons in any circumstances. The likelihood is smaller that formal psychology will be able to produce records of the occurrence of O with persons highly similar to the one in question or in circumstances highly similar to those in question. The likelihood is quite small that formal psychology will be able to produce records of the occurrence of O with the same person who is in question or in circumstances the same as those in question. Non-psychology may well be able to do all these.

Psychology offers no special education in how to argue validly. Its formality is not even a guarantee for second-hand use of the arguments it contains: invalidity is found not only in the everyday arguments discussed by Thouless (1933), Flew (1975) and others, but also in professional studies of human behaviour, as demonstrated, for example, by Fischer (1971) in his book about historians' fallacies.

What of the notion that information from psychology is better justified or warranted than information from other sources? Variables do not need much warranting merely to be antecedent possibilities, and

the assessment of relevance and weight that would
give warrant to a possibility are applicable equally
to possibilities from everywhere.

CHAPTER TEN

USE OF THE STANDARD TO ANALYSE APPLICATIONS AT LARGE

The purpose of this chapter is to show the use of the standard process of application proposed in chapter 8 as a tool for analysing any application of knowledge to psychical practice.

The following sections give (A) the general approach, (B) possible departures from the standard process, (C) possible effects of process departures, and (D) commentary.

10A. THE GENERAL APPROACH

I propose to distinguish: the fundamentals that

determine the shape of the process, the process itself, the information produced, and the effect of that information when used as intended.

The fundamentals are (a) the briefing (such as being confined to the psychical and to the best practicable), (b) the properties adopted as desirable (such as in chapter 3), and the operationalizing of these properties (such as in chapters 4 to 7).

Following this division, some analytic purposes suggest themselves:

(a) One may wish to compare any process to the standard process.

(b) One may wish to know where differences in process came from, or one may wish to ask what differences in process might flow from a given difference in fundamentals.

(c) One may wish to know what differences in product or in effect may flow from a difference in process. One may wish to find what effects would be lost by a cost-saving curtailment of the standard process, or one may wish to know how much more expensive one would have to make the process to achieve a given effect.

The foregoing suggests that it would be useful to link process differences with product and effect differences and cost differences. Accordingly the approach will be (a) to focus on the process, (b) to use the notion of a departure from each step in the standard process, and (c) to list all the departures, deriving them from the steps in the standard process as articulated in chapter 8. Section H will be omitted because it comes into play after action is taken, and the applications to be analysed are before action is taken.

Then I will trace the effects of each process departures on the rest of the process, on the information produced and on the effect of the information if used as intended. The links between the fundamentals and each step in the process are given in chapter 8.

10B. POSSIBLE DEPARTURES FROM THE STANDARD PROCESS

This section lists the departures

I retain the lettering and numbering (Stages A - J) used in chapter 8.

- A.A Proceeding otherwise than by addressing problems
- A.B Proceeding with a problem that is not psychological
- A.C Proceeding with a hitherto acceptable problem that does not concern practice
- A.D Proceeding with a hitherto acceptable problem that is not within the practice of a potential receiver
- A.E Proceeding with a psychological problem that is not presented by the client in positive terms
- A.F Proceeding with a hitherto acceptable problem that is not clearly either of termination or of prevention
- A.G Proceeding with a hitherto acceptable problem where there are not identified people whose psyches are the subjects of that problem
- A.H Proceeding with fewer subjects for a particular problem than are acceptable and commissioned for
- A.I Proceeding with fewer problems than are acceptable and commissioned for

B. RECEIVERS

- B.A Proceeding with receivers who are not practitioners who will not deal with accepted applicants
- B.B Proceeding with not as many acceptable receivers as one is commissioned for
- B.C Proceeding with receivers who are hitherto acceptable but whose ability to accept costs (thresholds of unacceptability on the cost dimensions that for the client include unacceptable ranges) is not known to be usual or unusually great or known or assumed to be unusually small
- B.D Proceeding at any one time with receivers who are hitherto acceptable but do not share their sensitivity to cost
- B.E Proceeding at any one time with receivers who are hitherto acceptable but do not share their relations with accepted subjects

C. FOCI

- C.A Proceeding not only with identified behaviours
- C.B Proceeding with an identified behaviour if it is not tied to identified circumstances
- C.C Proceeding with a hitherto acceptable behaviour that is not tied to a subject who is one person or type of person
- C.D Proceeding with hitherto acceptable behaviours not only if they are part of an acceptable applicatee
- C.E Proceeding with hitherto acceptable behaviours not only if they are expectable
- C.F Proceeding to seek behaviours that are presently available
- C.G Proceeding without all the acceptable behaviours consistent with local requirements

D. INFORMATION APPLIED

- D.A Proceeding with agents not derived from antecedents of the phenomenon in question
- D.B Proceeding with antecedents not explicitly giving rise to agents

E. ANTECEDENTS

F. AGENTS OF CHANGE AND NEW FOCI

- F.A Proceeding with proposed agents of change that are not in terms of chapter 7 and according to chapter 7 effective removers or terminators of occasions of the absence of the behaviour in question
- F.B Proceeding with hitherto acceptable agents that are not in terms of the behaviour of the receiving practitioner, subject or helper in the least costly appropriate combination according to chapter 7
- F.C Proceeding with hitherto acceptable agents not only if they are both morally acceptable and targetting elements that it is morally acceptable to target
- F.D Proceeding with hitherto acceptable agents not only if they will involve costs acceptable for the client

F.E Proceeding with hitherto acceptable agents in the form of behaviour that is not expectable

F.F Proceeding with more than one acceptable agent per occasion

F.G Proceeding with an agent when a less costly one for the same occasion is acceptable

F.H Proceeding without all the acceptable agents subject to local requirements

F.I Proceeding without deleting agents that are immediately unavailable

F.J Proceeding without seeking further information on agents that are immediately unavailable

F.K Proceeding by seeking further information on agents that are immediately available

G. COLLECTIONS OF AGENTS

G.A Proceeding with agents that are not correctly identified as identical, complementary in performance, unrelated, contradictory in performance or having contradictory effect

G.B Proceeding without removal of contradictions and threats of contradictory effects

G.C Proceeding to remove contradictions and threats of contradictory effects by means other than changing agents, changing targets, or abandoning the smallest number of agents possible, in that order

10C. POSSIBLE EFFECTS OF DEPARTURES OF PROCESS

This goes through the complete list of departures of process and adds a list of departures of product (that is, information produced) and a list of departures of effect (that is the impact of the information when used as intended).

APPLICATEES

A.A Proceeding otherwise than by addressing problems

ENTAILS:

- (i) X.3 (other steps impossible for non problems)

A.B Proceeding with a problem that is not psychological

ENTAILS:

- (i) X.3

A.C Proceeding with a hitherto acceptable problem that does not concern practice

ENTAILS:

- (i) X.3

A.D Proceeding with a hitherto acceptable problem that is not within the practice of a potential receiver

ENTAILS:

- (i) X.3

A.E Proceeding with a psychological problem that is not presented by the client in positive terms

COULD ENTAIL:

- (i) C.G (a behaviour missed)

A.F Proceeding with a hitherto acceptable problem that is not clearly either of termination or of prevention

COULD ENTAILS

- (i) B.A (wrong receiver identified)
- (ii) C.C (wrong subject identified)

A.G Proceeding with a hitherto acceptable problem where there are not identified people whose psyches are the subjects of that problem

COULD ENTAIL:

- (i) B.A (wrong receiver identified)
- (ii) C.C (wrong behaviour identified)

A.H Proceeding with fewer subjects for a particular problem than are acceptable and commissioned for

COULD ENTAIL:

- (i) B.B (receiver missed)
- (ii) C.G (behaviour missed)

A.I Proceeding with fewer problems than are acceptable and commissioned for

COULD ENTAIL:

- (i) B.B (receiver missed)
- (ii) C.G (behaviour missed)

B. RECEIVERS

B.A Proceeding with receivers who are not practitioners who will deal with accepted problems

COULD ENTAIL:

- (i) F.B (agent wrongly formatted for acceptable receiver)
- (ii) F.C (unacceptably costly agenselected)
- (iii) F.D (morally unacceptable agent selected)
- (iv) F.I (unavailable agent selected)
- (v) F.J (necessary information not sought on agent)
- (vi) F.K (unnecessary information sought on agent)

B.B Proceeding with not as many acceptable receivers as one is commissioned for

COULD ENTAIL:

- (i) F.B (agent wrongly formatted for acceptable receiver)
- (ii) F.C (unacceptably costly agenselected)
- (iii) F.D (morally unacceptable agent selected)
- (iv) F.I (unavailable agent selected)
- (v) F.J (necessary information not sought on agent)
- (vi) F.K (unnecessary information sought on agent)

B.C Proceeding with receivers who are hitherto acceptable but whose ability to accept costs (thresholds of unacceptability on the cost dimensions that for the client include unacceptable ranges) is not known to be usual or unusually great or unusually small

COULD ENTAIL:

- (i) F.E (accepting agents that are too costly)

B.D Proceeding at any one time with receivers who are hitherto acceptable but do not share their sensitivity to cost

COULD ENTAIL:

- (i) X3 (confusion)

B.E Proceeding at any one time with receivers who are hitherto acceptable but do not share their relations with accepted subjects

COULD ENTAIL:

- (i) X3 (confusion)

C. FOCI

C.A Proceeding not only with identified behaviours

ENTAILS:

(i) X.3

C.B Proceeding with an identified behaviour that is not tied to identified circumstances

COULD ENTAIL:

(i) E.D (weight of possible occasions wrongly assessed)

C.C Proceeding with a hitherto acceptable behaviour that is not tied to a subject who is one person or type of person

COULD ENTAIL:

(i) E.D (weight of possible occasions wrongly assessed)

C.D Proceeding with hitherto acceptable behaviours not only if they are part of an acceptable problem

COULD ENTAIL:

(i) E.A (too many antecedents accepted)

ALSO ENTAILS:

(i) X.3

C.E Proceeding with hitherto acceptable behaviours not only if they are expectable

COULD ENTAIL:

(i) E.A (too many antecedents accepted)

ALSO ENTAILS

(i) X.3

C.F Proceeding to seek behaviours that are presently available

COULD ENTAIL:

(i) E.A (too many antecedents accepted)

ALSO ENTAILS:

(i) X.3

C.G Proceeding without all the acceptable behaviours consistent with local requirements

COULD ENTAIL:

(i) F.H (missing agents)

D. INFORMATION APPLIED

D-A Proceeding with agents not derived from antecedents of the phenomenon in question

COULD ENTAIL:

- (i) F-A (ineffective agent selected)
- (ii) F-G (unnecessarily costly agent selected)
- (iii) F-H (agent wrongly missed)

D-B Proceeding with antecedents not explicitly giving rise to agents

COULD ENTAIL:

- (i) F-A (ineffective agent selected)
- (ii) F-G (unnecessarily costly agent selected)
- (iii) F-H (agent wrongly missed)

E. ANTECEDENTS

E-A Proceeding with proposed antecedent variables that are not relevant to the behaviour in question

COULD ENTAIL:

- (i) F-A (ineffective agent selected)

E-B Proceeding with antecedents that are not according to chapter 6 of the form to be sufficient conditions of the absence of a behaviour

COULD ENTAIL:

- (i) F-A (ineffective agent selected)
- (ii) F-G (unnecessarily costly agent selected)
- (iii) F-H (agent wrongly missed)

E-C Proceeding with proposed antecedents that are not sufficient conditions of the absence of the behaviour in question

ENTAILS:

- (i) F-A (ineffective agent selected)

E-D Proceeding with antecedents that can not be appropriately inferred to have a sufficiently strong possibility of any future incidence in the circumstances in question

COULD ENTAIL:

- (i) F-A (ineffective agent selected)

E-E Proceeding without all, subject to local requirements, of the acceptable antecedents for the behaviour in question

COULD ENTAIL:

- (i) F-H (agent wrongly missed)

F. AGENTS OF CHANGE AND NEW FOCI

F.A Proceeding with proposed agents of change that are not according to ch7 effective removers or terminators of occasions of the absence of the behaviour in question

COULD ENTAIL if not in terms of chapter 7
(i) G-A

ENTAILS if not effective:
(i) P1
(ii) P2
(iii) P7
(iv) P8

ENTAILS if effective for an unweighty occasion:
(ii) P5 (unless the agents derived are the same as other agents derived elsewhere)

F.B Proceeding with hitherto acceptable agents that are not in terms of the behaviour of the receiving practitioner, subject or helper in the least costly appropriate combination according to ch7
ENTAILS:
(i) P6

F.C Proceeding with hitherto acceptable agents not only if they are both morally acceptable and targetting elements that it is morally acceptable to target

ENTAILS:
(i) P4

F.D Proceeding with hitherto acceptable agents not only if they will involve costs acceptable for the client

ENTAILS:
(i) P4

F.E Proceeding with hitherto acceptable agents in the form of behaviour that is not expectable

ENTAILS:
(i) P3

F.F Proceeding with more than one acceptable agent per occasion

ENTAILS:
(i) P10

F.G Proceeding with an agent when a less costly one for the same occasion is acceptable

ENTAILS:

- (i) P6
- (ii) P8

F.H Proceeding without all the acceptable agents,
subject to local requirements

ENTAILS:
(i) P8

F.I Proceeding without deleting agents that are
immediately unavailable

ENTAILS
(i) P3

F.J Proceeding without seeking further information on
agents that are immediately unavailable

ENTAILS
(i) P8

F.K Proceeding by seeking further information on
agents that are immediately available

ENTAILS
(i) X2 Waste of time

G. COLLECTIONS OF AGENTS

G.A Proceeding with agents that are not correctly
identified as identical, complementary in
performance, unrelated, contradictory in performance
or having contradictory effect

ENTAILS:
(i) G.B
(ii) P9
(iii) P10

G.B Proceeding without removal of contradictions and
threats of contradictory effects

ENTAILS:
(i) P11

G.C Proceeding to remove contradictions and threats
of contradictory effects by means other than changing
agents, changing targets, or abandoning the smallest
number of agents possible, in that order

ENTAILS:
(i) P8
(ii) P11

DEPARTURES OF PRODUCT (P)

P1 HAVING AN AGENT THAT THE STANDARD DOES NOT HAVE -
BLOCKING THE TARGETTING OF A WEIGHTY ANTECEDENT

COULD ENTAIL:

(i) X1

P2 HAVING AN AGENT THAT THE STANDARD DOES NOT HAVE -
INEFFECTIVE BUT UNHARMFUL

ENTAILS:

(i) X2

P3 HAVING AN AGENT THAT THE STANDARD DOES NOT HAVE -
AN UNAVAILABLE AGENT

ENTAILS:

(i) X2

P4 HAVING AN AGENT THAT THE STANDARD DOES NOT HAVE -
UNACCEPTABLE IN MORAL STANCE OR COST

ENTAILS:

(i) X2

P5 HAVING AN AGENT THAT THE STANDARD DOES NOT HAVE -
TARGETTING AN UNWEIGHTY ANTECEDENT

ENTAILS:

(i) X2

P6 HAVING AN AGENT THAT THE STANDARD DOES NOT HAVE -
COSTLIER THAN NEED BE

ENTAILS:

(i) X2

P7 HAVING AN AGENT THAT THE STANDARD DOES NOT HAVE -
WEAKER THAN NEED BE

COULD ENTAIL:

(i) X1

P8 NOT HAVING AN AGENT THAT THE STANDARD HAS

ENTAILS:

(i) X1

P9 HAVING AGENTS WHOSE RELATIONS ARE UNCLEAR

COULD ENTAIL:

(i) X2

P10 HAVING A SUPERFLUITY THAT THE STANDARD DOES NOT
HAVE - EFFECTIVE BUT DUPLICATING AGENTS

ENTAILS:

(i) X2

P11 HAVING CONTRADICTIONARY AGENTS

COULD ENTAIL:

(i) X1

DEPARTURES OF EFFECT (X)

(This list assuming that the plan is actioned as intended, and that contradiction leads to non-implementation of all contradictory agents)

X1 CRUCIAL ANTECEDENT IS NOT REMOVED (if an antecedent is crucial and one fails to target it, targets it ineffectively or is blocked)

X2 INCURRING UNNECESSARY COSTS

10D. COMMENTARY

The foregoing allows one to ask of any method of application

(a) which process departures does the method have (including process departures entailed by other process departures)?

(b) what are the certain and possible entailments in terms of costs and effects?

(c) what choice of fundamentals does the method imply?

This standard can be used to measure applications not only of generic psychology but also of other knowledge. It could be used to comment, for example on the cost-effectiveness of a psychiatrist's meeting

a case of a troubled teenager, reading in the first paragraph of case notes that the parents were in their fifties when the child was born, and looking no further.

CHAPTER ELEVEN

WHAT PSYCHOLOGY CAN OFFER

Chapter 9 identified where formal psychology might be one of a number of alternate sources of generic information to apply to a practical psychical problem. Before answering the main question of chapter 1, what the role of formal psychology SHOULD BE, one should ask where psychology is the preferred alternative, and what psychology it is.

This chapter looks at a number of types of application of psychology and sizes them up as candidates to represent psychology in the contest with non-psychology. How far from the standard in effects and costs is each typical example of applying psychology?

Chapter 10 showed how the standard can be used to

analyse applications. That approach will be followed here, though to avoid tedium I intend not to write out every departure for every application considered.

The sections cover (A) one-paradigm therapies, (B) Egan's method of counselling, (C) applying single findings and bodies of work, and (D) commentary.

11A. ONE-PARADIGM THERAPIES

Many of the ways of applying psychology to practical psychical problems belong to one of a smallish group of paradigms, including Applied Behaviour Analysis (ABA), Psychoanalysis, and Self-oriented therapy. Cognitive-behaviour therapy, currently one of the most prevalent families of techniques, is covered by what is said of applied behaviour analysis - because it is behaviour analysis applied to problem solving (D'Zurilla & Goldfried, 1971) and other cognitive entities (Dobson, 1988).

How do they compare to the standard proposed in chapter 8?

First, they all have problems identified, and normally the identification is not regarded as problematical. There is usually something expectable

but not presently available that is desired.

In psychotherapy the receiver is normally the subject, but ABA may be addressed to wider audiences, especially where general principles are communicated, and this could cause difficulties. The receiver who has to deal with bystanders (for example in a full classroom or ward) may need different information from ABA than the receiver who is alone with one subject. If, for example, a teacher ignores some behaviour of one pupil, something may be learned not only by the targetted pupil but also by bystanders, and they may learn something that the teacher does not wish them to learn.

Of course there has been controversy about whether behaviour should be the focus. By some it is regarded as a symptom, in other words not the real target. The standard in chapter 8 takes a middle line that behaviour (defined quite widely) is the appropriate focus but only if it covers whatever else, motive, state or effect is complained of.

All these paradigms in effect try to remove obstacles to the presence of an expected desideratum. The paradigms normally identify both antecedents and agents, but limited in each paradigm to a particular range.

ABA is largely defined by its preferred agents of change, reinforcement and its associates. The psychological targets that ABA deals with are therefore those that can be removed by reinforcement. Views differ to some extent on what these are, but they could include some abilities, thresholds for the adoption of less considered ends, aversions and attractions. E elements may be regarded as targets - they are not removed by reinforcement but then not by other psychological agents either. Wheldall and Merrett (1984), in making a special point of reminding their readers that E may be an appropriate target, admit some neglect of this in ABA.

It might seem like the work of a Procrustes to use words like antecedents and agents to replace the vivid language of psychoanalysis but it does have antecedents of the absence of its desiderata and ways of dealing with the antecedents.

Self-oriented therapy concentrates on those antecedents that have to do with self, principally attitudes to the self. Different members of this family of therapies have different ways of improving different aspects of the attitude to the self.

All these paradigms, compared with the standard, have incomplete lists of antecedents. And because antecedents are rarely set out in groups in which all

the active factors (for example including E) are made explicit, opportunities may be missed to target a factor that is less costly to target than the one the paradigm focusses on. For example one could save a lot if it were acceptable and possible to remove the circumstances in which some undesired reaction occurred rather than to keep the circumstances and reduce the reactivity.

Relevance is not a problem. Rather than have a list of testable variables the relevance of which has to be tested, the variables to be taken forward may well be derived from the behaviour in question, and must therefore be relevant if the derivation is valid.

Weight is not usually considered: one-paradigm therapists have already decided what is important. The weight of selected occasions may not be explicitly considered or related to past occurrences and so forth, but the variables will in most cases be derived with past occurrences in mind.

There is no reason to say that some neglect moral acceptability more than others, though moral debate seems to have been fiercer over ABA than over the others.

Costs to the receiver are not always given enough

attention. Some programmes of therapy could be very costly in time and in arranging the conditions. Some programmes of token reinforcement would seem to require prodigious feats of record-keeping.

Incoherence is easy to avoid when only one system is used.

In sum, one-paradigm therapies have the advantages of built-in coherence, and the deliverer may save time not having to consider possibilities outside the paradigm. Whether the practitioner saves time depends on how quickly the problem is solved, and that depends on what the problem is.

With an incomplete list of testable antecedents it is quite possible that crucial factors will be missed, that less costly alternative targets will be missed, and that unweighty factors will be promoted.

These failures are most likely where ABA is used on a problem of the kind of ability or belief that is not amenable to change by ABA's preferred methods, where self-oriented therapy or psychoanalysis is used on a problem of less considered motivation or ability, or where the attractions or aversions not recognized by the paradigm are crucial.

Roughly comparing the chapter 8 standard with the

one-paradigm approaches makes it seem that the dangers of using one paradigm will often outweigh the benefits.

The main difference between the paradigms is in the list of testable antecedents they use, and this suggests that they could be complementary to each other.

11B. EGAN'S METHODS OF COUNSELLING

Egan, a much cited guide to counselling, provides an example of eclecticism. In the latest edition (Egan, 1990) of his detailed text, he presents the latest refinement of his model and a discussion of methods and skills for practitioners. Counselling is, at least in part, a process of applying psychology to practical psychical problems. The trainee counsellor to whom Egan's book is addressed is the equivalent of chapter 8's deliverer.

The model of helping has three stages: helping clients define and clarify problem situations, developing preferred scenarios, and linking preferred scenarios to action.

Counselling obviously deals with problems. There

may be more than one problem in a single case, or a problem may include more than one person, but there is no essential difference from the problems envisaged in the chapter 8 standard.

But identifying the problems may not be easy. Counsellors fully acknowledge the complexity of problems. They see the identification of what is to be changed as very problematical. Indeed many of them see this as the whole story of counselling, that once the desideratum is identified, the job of counselling is done, or nearly done. Egan is an exception: he points out the need to look at obstacles to the client's doing what they have said they will do; but still the identification of the obstacle gets as much as or more attention than its removal. It may be reasonable to stop at identifying the problem in cases where the problem is not psychical (e.g. how to find enough money to go to college) or presents no problem, but that still leaves quite a lot of problems that some writers on counselling are prepared to leave to the unadvised practitioner.

The receiver is the trainee counsellor's client, and normally the receiver and subject are one and the same. There may be what chapter 8 would call a helper in the form of a friend, say, of the client.

The main model highlights brainstorming and evaluation of possible things to do. This is eclectic in a sense, though the ideas come less from disciplines than from the facts of the case and any associations they may have in the mind of the deriver. The 'things to do' are not clearly identified as agents for the removal of particular obstacles.

Egan's process of evaluating is his 'balance sheet methodology' where the profits and losses associated with proposed agents are set out. The losses include costs to the client, but the consideration of profits only vaguely and weakly raises the question of the likely effectiveness of the proposed strategy. This reflects the absence of clear identification of obstacles to be removed. The question of weight of proposed factors is similarly dealt with in terms of suitability for the client.

Egan and the chapter 8 standard are in line in stressing the importance of moral acceptability - Egan includes consideration of the effect of recommended actions not only on the client but also on anyone else who may be affected.

Egan and the standard are in line in recognizing the multi-layered nature of psychical problems: he is not just combatting the problem complained of, but

also sub-problems that the main problem raises, problems in the complaining itself (for instance that the wrong problem is raised) and problems in the behaviour of the helper. He refers to the possibility of applying his model to all four of these, but in practice he treats them differently, applying different models.

For the main problem he proposes brainstorming and evaluation to identify the things to do that might be recommended.

To combat a sub-problem he does not repeat stages of his main process. He mentions restraining forces and facilitating forces, including from psychology learned helplessness, and self-efficacy, and he envisages the need for behavioural principles to be applied.

To combat a client's raising an inappropriate topic, Egan relies heavily on one agent, 'challenging', and does not mention brainstorming.

To combat the helper's failing to recognize the appropriate topic as appropriate, Egan suggests, again without benefit of brainstorming, that the helper acquire knowledge from psychology, about psychical development, and personality, for example.

Coherence and monitoring of the action taken are included.

One can see why some of the foregoing features are there: the brainstorming can produce enough ideas to keep everyone busy; where he suggests particular measures without brainstorming it may just be shortcircuiting the brainstorming to come to the same conclusion more quickly; 'challenging' is a special counselling technique no doubt found to work often enough; and the absence of links between agents and particular targets may reflect the idea that only measures appealing to the client are worthwhile proceeding with.

But however painstaking and wide-ranging the process it, it is not systematic. Therefore Egan is liable to miss some agents he would have got by being systematic and he is liable to recommend some agents he would have rejected by being systematic. How damaging this would be depends on which agents are wrongly missed and wrongly included, but at the very least it must involve some waste of time. And more waste of time would come from proceeding with more than one acceptable agent per occasion or proceeding with an agent when a less costly one for the same occasion is acceptable, both quite likely outcomes of the brainstorming. The danger of missing a crucial

agent is presumably greatest where the brain doing the storming has limited associations to draw upon, or where the crucial agents are unusual, or just great in number.

In sum, this approach is not, as the one-paradigm approaches are, thirled to a pre-determined set of antecedents or agents. But it is unsystematic. Therefore it is more likely to produce ineffective, unweighty or wasteful 'things to do' than the chapter 8 standard, and at no less cost. That the chapter 8 standard is a skeleton beside the rich detail of Egan's approach does not alter this conclusion - it suggest that the rich detail should be applied to the standard.

11C. APPLYING SINGLE FINDINGS AND BODIES OF WORK

This approach does not proceed from identifying a problem but from identifying some information that it is thought should or might be applicable to practice.

The task is, say, to see what are the implications for education of the work of Piaget, or the concept of locus of control or the finding that extraverts are more successful in primary schools than they are in secondary schools. The buggy algorithms mentioned

in chapter 1 are a case in point.

The starting point may not be with a problem, but at some stage a problem is normally thought of. And it is probably derived from the information in question - when they see the information to be applied the derivors begin to think of problems that it could be applied to. For example when the concept of locus of control has been researched and consequences of having extreme values have been identified, having an extreme value of locus of control may be cited as a problem.

Among the particular dangers of this orientation are:

-that the selected problem is not a problem worth investigating, because it is not within the practice of any likely receiver, because the problem has not arisen for a particular subject, or because the desired phenomenon is not expectable, or already available

-that it obscures a problem that IS worth investigating

-that only certain factors are considered (as in a one-paradigm application), perhaps because certain antecedents and certain problems are locked together in the same language so as to exclude other antecedents being considered for that problem,

-that the factors offered are incomplete or at the wrong level of detail in the light of the standard.

11D. COMMENTARY

The best representative of psychology in any competition to see, when psychology is an alternative source of information, whether it can be better than alternatives, is that which is derived by the standard process of chapter 8 using a good eclectic psychology to provide the testable variables.

The superiority of eclectic psychology derived by the standard process over an alternative application of psychology is likely to vary from case to case: when a one-paradigm application hits the case where its factors are crucial, eclecticism adds nothing.

But it appears that over a range of cases it would not present great costs to be eclectic in the manner proposed here, and the danger of recommending something disastrous would appear to be slight. On the other hand the danger of missing something crucial by not being eclectic is high, while the saving in cost is low.

CHAPTER TWELVE

POSSIBLE ANTECEDENTS FROM A GOOD ECLECTIC PSYCHOLOGY

Chapter 11 suggested that the best available applications of generic psychology to practical psychical problems are when the psychology is good eclectic psychology.

Chapters 13, 17 and 18 are all, for various reasons, going to try to apply the best available psychology to practical psychical problems. Therefore what is the best available psychology needs to be identified, and that is the purpose of this chapter.

The standard process proposed in chapter 8 gives enough detail except for the possible antecedents of the absence of the desired behaviour. Only superordinate variables or categories of variables

were given. What has to be added are subordinate variables, members of the categories; and they must, from chapter 11, give a good eclectic coverage of formal psychology.

The task in this chapter, therefore, is to propose psychological variables that will be subcategories of the variables identified in chapter 6 as antecedents of the absence of any psychical phenomenon. Then the matter will be looked at from the opposite direction - how the various parts of psychology are utilized.

The sections will offer (A) briefing, (B) methods for finding variables, (C) a list of variables found by these methods, (D) how the conventional parts of the discipline are used in the application of a good eclectic psychology and, and (E) commentary.

12A. BRIEFING

Candidates for inclusion on the list should be up-to-date, not meaning produced recently but meaning in harmony with currently accepted data.

Where the option is available, one should prefer concepts that are veterans of different times or different settings. They need not be exactly the

same in their different manifestations. If different investigators over time or workers in different paradigms are using similar concepts, that bunch of concepts deserves further consideration.

From a bunch of similar up-to-date concepts one should take that which can subsume the others with least violence.

Seeking and combining similar concepts are not intended to be exercises in veiling with glosses. At the same time the present purpose is not the scientific one that thrives on the search for differences.

One should not be afraid to take a 'best guess' where there is indecision, dispute or confusion.

It is not necessary for the items to be mutually exclusive.

The demands of practicability will include a limit on the length of the list and hence a limit on the coverage and amount of detail that can be entered into.

A level of detail will have to be chosen that is less fine-grained than many 'cutting edge' studies. And the coverage will not be complete. For example so

many different motives have been identified that it would be inappropriate to try to list them all.

It would be possible to be more fine grained or more inclusive over less ground, but the present list ought to demonstrate a full range of variables.

12B. METHODS OF FINDING VARIABLES

This section will discuss methods of making subdivisions of the categories of chapter 6. The actual subdivisions that I propose will be listed in section 12C.

12B.1 LESS CONSIDERED MOTIVATION

We have these categorial variables:

L = height of threshold for adopting the less considered end (LCE) involving Q, and degree of resistance to Q

E = current nearness to threshold, and degree of Q that is present

When L is stated to be low, it means that both components are low separately. Similarly for E,

and for medium and high.

I go some way - though not using his language - with Gray (1987), a recent builder upon the classical work of Pavlov and others. There is a simple categorizing of events: (a) pleasures, omission of expected insults, and signals of the imminence of either; (b) insults, omission of expected pleasures, and signals of the imminence of either. Gray has proposed dimensions of individual difference (with physical correlates that make biological sense): in my terms, general sensitivity to all of these events; and special sensitivity to the (b) group.

I use the term 'insult' for anything unpleasant because the term more frequently used, 'aversive', is required to mean that which is avoided. Insult therefore includes frustration, and that in turn would include not being able to do something that one wished to do or was impelled to do. Of course what is a pleasure or an insult may be different for different people or for the same person at different times.

The present purpose requires these variables: (i) sensitivity to pleasure, omission of expected insult, and signals of same, (ii) sensitivity to insult and omission of pleasure, (iii) sensitivity to signals of insult and omission of pleasure. Class (i) may be

followed by adoption of the LCE to embrace recklessly. Class (ii) may be followed by LCEs to attack. Class (iii) may be followed by the LCEs to take flight or comfort oneself. Whether the LCEs do follow in each case depends on the person's resistance to the stimulus, the person's threshold for the LCE and how near the person is currently to the threshold.

This system fits well with accepting the notion that emotion or excitation is a crucial mediator (Berkowitz & Heiner, 1989), and with neutrality on the issue of how specific that excitation is in the different cases (Zillman, 1985).

There must also be room for the stimulus that draws attention willy-nilly, basically the 'orienting reflex' but seen in more everyday terms (Berlyne, 1966); and this has to coexist with cses where for example threat led not to flight but only to worry.

The other type of less considered motivation was habit, not every type of habit but any habit that is triggered by stimulation. I do not intend at present to distinguish different habits.

12B.2 ABILITY

We have these categorial variables:

A = the degree of possession of ability

E = the demand for ability made by the task and the circumstances

Chapter 7 on change-agents has already required some subdivisions to be made: capacity, vigour, perceptuo-motor proficiency, and power of concentration.

There has been a programme of work by Fleishman on the categorization of abilities. This is based mainly on factor analysis, translating task behaviour into ability requirements. It covers all aspects of human performance, incorporating but ranging more widely than work on the definition of intelligence. At the last count (Fleishman & Quaintance, 1986) 52 abilities had been identified - too many for the present purpose; but I can group them and note that the detail can be drawn out when required by a particular case (e.g. dexterity can be extracted from the general heading perceptuo-motor proficiency). I am going to use this list in a collapsed form that is in line with what is known about information processing. The result is one that can coexist with

the approaches to ability of at least two recent generations, as represented by Guilford (1967) and Sternberg (1985).

Capacity as used in chapter 7 will be divided into possession of performing power, deciphering ability, the ability to resolve ambiguity, and attentional capacity.

I distinguish ability to concentrate - referred to by, for example, Wachtel (1967) as a dimension of individual difference, and already singled out in chapter 7 - and attentional capacity, well known in psychology, for example in claims that attention 'span' is limited (Mandler 1975, Kantowitz 1985).

Problem-solving ability is taken to be mainly an amalgam of knowledge, performing power and perceptuo-motor proficiency. Examples of the knowledge involved are knowledge of certain procedures, knowledge of when to use the procedures, and knowledge that it is appropriate and useful to produce ideas in volume without censorship. Performing power is involved in the production of ideas in volume without censorship, and in the judgement of ideas produced. Perceptuo-motor proficiency is involved in terms of speedy coordination or fluency.

12B.3 AVERSION/ATTRACTION

We have the following categorial variables. They apply to doing P and considering P.

AV = degree of aversion to some object

B = degree of connection believed to exist between P and the object of aversion

C = degree of conditions O that is followed by salience of B

E = degree of O that is present

ATT = degree of attraction to some object

B = degree of connection believed to exist between O and the object of attraction

C = degree of O that is followed by salience of B

E = degree of O that is present

I assume only two degrees of salience ('salient' and 'unsalient').

The need here is to identify common aversions/attractions; and they can be taken as two sides of the same coin. We do not need to worry about beliefs except in so far as the incidence of certain beliefs or the reasonableness of them may be indicated by psychology.

I have a number of approaches here: (i) using factor analyses of individual differences; (ii) adopting the often assumed aversion to loss (or attraction to enhancement) of self esteem, (iii) bringing in some cognitive items, and (iv) giving a nod in the direction of biological motivation. I also include an 'other' possibility - see above, and the possibility that the object of aversion or attraction is P itself, or Q itself. (The attraction to Q is different from the LCE to do Q in that the person is not so much impelled to do Q regardless of other considerations.)

(i) There have been many factor analyses that are basically categorizations of everyday words used to refer to individual differences in 'personality'. In the last few years there has been increasing agreement on a 'big five' (John, 1989), and I use four of these (the fifth concerns ability). As will be seen they present no surprise to anyone familiar with Murray's (1938) classic work on motivation. But it is not quite as simple as that: each of the big five categories contains terms that are close to each other in meaning but obviously different, and a certain amount of artistry is required to name, and in a sense characterize the personality, of each category. The first eight entries under the heading of 'aversions/attractions' in the list in section F

(to follow) show the names I have chosen; and I have chosen them to be as inclusive as possible.

(ii) An aversion to loss (or attraction to enhancement) of self esteem is often assumed, and has recently been involved in a major piece of unifying work by Bandura (Bandura 1986, Maddux & Stanley 1986) based on the concepts effectance and self-efficacy. I am allowing it to subsume the best part of the motive to evaluate oneself (Jones & Gerard 1967, Tesser 1986).

Many objects of aversion/attraction can be derived from self esteem - which is another way of saying that they would be covered if only self esteem appeared on the list. But it will make the workings of what is to follow in chapters 10 and 12 more obvious if a few of the objects related to self esteem are singled out.

It is worthwhile to single out the aversion to failure or attraction to success which is related to self-esteem by some researchers but has also been mentioned in its own right - Skinner (e.g.1958) made a particular point of this. One is not saying that everyone is motivated by an equally strong attraction to success, and of course success is as defined by the behavior.

'Aversion to persuasion by someone whose opinion of one is low' cannot be merely singled out: the derivation needs to be explained. It is by the simplest form of balance theory (Heider, 1958). (I shall use first and second person pronouns to avoid confusion in this derivation: as pointed out by Farr & Anderson (1983), confusion among persons is easy to fall into in pursuing this theme.) If I am positive about myself and about you but I get the idea that you are negative about me, then there is a situation that requires change. One possible change that would restore balance would be for me to stay positive about you but become negative about myself. I respect you, you think nothing of me, I agree with you: I think nothing of myself. That is a balanced situation. But if I wish to avoid losing self esteem, I must become negative about you. You think nothing of me, I think I am all right, therefore I do not recognize you as a competent judge. In other words, if I am averse to losing self esteem, I will be averse to accepting as a competent judge anyone whom I read as having a low opinion of me.

Beliefs about the self (roughly speaking self-concept) are obviously related to self-esteem. It is worthwhile to single out an attraction to expressing a desired self-concept, held to be important by a number of workers including Harre

(e.g. Harre & Secord, 1972).

I have included what is intended to be a representative of the work of Csikszentmihalyi (Csikszentmihalyi, 1975, Csikszentmihalyi & Csikszentmihalyi 1988) on the satisfying exhilarating feeling of flowing achievement. This appears in the list as an attraction to 'high functioning'. It could be argued to be related to self-esteem, particularly in terms of Bandura's 'effectance'.

(iii) I include some simple cognitive motives: an aversion to accepting what is believed to be not valid, an aversion to accepting what disconfirms an existing belief, an aversion to accepting what is said by a person read as inexperienced or untrustworthy, and an attraction to making sense of things.

The first two are points that in a way are too fundamental to interest researchers; but they are acknowledged in the two main theories of persuasion of the past decade (Chaiken 1987, Petty & Cacioppo 1986), theories re-examining the relevance of some of the variables identified in the more traditional paradigm of research into persuasion (Hovland et al 1949, Hovland et al 1953). These theories as well as acknowledging the importance of ordinary thinking about the issues, have given rise to research supporting some of the variables from the older

paradigm, especially the trustworthiness (Petty et al, 1982) and expertise (Hass, 1981) of the would-be persuader - hence the third motive.

The attraction to making sense of things is most often highlighted in studies of children because their following this path can lead to some strange results. Studies of adults do not often have to highlight this very basic motive, but studies of children have highlighted it, for example to make the point that the strange conclusions that children's thinking can come to are not always the results of slips or mishaps (e.g. Hunt, 1969).

All four points could also be derived from self-esteem: presumably it lowers self esteem to accept something that one believes to be argued invalidly, or that would require a shift of existing beliefs without good reason, or that is put forward by an inexperienced or untrustworthy person; and it does not harmonize with high self-esteem to be content with not understanding things.

(iv) My nod in the direction of biological motivation is simply to include aversion to distress/need and its mirror image attraction to safety/satiety.

120. A GOOD ECLECTIC LIST OF VARIABLES FROM
PSYCHOLOGY

OCCASIONS OF LESS CONSIDERED MOTIVATION

L+E 1. Height of emotional threshold for LCE 1 (to take flight), and resistance to O as a signal of insult or of omission of pleasure; current nearness to the threshold and degree of O that is present

L+E 2. Height of emotional threshold for LCE 2 (to comfort oneself), and resistance to O as a signal of insult or of omission of pleasure; current nearness to the threshold and degree of O that is present

L+E 3. Height of emotional threshold for LCE 3 (to attack), and resistance to O as an insult or omission of pleasure; current nearness to the threshold and degree of O that is present

L+E 4. Height of emotional threshold for LCE 4 (to embrace recklessly), and resistance to O as a pleasure or signal of same; current nearness to the threshold and degree of O that is present

L+E 5. Height of threshold for LCE 5 (to deploy attention), and resistance to O as a drawer of attention; current nearness to the threshold, and degree of that is present

L+E 6. Degree of O that is followed by LCE 6 (any LCE known to be habitual for the person in question); degree of O that is present

OCCASIONS OF ABILITY (1)

These refer to the ability to do Y.

A+E 1. Degree of possession of performing power; demand for performing power

A+E 2. Degree of possession of vigour; demand for vigour

A+E 3. Degree of possession of perceptuo-motor proficiency (defined widely to include 'social skills'); demand for perceptuo-motor proficiency

A+E 4. Degree of possession of abilities for deciphering; demand for deciphering

A+E 5. Degree of possession of abilities for resolving ambiguity; demand for resolving ambiguity

A+E 6. (after the intention is formed) Degree of

possession of attentional capacity; demand for attentional capacity

A+E 7. (after the intention is formed) Degree of possession of ability to concentrate; demand for the ability to concentrate

A+E 8. (after the intention is formed) Degree of possession of accessible knowledge; degree of demand for accessible knowledge

A+E 9. (after the intention is formed) Degree of possession of abilities in solving problems; degree of demand for abilities in solving problems

OCCASIONS OF ABILITY (2)

These refer to the ability to recognize or consider Y.

A+E 10. (before the intention is formed) Degree of possession of attentional capacity; demand for attentional capacity

A+E 11. (before the intention is formed) Degree of possession of ability to concentrate (degree of difference in surprisingness and intensity between stimuli that is followed by ignoring the less surprising or intense); demand for the ability to concentrate
(present degree of superiority in surprisingness or intensity of Q over P)

A+E 12. (before the intention is formed) Degree of possession of accessible knowledge; degree of demand for accessible knowledge

A+E 13. (before the intention is formed) Degree of possession of abilities in solving problems; degree of demand for abilities in solving problems

OCCASIONS OF AVERSION OR ATTRACTION

AV/ATT+B+C+E 1. Degree of aversion to monotony/weak stimulation OR attraction to variety/strong stimulation; degree of connection believed to exist between P and the object of aversion OR believed to exist between Q and the object of attraction; the degree of conditions Q that is followed by salience of B; and the degree of Q that is present

AV/ATT+B+C+E 2. Degree of aversion to variety/strong stimulation or attraction to monotony/weak stimulation; B,C,E as above

AV/ATT+B+C+E 3. Degree of aversion to

disagreeableness or attraction to agreeableness;
B,C,E as above

AV/ATT+B+C+E 4. Degree of aversion to agreeableness
or attraction to disagreeableness; B,C,E as above

AV/ATT+B+C+E 5. Degree of aversion to unconscientious
behaviour or attraction to conscientious behaviour;
B,C,E as above

AV/ATT+B+C+E 6. Degree of aversion to conscientious
behaviour or attraction to unconscientious behaviour;
B,C,E as above

AV/ATT+B+C+E 7. Degree of aversion to the emotive or
attraction to the unemotive; B,C,E as above

AV/ATT+B+C+E 8. Degree of aversion to the unemotive
or attraction to the emotive; B,C,E as above

AV/ATT+B+C+E 9. Degree of aversion to that which
clashes with a desired self concept or attraction to
that which expresses a desired self-concept; B,C,E as
above

AV/ATT+B+C+E 10. Degree of aversion to failure or
attraction to success; B,C,E as above

AV/ATT+B+C+E 11. Degree of aversion to agreeing with
those who have a low opinion of one or attraction to
disagreeing with those who have a high opinion of
one; B,C,E as above

AV/ATT+B+C+E 12. Degree of aversion to low
cost-effectiveness or attraction to high
cost-effectiveness; B,C,E as above

AV/ATT+B+C+E 13. Degree of aversion to believing what
is not valid or attraction to believing what is
valid; B,C,E as above

AV/ATT+B+C+E 14. Degree of aversion to agreeing with
those who are green or insincere or attraction to
agreeing with those who are expert and sincere

AV/ATT+B+C+E 15. Degree of aversion to accepting
messages that disconfirm existing beliefs or values
or attraction to accepting messages that confirm
existing beliefs or values; B,C,E as above

AV/ATT+B+C+E 16. Degree of aversion to low
functioning or attraction to high functioning; B,C,E
as above

AV/ATT+B+C+E 17. Degree of aversion to not making
sense of things or attraction to making sense of
things; B,C,E as above

AV/ATT+B+C+E 18. Degree of aversion to losing esteem (other than as covered elsewhere in this list) or attraction to gaining esteem (other than as covered elsewhere in this list); B,C,E as above

AV/ATT+B+C+E 19. Degree of aversion to physical distress/need or attraction to physical safety/satiety; B,C,E as above

AV/ATT+C+E 20. Degree of aversion to P or attraction to Q; degree of incidence of some variable O that is followed by salience of P or Q; and the present incidence of O.

12D. HOW THE CONVENTIONAL PARTS OF PSYCHOLOGY ARE USED IN THE APPLICATION OF A GOOD ECLECTIC PSYCHOLOGY

There are different views of how the discipline is composed, but it is reasonable to follow the Annual Review of Psychology. Though by its nature this is a guide more to current preoccupations than to the history of the subject, and more to the USA than to other countries, it is the best indication of the parts into which the discipline is conventionally divided.

I shall comment briefly on each of the headings as they appear in a recent (Rosenzweig and Porter, 1990) 'master list' - the system used in the Annual Review for categorizing contributions over a number of years.

PREFATORY CHAPTERS

These mostly cover the work of famous people. That which is of current significance should appear also in, and hence be covered by, the chapters on parts of the discipline.

ATTENTION

There is some use in the proposed procedure of

information about why one attends to one thing rather than another, but more is made of the very basic points (a) that attention is necessary for many performances, and (b) that not everything registered by the senses, nor all the information possessed at a particular time need be much attended to.

Although the provenance of behaviour is arguably the central question of psychology, interest in it waxes and wanes. The central point that some behaviours are less considered than others is probably assumed very widely in the discipline, and assumed means that people do not go around saying it all the time.

(This despite the fact that not too long ago psychologists were divided into schools, not to say sects, depending on whether they admitted the importance or even existence of less considered or more considered behaviour.)

BIOLOGICAL PSYCHOLOGY

This is concerned with relations between behaviour and biology including anatomy, physiology and genetics.

The list of possible variables is intended to be confined to the psychical level and they are regarded as having physical parallels in principle. These are, of course, far from identifiable (e.g.

Mackintosh, 1986), though the dimensions from Gray (1987) that are used in forming the variables based on LCEs are claimed to have reasonable physical parallels that make biological sense. In some cases a shortage of language impedes the distinction between the psychological and physical, hence for example, vigour and performing proficiency are intended to be psychological concepts.

I take it that as well as there being a physical parallel for every psychological phenomenon, either can influence the other. Obviously the physical state of the person will limit what is possible psychologically. Quite a lot of use is made of the possible effects of the physical on the psychological in chapter 7 on change agents, where the ingestion of substances, and physical activity are among the agents.

Arousal is treated here as a physical state, which may be affected by psychological events such as monotony, and which in turn may affect behaviour, for example in the form of degree of vigour or ability to concentrate.

CLINICAL AND COMMUNITY PSYCHOLOGY

These concern the ways that certain practical problems are conceptualized and dealt with, largely in the field of mental health. (The conventional use

of the term 'clinical' has tended to drift from bedside or one-to-one consultation to the whole of psychology's application in mental health, sometimes even physical health). In any case we are talking about fields of application.

Mental health has been the setting for some studies of phenomena of more general interest, for example where characteristics of troubled or troublesome people are seen as extreme values of personality variables that are properties of everyone. Much the same applies to psychotherapy as applies to counselling (q.v.).

It is not vital for the present study to be able to accommodate every kind of extreme or unusual behaviour, but it ought to accommodate some of the phenomena dealt with in clinical and community psychology. Addictions are mentioned as physical states that may result from habits or the pursuit of attractiveness. Depression could be seen as both a behaviour (simply feeling depressed or lack of vigour) and a physical state, with either capable of deepening the other, and with other cumulative potential - for example after certain lack-lustre performances one's belief in one's own abilities might change, and this might affect future behaviour.

If one were using the ideal procedure one would ask why someone felt depressed when they might be

expected not to. One might find physical factors under ability (the person cannot but feel depressed when in a certain physical state), and one might find psychical factors such as conflict/frustration in some cases psychical factors as well. It is not my purpose to go into detail about these phenomena, merely to suggest that one COULD go into detail about them while using the framework of the proposed ideal procedure or something very much like it.

COGNITIVE PROCESSES

These play a very important part in the list of possible variables, although they appear there at a high level of generality; but for problems other than those dealt with in later chapters, more distinctions could be drawn.

COMPARATIVE PSYCHOLOGY, ETHOLOGY AND ANIMAL BEHAVIOUR

The comparative approach to human behaviour and the method of ethology could be said to make a contribution to the list of possible variables in so far as these studies lend support to some of the general psychological information that the list includes.

The study of animal behaviour for its own sake is not immediately relevant.

DEVELOPMENTAL PSYCHOLOGY

If this is defined as the study of the process by which development occurs, it might be useful in determining the effectiveness of agents for certain targets. Defined as the study of typical psyches at different ages, it could identify possible antecedent variables; but it is likely that most if not all variables will be relevant to all ages, while typical values differ between ages. This does not rule out the possibility that the study of people of a specific age will reveal something of general interest, for example the attraction to understanding included in the list of test variables owes something to the work of Piaget with children.

EDUCATION AND COUNSELLING

Education is a particular field of practical problems, such as those addressed in the case study to follow, indiscipline and lack of interest among school-students.

Also work may be done in this particular field that is of interest more generally, for example theories of cognitive learning (e.g. Anderson, 1982, Glaser, 1990).

Counselling is an activity, which could be called a small field of practical problems. If it is not possible to see counsellors as dealers with psychical problems (in the sense givers of advice or takers of action), at least they can be seen as helping their clients to be dealers with psychical problems. In this way the ideal could apply to counselling (any of it that purported to use psychology).

EMOTION

I would be wishing to adopt the assumptions that (a) emotions are psychical (that is with physical parallels but able to influence and be influenced by the physical, as proposed under BIOLOGICAL PSYCHOLOGY), and (b) emotions are not just epiphenomenal, but can influence behaviour. Indeed the treatment of less considered motivation is heavily dependent on the notion of something building up and reaching a threshold. This something is in effect an emotion.

The feeling of emotions is included in the definition of 'behaviour' in chapter 6, which implies that questions can be asked about the provenance of emotions.

ENVIRONMENTAL PSYCHOLOGY

Many questions in environmental psychology are of this form: what are the consequents of a given antecedent. In chapter 4 (following the notion of practical relevance adopted there) it was decided to deal with such questions only through the other form of question: what are the antecedents of a given consequent. For example many practical problems boil down to deciding which of two environments to choose, for example should a child of a divorce live with the mother or live with the father, should a retired couple move house or not. These can best be answered by first settling what the desired consequents are, then identifying the antecedents of those, then relating the practical options to those antecedents (for example choosing the alternative that has more of the agents that might bring the desiderata about.)

The environment appears in every set of test-variables, and yet few findings from environmental psychology have been needed, perhaps because of the particular nature of the practical problems dealt with in later chapters. There are some findings for example that schoolchildren are more boisterous in windy weather, but these findings are quite subsidiary - maybe contributing to nearness to a threshold, something of that sort.

Much the same applies to hypnosis as applied to counselling (q.v.).

LEARNING AND MEMORY

The Behaviourist approach to learning provides some change agents in chapter 7. There are some Cognitivist tinges, for example students' interpretations of what it means if a teacher ignores some behaviour. And reinforcement is assumed to affect expectations.

The Cognitivist approach to learning and memory informs the list of ability-type test-variables and also provides some change agents in chapter 7.

The Behaviourist and Cognitivist approaches appear here as largely looking at different phenomena which coexist. What were at one time competitors to be the one and only paradigm in psychology are seen as competing, if at all, only in border disputes at the margins of their respective territories.

MOTIVATION

There have been times in psychology when the question asked under this heading was what makes a human being tick, what is the one essential life force. The approach here ignores that but asks what direction or

directions a person is going in at a particular moment. There can be many such directions and they can vary in scope. I am not entering the debate (Maslow 1943, 1970, Wahra & Bridwell, 1976) about whether there is a hierarchy.

Some account must be taken of biological motivation. In line with the position described under BIOLOGICAL PSYCHOLOGY, I looked for psychical manifestations of physical motivation, and there is at least a token in the list of test variables in terms of attraction to safety or satiety / aversion to danger or need.

'Cognitive motivation' appears in terms of some basic logic that is not often studied explicitly (e.g. attraction to validity). For 'Social motivation' see SOCIAL PSYCHOLOGY

PERCEPTION

Much the same applies to this as was said about COGNITIVE PROCESSES (q.v.)

Some very basic points are used, for example that the same sensory input can often be construed in more than one way.

PERSONALITY

This usually means the study of regular characteristics of persons: for example the extent to which regularities exist, what they are, where they come from, what differences between individuals there may be, and how the individual differences combine with differences between situations.

Identified individual differences are important in the list of test-variables. The work of Gray (1987) following that of Eysenck on individual differences is used in the list of test-variables (the LCE section). Factor analyses of individual differences noted in everyday language are used in the list of test-variables (the section on aversions/attractions).

Individual differences in ways of thinking are not mentioned prominently in the list of possible variables, though there is quite a lot of literature, based on for example 'cognitive style' (Witkin et al, 1962, Kagan et al, 1964) and expectancy for internal or external locus of control (Rotter, 1966). It is implicit that they will come in under ability and under beliefs, which are in the aversion/attraction section of the list of test-variables.

There have been periodic surges in the literature of a debate on the relative importance of individual and situational differences. The thinking here sidesteps

that: it assumes that the environmental and the psychical will both be present on every occasion, it does not assume that any set of possible variables will be relevant to every occasion, and heterogeneous groups of people are not dealt with simultaneously.

A personality theory can also mean in effect a model of the provenance of behaviour, though the theorists, such as Freud, would hardly have used this language. Not much use is made of theories like this because the present study is intended to have a model that can accommodate a wide range of psychological concepts. (One might ask whether the model implied here is compatible with Freud's concepts. It is intended to be: for example unconscious motivation might be seen in the reasons why attractions and aversions are attractive and aversive.

Personality assessment is a large part of the literature on personality. Its relation to the ideal is as for assessment generally, discussed earlier in this chapter.

PERSONNEL AND ORGANIZATIONAL PSYCHOLOGY

This is another field of practical problems, akin to education.

PSYCHOLOGY AND CULTURE

Studies of the generalizability of findings in one culture to other cultures would be useful (there are not very many of them) in the support they gave or withdrew from those findings.

Studies of the influence of culture on behaviour are akin to environmental psychology (q.v.).

An applicer might wish to know something of cultural norms prevailing in a particular place or time, but that is another matter.

PSYCHOLOGY IN OTHER COUNTRIES

This contains a number of surveys, each concerning the presence of psychology in a particular country. That which is of current significance should appear also in, and hence be covered by, the chapters on parts of the discipline.

PSYCHOPATHOLOGY

Some of the remarks under CLINICAL AND COMMUNITY PSYCHOLOGY are relevant to this.

RESEARCH METHODOLOGY

I have defined methodology to be not in the

psychological domain. Under this definition applying psychology excludes applying methods of research, but one is still concerned with the methods of the applier.

I have proposed what I describe as hay-seed methods (for example of relating strength of possibility of future incidence to evidence of past incidence) and hence have made little use of the formal methods well-known in psychology and other disciplines.

SENSORY PROCESSES

These appear principally in the list of possible variables as ability to decipher.

SEX ROLES

This is largely a special case of the influence of culture on the psyche - see CULTURE AND PSYCHOLOGY. Work on this topic can expand or counter intuition, for example by pointing to the possible existence in women of motivation to avoid success.

SOCIAL PSYCHOLOGY

I define this as the study of social antecedents of psychical phenomena. Others would include the study of group phenomena as consequents, but I decided to

exclude that for the present purposes. Of course real life is not so simple. For example the behaviour of one member of a family and the concerted behaviour of the rest of the family may influence each other, as it were antiphonally. But for the present purpose I shall confine myself to whatever of the concerted behaviour can be explained in terms of the individuals making up the concert.

A number of the possible variables in the aversion/attraction list are social, including some culled from the study of persuasion and balance theory.

Attitude has received enormous attention in social psychology. I have not adopted the term though I cover similar ground in talking about control of action: the concept of attitude is vague, meaning position in respect of something; and the best correspondence between attitude and behaviour is achieved (Ajzen & Madden, 1986) when the concept of intention is introduced, a concept that is used here.

SPECIAL TOPICS

These tend to cover studies in fields of practice (for example sport psychology and the psychology of religion).

12E. COMMENTARY

This list of variables to consider as possible antecedents of the absence of a desired behaviour is not comprehensive of all relevant psychology, but I hope it shows how different parts of the discipline can be combined to achieve broad coverage in a feasible way.

There is obviously more than one principle of classification at work in the list of conventional parts of the discipline. Thus 'educational psychology', 'environmental psychology' and 'cross-cultural psychology' are all bits of psychology but each is a different kind of bit. Nevertheless quite a lot of current activity in the discipline is located in fields of application, of one kind or another. This activity may or may not produce generic information of the kind defined in chapter 2 and of interest here.

It appears that one should be careful in thinking about how fields of application relate to pure topics. For example, a chapter with the educational heading of 'learning' could subsume material from a number of different psychological topics, certainly not confined to the psychological heading of

'learning'.

The proposed way of achieving an application of a good eclectic psychology uses information from many parts of the discipline, and uses information (for example on the structure of abilities) that does not appear in the above list.

CHAPTER THIRTEEN

A STANDARD APPLICATION OF FORMAL PSYCHOLOGY TO RECEIVERS' NOT USING INFORMATION AS INTENDED

I now have a standard process of application and a good eclectic list of testable antecedents from psychology. In this chapter I shall try to produce an eclectic psychological application to the problem of how to ensure the intended use of furnished psychical information. That will allow the process itself to be finalized, as well as giving an indication of its feasibility.

The main local requirement is that the testable antecedents be from eclectic psychology.

I shall set acceptable weight at one of the options

suggested in chapter 5C - (the most ambitious): when there is

(i) knowledge of one and only one occurrence, and any number of non-occurrences, of O with the same person in highly similar circumstances, or (ii) knowledge of one and only one occurrence, and any number of non-occurrences, of O with a highly similar person in the same circumstances, or (iii) knowledge of two or more occurrences, and any number of non-occurrences, of O with highly similar persons in highly similar circumstances.

The following simplifications are adopted: I assume no opportunity to continue searching after a practical trial. I assume I know what will be producible from any user and any communicator.

The following abbreviations are used: POR = producible on request; PAW = producible at will; NPOR = not producible on request; and NPAW = not producible at will. Y is a particular desired behaviour and Z is a particular behaviour incompatible with Y.

Explanations (typically where the first choice of target or agent has been passed over) are enclosed in asterisks. They are not repeated when similar cases appear subsequently. Agents are numbered not consecutively but according to the occasion to which

they refer, so that they can be easily traced at the end of the exercise. Wherever it has been necessary to refer to formal psychology in assessing future incidence, the reference has been given.

Sections D, E and F of the process will be taken together. That is: seeking relevant variables, seeking values worth considering, and seeking agents or new sub-problems will all come under 'SEARCHING', and will be done consecutively for each separate behaviour.

13A-C INITIAL ASSIGNMENT

IDENTIFY THE PROBLEM: What will ensure that given information is used as intended

FIND WHETHER THE PROBLEM IS DEFINED AS WIDELY AS COMMISSIONED: Done

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED: No (therefore there may be some scope for prevention of some targets)

IF NOT, DECIDE HOW MUCH TO SEEK PREVENTION OF TARGETS: Only where ready termination is impossible

IDENTIFY THE SUBJECT: Any future receiver of any furnished psychical information - not the receiver of this application but the receiver in other applications - to avoid confusion in the rest of this chapter called the user. The user cannot be fully identified, therefore there will be no opportunity to use information about the past of the same person.

IDENTIFY THE RECEIVER: The receiver of THIS application is any furnisher of psychological information.

FIND THE RECEIVER'S ABILITY TO ACCEPT COSTS: Normal

FIND WHETHER THE RECEIVER IS THE SUBJECT OR A PRACTITIONER: a practitioner. (To avoid confusion, in this chapter the receiver/practitioner will be called

'the communicator'). Communicator's behaviour will be sought before user's behaviour, agents will include doing communicator's behaviour and asking for user's behaviour, new sub-problems will arise when communicator's behaviour is NPAW or user's behaviour is NPOR.

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y1 = a user's taking the actions suggested by furnished psychological information on any relevant occasion subsequent to that on which the information was given

FIND WHETHER Ys ARE EXPECTABLE: Yes if the furnished psychological information is sensible - assume it is for the purpose of this exercise

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: Assume this to have been done for the purpose of this exercise

13D-F. SEARCHING (1)

Y1 = a user's taking the actions suggested by furnished psychological information on any relevant occasion subsequent to that on which the information was given.

.....
TESTING L+E 1

IS LCE 1 INCOMPATIBLE WITH Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high C + moderate E (where X is the situation in which Y1 must be done)

Hence OCCASION 1: L = low (threshold for LCE to escape, and resistance to X)
E = moderate (nearness to threshold and incidence of X)

TARGET = L (resistance to X): *E difficult to control; within L resistance to X easier to deal with than threshold*

USER'S BEHAVIOUR FOR CHANGE OF L: NPOR and therefore adopted as a new Y -

Y2 (part) = to give oneself good experiences of X

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENT -

1A = to help provide opportunities for graduated

experience (if this is within one's brief and power)

.....

TESTING L+E 2

IS LCE 2 INCOMPATIBLE WITH Y1? No

Hence no occasion

.....

TESTING L+E 3

IS LCE 3 INCOMPATIBLE WITH Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low L + moderate E (where X is an insult)

Hence OCCASION 2: L = low (threshold for LCE to aggress, and resistance to X)
E = moderate (nearness to threshold and incidence of X)

TARGET = E (nearness to threshold) *easier to deal with than incidence of X*

USER'S BEHAVIOUR FOR CHANGE OF E: NPOR and therefore adopted as a new Y -

Y2 (part) = to guard against experiencing an accumulation of insult

No communicator's behaviour is quoted because it is unlikely that any communicator would be in control of the user's experiencing of insult.

.....

TESTING L+E 4

IS LCE 4 INCOMPATIBLE WITH Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low L + moderate E (where X is hilarity)

Hence OCCASION 3: L = low (threshold for LCE to behave recklessly, and resistance to X)
E = moderate (nearness of threshold and incidence of X)

TARGET = E (nearness of threshold) *incidence of X not so easy to deal with*

USER'S BEHAVIOUR FOR CHANGE OF E: NPOR and therefore adopted as a new Y -

Y2 (part) = to guard against an accumulation of hilarity

.....

TESTING L+E 5-6

ARE LCEs 5-6 INCOMPATIBLE WITH Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....

TESTING A+E 1-2

DO THEY REFER TO A COMPONENT OF Y1? Yes for some Y1s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....

TESTING A+E 3

DO THEY REFER TO A COMPONENT OF Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low A + moderate E

Hence OCCASION 4: A = low (degree of skill possessed)
E = moderate (degree to which skill is required)

TARGET = A *E cannot be changed*

USER'S BEHAVIOUR FOR CHANGE OF A: NPOR and therefore adopted as a new Y -

Y2 (part) = to practise

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENT -

4A = to help provide opportunities for practice (if this is within one's brief and power)

.....

TESTING A+E 4-7

DO THEY REFER TO A COMPONENT OF Y1? Yes for some Y1s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....

TESTING A+E 8

DO THEY REFER TO A COMPONENT OF Y1? Yes: knowledge

of the information itself, and knowledge that some scripts may not be appropriate

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low A + moderate E

Hence OCCASION 5: A = low
(degree of possession of accessible knowledge)
E = moderate (degree of demand for accessible knowledge)

TARGET = A

USER'S BEHAVIOUR FOR CHANGE OF A: NPOR and therefore adopted as new Ys -

Y3 = to acquire in accessible form, from a message on a previous occasion, the information in Agents 5A and 5C

Y4 = to reject counter arguments encountered on subsequent occasions to the information in Agents 5A and 5C

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

5A = to present the message

5B = to find what information is already used on similar occasions

5C = to present advance organizers (Ausubel 1960, Derry 1984) and other material that will link the already possessed and the new information if there is a gap between them

5D = to use methods that encourage the linking of the presented information with existing knowledge if there is a gap

.....
TESTING A+E 9

DO THEY REFER TO COMPONENTS OF Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 6: A = moderate (degree of possession of abilities to solve problems)
E = high (degree of demand for abilities to solve problems)

TARGET = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted

as AGENTS -

6A = to assess the problem-solving that is likely to be required in applications by the practitioners

6B = to change the information presented so that, as far as possible, its application does not demand more problem-solving ability than the practitioners possess

.....
TESTING A+E 10

DO THEY REFER TO A COMPONENT OF Y1? Yes for some behvers and some Y1s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING A+E 11-15

DO THESE REFER TO COMPONENTS OF CONSIDERING Y1? Yes for some Y1s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasions

.....
TESTING AV+B+C+E 1-2

ARE THERE REASONABLE Bs INVOLVING AVs 1-2 AND Y1? Yes for some Y1s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING AV+B+C+E 3

IS THERE A REASONABLE B INVOLVING AV 3 AND Y1? Yes: if a norm existed that could seem to contradict the action recommended, following the action would be seen to be courting social disaffiliation

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV + moderate B + moderate C + moderate E

Hence OCCASION 7: AV = high
(degree of aversion to social rejection)
B = moderate (strength of connection believed to exist between social rejection and Y1)

C = moderate (degree of being observed by one's reference group that is followed by salience of social rejection)
E = high (degree to which one is observed by one's reference group)

TARGET = B; E not readily changeable; no subject's behaviour appropriate to AV or C

USER'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore adopted as new Ys -

Y3 = to acquire in accessible form, from a message on a previous occasion, the information in Agent 7B

Y4 = to reject counter arguments encountered on subsequent occasions to the information in Agent 7B

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

7A = to assess any threatened interference from norms that needlessly appear to conflict with the recommendations

7B = to show if necessary that following the recommendations need not appear to conflict with a norm

7C = to provide opportunities for memorizing the information that is to be acquired

.....
TESTING AV+B+C+E 4-9

ARE THERE REASONABLE Bs INVOLVING AVs 4-9 AND Y1?
Yes for some Y1s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasions

.....
TESTING AV+B+C+E 10

IS THERE A REASONABLE B INVOLVING AV 10 AND Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV + moderate B + high C + any E

Hence OCCASION 8: AV = high (degree of aversion to failure)
B = moderate (strength of connection believed to exist between Y1 and failure)

C = moderate (degree of prospect of performing that is followed by salience of failure)
E = high (degree to which a performance is in prospect)

TARGET = B *E not changeable; C not easy to change; inappropriate to terminate or avoid AV*

USER'S BEHAVIOUR FOR CHANGE OF C: NPOR and therefore adopted as new Ys -

Y3 = to acquire in accessible form, from a message on a previous occasion, the information in Agent SA

Y4 = to reject counter arguments encountered on subsequent occasions to the information in Agent SA

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

SA = to present the information that the practitioner's ability is not at issue in terms of the case in question *easier than putting across the message that the practitioners can do what they believe they cannot do*

SB = to provide opportunities for memorizing the information that is to be acquired

.....
TESTING AV+B+C+E 11-12

ARE THERE REASONABLE Bs INVOLVING AVs 11-12 AND Y1?
Yes for some Y1s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasions

.....
TESTING AV+B+C+E 13

IS THERE A REASONABLE B INVOLVING AV 13 AND Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV + moderate B + any E + moderate C

Hence OCCASION 9: AV = high (degree of aversion to doing what is invalid)

B = moderate (strength of connection believed to exist between Y1 and doing what is invalid)

C = moderate (degree of having a choice of action that is followed

by salience of validity)
E = high (degree to which one has a
choice of action)

TARGET = B; E not changeable; inappropriate to
terminate or avoid AV or C

USER'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore
adopted as new Ys -

Y3 = to acquire in accessible form, from a message
on a previous occasion, the information in Agent
9B

Y4 = to reject counter arguments encountered on
subsequent occasions to the information in Agent
9B

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted
as AGENTS -

9A = to assess any threatened interference from
apparent (not actual) invalidities in the message

9B = to indicate if necessary that the apparent
invalidities are not actual invalidities

9C = to provide opportunities for memorizing the
information that is to be acquired

.....
TESTING AV+B+C+E 14-20

ARE THERE REASONABLE Bs INVOLVING AVs 14-20 AND Y1?
Yes for some Y1s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
Hence no occasions

.....
TESTING AV+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? none
Hence no occasion

.....
TESTING ATT+B+C+E 1-20

ARE THERE Zs THAT COULD HAVE BEEN ATTENDED TO AS WELL
AS Y1 AND BEEN INVOLVED WITH ATTs 1-20 IN REASONABLE
Bs? Yes for some Y1s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
Hence no occasions

.....
TESTING ATT+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? none

Hence no occasion

13C. SEEKING A QUESTION (2)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y2 = (a) to give oneself graduated experiences of the target circumstances

(b) to guard against accumulating experiences of insult

(c) to guard against accumulating hilarity

(d) to practise

(e) to do other similar things that may be recommended later in this chapter.

(f) to provide for oneself where necessary the opportunities for the foregoing

NOTE: these are set out as one question because early investigations suggested that the same occasions apply to all of them, and it would be tiresome to have so much repetition.

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED: no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

13D-F. SEARCHING (2)

.....

TESTING L+E 1-6

ARE LCEs 1-6 INCOMPATIBLE WITH Y2? Yes for some Y2s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none if the foregoing measures have been taken

Hence no occasions

.....

TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y2? Yes for sme Y2s

POSSIBILITIES OF OCCURRENCE WORHT CONSIDERING: none

Hence no occasion

.....

TESTING A+E 11-12

DO THEY REFER TO COMPONENTS OF CONSIDERING Y2? Yes
for some Y2s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasions

.....

TESTING A+E 13

DO THEY REFER TO A COMPONENT OF CONSIDERING Y2? Yes
for some Y2s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low A
+ high E

Hence OCCASION 10: A = low (degree of possession of
the knowledge that Y2 may be in
question)
E = high (degree of demand for
possession of that knowledge)

TARGET = A

USER'S BEHAVIOUR FOR CHANGE OF A: NPOR and therefore
adopted as new Ys -

Y3 = to acquire in accessible form, from a message
on a previous occasion, the information in Agent
10A

Y4 = to reject counter arguments encountered on
subsequent occasions to the information in Agent
10A

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted
as AGENTS -

10A = to find which Y2s are relevant to the
particular case in question

10B = to check whether any Y2 that is relevant is
believed to be unimportant

10C = to convey if necessary that Y2 is not
unimportant

.....

TESTING A+E 14-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y2? Yes
for some Y2s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasions

.....
TESTING AV+C+B+E 1

IS THERE A REASONABLE B INVOLVING AV1 AND Y2? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV + moderate B + moderate C + high E

Hence OCCASION 11: AV = high (degree of aversion to
monotony)
B = moderate (strength of
connection believed to exist
between monotony and Y2)
C = moderate (degree of prospect of
a task that is followed by salience
of monotony)
E = high (degree to which a task is
in prospect)

USER'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore
adopted as a new Y -

Y5 = to infer from early experiences of Y2-ing
that it is interesting

.....
TESTING AV+B+C+E 2

IS THERE A REASONABLE B INVOLVING AV2 AND Y2? Yes for
some Y2s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING AV+B+C+E 3

IS THERE A REASONABLE B INVOLVING AV3 AND Y2? Yes:
disagreeableness taking the form of social rejection

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV + moderate B + moderate C + high E

Hence OCCASION 12: AV = high (degree of aversion to
disagreeableness)
B = moderate (strength of
connection believed to exist
between Y2 and social rejection)
C = moderate (degree of presence of
a reference group that is followed
by salience of rejection)
E = high (degree to which a
reference group is present)

TARGET = B

USER'S BEHAVIOUR FOR CHANGE OF A: NPOR and therefore adopted as new Ys -

Y3 = to acquire in accessible form, from a message on a previous occasion, the information in Agent 12A

Y4 = to reject counter arguments encountered on subsequent occasions to the information in Agent 12A

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

12A = to check whether any Y2 that is relevant is believed to be ingratiating

12B = to convey if necessary that Y2 is not ingratiating

.....
TESTING AV+B+C+E 4-8

ARE THERE REASONABLE Bs INVOLVING AVs4-8 AND Y2? Yes for some Y2s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING AV+B+C+E 9

IS THERE A REASONABLE B INVOLVING AV 9 AND Y2? Yes: if practising was seen as uncool

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV + moderate B + moderate C + moderate C

Hence OCCASION 13: AV = moderate (degree of aversion to that which clashes with a desired self-concept)
B = moderate (strength of connection believed to exist between congruence with desired self concept and Y3)
C = moderate (degree to which salience of B follows presence of a reference group)
E = high (degree to which a reference group is present)

TARGET = B; E not readily changeable; there is no subject's behaviour appropriate to AV or C.

USER'S BEHAVIOUR FOR CHANGE OF A: NPOR and therefore adopted as new Ys -

Y3 = to acquire in accessible form, from a message on a previous occasion, the information in Agent 13B

Y4 = to reject counter arguments encountered on subsequent occasions to the information in Agent 13B

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

13A = to check whether any Y2 that is relevant is believed to be uncool

13B = to convey if necessary that Y2 is not uncool

.....
TESTING AV+B+C+E 10-11

ARE THERE REASONABLE Bs INVOLVING AVs10-11 AND Y2?
Yes for some Y2s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING AV+B+C+E 12

IS THERE A REASONABLE B INVOLVING AV 12 AND Y2? Yes:

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV + moderate B + moderate C + high E

Hence OCCASION 14: AV = high (strength of aversion to low cost-effectiveness)
B = moderate (strength of connection believed to exist between Y2 and low cost-effectiveness)
C = moderate (degree of prospect of a task that is followed by salience of cost-effectiveness)
E = high (degree to which a task is in prospect)

TARGET = B; E not readily changeable; no subject's behaviour appropriate to AV or C

USER'S BEHAVIOUR FOR CHANGE OF A: NPQR and therefore adopted as new Ys -

Y3 = to acquire in accessible form, from a message on a previous occasion, the information in Agents 14B and 14C

Y4 = to reject counter arguments encountered on

subsequent occasions to the information in Agents
14B and 14C

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted
as AGENTS -

14A = to check whether any Y2 that is relevant is
believed to be of low cost-effectiveness

14B = to convey if necessary that Y2 is not of low
effectiveness

14C = to convey if necessary that Y2 is not of
high cost

.....
TESTING AV+B+C+E 13-20

ARE THERE REASONABLE Bs INVOLVING AVs 13-20 AND Y2?
Yes for some Y2s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
Hence no occasions

.....
TESTING AV+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? none
Hence no occasion

.....
TESTING ATT+B+C+E 1-2

ARE THERE Zs THAT COULD HAVE BEEN ATTENDED TO AS WELL
AS Y2 AND BEEN INVOLVED WITH ATTs 1-2 IN REASONABLE
Bs? Yes for some Y2s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
Hence no occasions

.....
TESTING ATT+B+C+E 3

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS
WELL AS Y2 AND BEEN INVOLVED WITH ATT 3 IN REASONABLE
Bs? Yes: agreeableness in the form of social
acceptance.

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
ATT + moderate B + moderate C + moderate E

Hence OCCASION 15: high (attraction to social
acceptance)
B = high (strength of connection
believed to exist between Q1 and

social acceptance)
C = moderate (degree of being able
to dispose of one's own time that
is followed by salience of Qs
linked to social acceptance)
E = moderate (degree of present
ability to dispose of one's own
time)

TARGET = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted
as an AGENT -

15A = to arrange for supervised Y2-ing where
necessary and possible

:::::::::::::::::::::::::::::::::::::
TESTING ATT+B+C+E 4-20

ARE THERE Zs THAT COULD HAVE BEEN ATTENDED TO AS WELL
AS Y2 AND BEEN INVOLVED WITH ATTs 4-20 IN REASONABLE
Bs? Yes for some Y2s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasions

:::::::::::::::::::::::::::::::::::::
TESTING ATT+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? None

Hence no occasion

13C. SEEKING A QUESTION (3)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y3 = acquiring the information in accessible form from a message

FIND WHETHER THE UNDESIRED HAS ALREADY HAPPENED: no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

13D-F. SEARCHING (3)

.....

TESTING L+E 1-4

ARE LCEs 1-4 INCOMPATIBLE WITH Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasions

.....

TESTING L+E 5

IS LCE 5 INCOMPATIBLE WITH Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low L + moderate E

Hence OCCASION 16: L =low (threshold for LCE to be lost in thought and resistance to X)

E = moderate (nearness to threshold and current incidence of X)

TARGET = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

16A = to look for threatened signs of imminent threat, promise or insult

16B = to forestall or accommodate and limit any signs of imminent threat promise and insult

16C = not to introduce signs of imminent threat promise or insult as far as possible

.....

TESTING L+E 6

IS LCE 6 INCOMPATIBLE WITH Y3? Yes for some LCE6s

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasions

.....

TESTING A+E 1

DO THEY REFER TO A COMPONENT OF Y3? No

Hence no occasions

.....

TESTING A+E 2

DO THEY REFER TO A COMPONENT OF Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low A + high E

Hence OCCASION 17: A = low (degree of possession of energy)
E = moderate (degree of energy required)

TARGET = A

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

17A = to assess the threat of low energy

17B = to act against the threat of low energy if necessary

17C = not to add to a threat of low energy

.....TESTING A+E 3

DO THEY REFER TO A COMPONENT OF Y3? No

Hence no occasions

.....

TESTING A+E 4

DO THEY REFER TO A COMPONENT OF Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: moderate A + high E

high E could be present: traffic and weather noise, coughing of room-mates, soft or poorly enunciated speaking by the giver of information

moderate D could be present: the sensory acuity of some people even at its maximum leaves something to be desired.

Hence OCCASION 18: A = moderate (degree of possession of deciphering ability)
E = high (demand for deciphering ability)

TARGET = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

18A = to check the level of noise and the strength of signal

18B = to strengthen the signal if necessary and possible

18C = to diminish noise if necessary and possible

.....
TESTING A+E 5

DO THEY REFER TO A COMPONENT OF Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 19: A = moderate (degree of possession of ability in resolving ambiguity)
E = high (degree of ability to resolve ambiguity demanded)

TARGET = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

19A = to assess threatened ambiguity (including vagueness) and misinterpretation

19B = to remove ambiguity

19C = to warn against threatened misinterpretations

.....
TESTING A+E 6

DO THEY REFER TO A COMPONENT OF Y3? Yes
yes - it comes in at the input stage and at the memorizing stage

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 20: A = moderate (degree of possession of attentional capacity)
E = high (demand for attentional capacity - number of separate pieces of information)

TARGET = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

20A = to identify the nature, length, frequency and number of contacts there will be between communicator and practitioner (i.e. the contact conditions)

20B = to check that there is not too much material for the contact conditions

20C = to reduce the amount of material if necessary to suit the contact conditions (by excision and shift to greater generality)

20D = to adjust the organization of the presentation to suit the contact conditions

20E = to check for the presence of uncommon terms and expressions

20F = to use common terms and expressions

.....
TESTING A+E 7

DO THEY REFER TO COMPONENTS OF Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 21: A = moderate (degree of possession of ability to concentrate)
E = high (demand for concentration)

TARGET = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

21A = to check for threatened distractions

21B = to forestall or accommodate and limit distractions if necessary

21C = not to introduce distractions

.....
TESTING A+E 8

DO THEY REFER TO A COMPONENT OF Y3? Yes

because you need to have understanding

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 22: A = moderate (degree of possession
of accessible knowledge)
E = high (degree of accessible
knowledge demanded)

***If E is changeable enough to eliminate the problem
-

TARGET 1 = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted
as AGENTS -

22A = to check for the presence of uncommon terms
and expressions

22B = to use common terms and expressions

22C = to use concrete illustration

22D = to use various illustrations

22E = to find what information is already used on
similar occasions

22F - to check for the presence of any demand for
information that is inessential for understanding
the presentation

22G - to eliminate any such demand

22H = to present advance organizers and other
material that will link the already possessed and
the new information if there is a gap between them

22I = to use methods that encourage the linking of
the presented information with existing knowledge
if there is a gap

***If E is not changeable enough to eliminate the
problem -

TARGET 2 = A

USER'S BEHAVIOUR FOR CHANGE OF A: NPOR and therefore
adopted as a new Y -

Y3 = to acquire in accessible form, from a message
on a previous occasion, the information in Agent
22K

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

22E = to find what information is already used on similar occasions

22J - to find any information that is essential for understanding the presentation and that is not already possessed

22K - to present any information that is essential for understanding the presentation and that is not already possessed

.....
TESTING A+E 9

DO THEY REFER TO A COMPONENT OF Y3? No

Hence no occasions

.....
TESTING A+E 10

DO THEY REFER TO A COMPONENT OF Y3? Yes for some As

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

.....
TESTING A+E 11-12

DO THEY REFER TO COMPONENTS OF CONSIDERING Y3? No

Hence no occasions

.....
TESTING A+E 13

DO THEY REFER TO COMPONENTS OF CONSIDERING Y3? Yes: some people do not know that active memorizing may be an issue

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: moderate A + high E

Hence OCCASION 23: A = moderate (degree of possession of accessible knowledge)
E = high (demand for accessible knowledge)

TARGET = A

USER'S BEHAVIOUR FOR CHANGE OF A: NPQR and therefore adopted as new Ys -

Y3 = to acquire in accessible form, from a message on a previous occasion, the information in Agent 23A

Y4 = to reject counter arguments encountered on subsequent occasions to the information in Agent 23A

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

23A = to indicate that active memorizing is necessary

23B = to provide opportunities for memorizing the information that is to be acquired

.....
TESTING A+E 14

DO THEY REFER TO A COMPONENT OF CONSIDERING Y3? No

Hence no occasion

.....
TESTING A+E 15

DO THEY REFER TO A COMPONENT OF Y3? Yes for some As

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

.....
TESTING AV+B+C+E 1

IS THERE A REASONABLE B INVOLVING AV1 AND Y3? Yes, if acquiring has to be worked on and the material is on a particular theme (T) or from a particular messenger (M)

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV + moderate B + moderate C + high E

Hence OCCASION 24: AV = high (degree of aversion to monotony)
B = moderate (strength of connection believed to exist between monotony and acquiring material on theme T or from messenger M)
C = moderate (degree of prospect of a task that is followed by salience of monotony)
E = high (degree of present prospect of a task)

TARGET = B

USER'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore adopted as new Y -

Y5 = to decide on any previous occasion that
acquiring material on theme T or from messenger M
are not monotonous

.....
TESTING AV+B+C+E 2-8

ARE THERE REASONABLE Bs INVOLVING AVs 2-8 AND Y3? No

Hence no occasions

.....
TESTING AV+B+C+E 9

IS THERE A REASONABLE B INVOLVING AV 9 AND Y3? Yes
if acquiring has to be worked on

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate AV + moderate B + moderate E + moderate C

Hence OCCASION 25: AV = moderate (strength of
aversion to what is incongruous
with a desired self-concept)
B = moderate (degree to which
working on acquiring is seen as
incongruous with a desired
self-concept)
C = moderate (degree of being
observed that is followed by
salience of desired self-concept)
E = high (degree to which one is
observed)

TARGET = B

USER'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore
adopted as new Ys -

Y3 = to acquire in accessible form, from a message
on a previous occasion, the information in Agent
25A

Y4 = to reject counter arguments encountered on
subsequent occasions to the information in Agent
25A

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted
as AGENTS -

25A = to convey that memorizing is not wet

25B = to provide opportunities for memorizing the
information that is to be acquired

.....
TESTING AV+B+C+E 10

IS THERE A REASONABLE B INVOLVING AV10 AND Y3? No

Hence no occasion

.....
TESTING AV+B+C+E 11

IS THERE A REASONABLE B INVOLVING AV 11 AND Y3? Yes,
if a particular messenger is involved

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate AV + moderate B + moderate E + moderate C

Hence OCCASION 26: AV = moderate (strength of
aversion to accepting the
persuasion of a messenger who holds
a low opinion of one)
B = moderate (degree to which Y3 is
seen as accepting the persuasion of
a messenger who holds a low opinion
of one)
C = moderate (degree of presence of
a messenger that is followed by
salience of the opinion the
messenger holds of one)
E = high (degree of presence of a
messenger)

TARGET = B

USER'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore
adopted as new Y -

Y6 = to make an early decision that the messenger
is not contemptuous

.....
TESTING AV+B+C+E 12

IS THERE A REASONABLE B INVOLVING AV12 AND Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV + high B + moderate C + high E

Hence OCCASION 27: high (degree of aversion to low
cost-effectiveness)
B = high (degree of connection
believed to exist between low
cost-effectiveness and Y3)
C = moderate (degree of prospect of
a task that is followed by salience
of cost-effectiveness)
E = high (degree to which a task is
in prospect)

TARGET = B

USER'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore

adopted as new Ys -

Y3 = to acquire in accessible form, from a message on a previous occasion, the information in Agent 27A

Y4 = to reject counter arguments encountered on subsequent occasions to the information in Agent 27A

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

27A = to indicate that taking in the message will have some desired effects

27B = to indicate consciousness of the cost to learners and interest in (if not action towards) minimizing them

27C = to provide opportunities for memorizing the information that is to be acquired

.....
TESTING AV+B+C+E 13

IS THERE A REASONABLE B INVOLVING AV 13 AND Y3? Yes, if particular recommendations are involved

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV + moderate B + moderate C + high E

Hence OCCASION 28: AV = high (degree of aversion to believing what is impracticable)
B = moderate (degree to which Y3 is seen as accepting impracticable recommendations)
C = moderate (degree of presence of recommendations that is followed by salience of their practicability)
E = high (degree to which recommendations are present)

TARGET = B

USER'S BEHAVIOUR FOR CHANGE OF C: NPOR and therefore adopted as a new Y -

Y7 = to decide that the recommendations are practicable

.....
TESTING AV+B+C+E 14

IS THERE A REASONABLE B INVOLVING AV 14 AND Y3? Yes, if a particular messenger is involved

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV + moderate B + moderate C + high E

Hence OCCASION 29: AV = high (degree of aversion to
accepting the persuasion of a
messenger who is green or
insincere)
B = moderate (degree to which Y3 is
seen as accepting the persuasion of
a messenger who is green or
insincere)
C = moderate (degree of presence of
a messenger that is followed by
salience of greenness and
insincerity)
E = high (degree of presence of a
messenger)

TARGET 1 (if E is changeable) = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted
as an AGENT -

29A = to use discussion

TARGET 2 (if E is not changeable) = B

USER'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore
adopted as new Ys -

Y3 = to acquire in accessible form, from a message
on a previous occasion, the information in Agents
29C-E

Y4 = to reject counter arguments encountered on
subsequent occasions to the information in Agents
29C-E

Y8 = to decide on an earlier occasion that the
messenger is not green or insincere

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted
as AGENTS -

29B = to distinguish existing beliefs values and
regular behaviour of the practitioners that is
fully acknowledgeable or partially acknowledgeable

29C = to acknowledge appropriately some existing
beliefs values or regular behaviour of the
practitioners

29D = to indicate that the communicator has some
inside knowledge of the field in which the
practitioner practises

29E = to present information from psychology or
elsewhere that justifies the recommendations

29F = to provide opportunities for memorizing the information that is to be acquired

.....TESTING AV+B+C+E
15

IS THERE A REASONABLE B INVOLVING AV15 AND Y3? Yes, if adopting particular beliefs is involved

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV + moderate B + moderate C + high E

Hence OCCASION 30: AV = high (degree of aversion to accepting what is contrary to existing beliefs or values)
B = moderate (degree to which Y3 is seen as adopting beliefs contrary to existing beliefs or values)
C = moderate (degree of presence of a message that is followed by salience of its consistency with existing beliefs and values)
E = high (degree to which a message is present)

TARGET 1 (if E is changeable) = E

USER'S BEHAVIOUR FOR CHANGE OF E: NPOR and therefore adopted as new Ys -

Y3 = to acquire in accessible form, from a message on a previous occasion, the information in Agent 30B

Y4 = to reject counter arguments encountered on subsequent occasions to the information in Agent 30B

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

30A = to assess any threatened interference from practitioners' existing beliefs that are underpinned and that could conflict with the recommendations

30B = to argue if necessary around or above such beliefs

30C = to provide opportunities for memorizing the information that is to be acquired

30D = to check for the presence of misleading expressions

30E = to replace misleading expressions

TARGET 2 (if E is not changeable) = B

USER'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore adopted as new Ys -

Y3 = to acquire in accessible form, from a message on a previous occasion, the information in Agents 30H-K

Y4 = to reject counter arguments encountered on subsequent occasions to the information in Agents 30H-K

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

30F = to assess any threatened interference from the practitioners' possessing concepts that are too coarse

30G = to refine such concepts as necessary

30H = to assess any threatened interference from the practitioners' possessing incorrect but not underpinned beliefs

30I = to correct such beliefs as necessary

30J = to assess any threatened interference from practitioners' faulty 'intuitive statistics'

30K = to warn as necessary against faulty 'intuitive statistics'

30L = to provide opportunities for memorizing the information that is to be acquired

.....TESTING AV+B+C+E
16-20

ARE THERE REASONABLE Bs INVOLVING AVs 16-20 AND Y3?
No

Hence no occasions

.....
TESTING AV+C+E 21

POSSIBILITIES WORTH CONSIDERING? None

Hence no occasion

.....
TESTING ATT+B+C+E 1-20

ARE THERE Zs THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y3 AND BEEN INVOLVED WITH ATTs 1-20 IN REASONABLE

Bs? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasions

.....

TESTING ATT+C+E 21

POSSIBILITIES WORTH CONSIDERING? None

Hence no occasion

13C. SEEKING A QUESTION (4)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y4 = rejecting specious counter-arguments at some stage after the information is originally given

FIND WHETHER THE UNDESIRED HAS ALREADY HAPPENED: no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

13D-F. SEARCHING (4)

.....
TESTING L+E 1-6

ARE LCEs 1-6 INCOMPATIBLE WITH Y4? No

Hence no occasions

.....
TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y4 THAT ARE POSSIBILITIES WORTH CONSIDERING? No

hence no occasions

.....
TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y4 THAT ARE WORTH POSSIBILITIES CONSIDERING? No

Hence no occasions

.....
TESTING AV+B+C+E 1-20

ARE THERE REASONABLE Bs INVOLVING AVs 1-20 AND Y4 THAT ARE POSSIBILITIES WORTH CONSIDERING? No

Hence no occasions

.....
TESTING AV+C+E 21

POSSIBILITIES WORTH CONSIDERING? None

Hence no occasion

.....
TESTING ATT+B+C+E 1-13

ARE THERE Qs THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y4 AND BEEN INVOLVED WITH ATTs 1-13 IN REASONABLE Bs AND BE POSSIBILITIES WORTH CONSIDERING: No

Hence no occasions

.....
TESTING ATT+B+C+E 14

IS THERE A Q THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y4 AND BEEN INVOLVED WITH ATT 14 IN A REASONABLE B? Yes: Q could be accepting the persuasion of a particular person P

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high ATT + moderate B + moderate C + high E

Hence OCCASION 31: ATT = high (degree of attraction to accept persuasion of a sincere expert)
B = moderate (degree to which accepting the argument of person P is seen as accepting the persuasion of a sincere expert)
C = moderate (degree of presence of a persuader that is followed by salience of the persuader's expertise and sincerity)
E = high (degree of presence of a persuader)

TARGET = B

USER'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore adopted as new Ys -

Y3 = to acquire in accessible form, from a message on a previous occasion, the information in Agents 31A and 31B

Y4 = to reject counter arguments encountered on subsequent occasions to the information in Agents 31A and 31B

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

31A = to assess the threat of counter-arguments

31B = to demolish weak versions of strongly threatened counter-arguments

31C = to show if necessary that beliefs involved

in counter-arguments may owe something to motives other than the search for validity

31D = to provide opportunities for memorizing the information that is to be acquired

.....
TESTING ATT+B+C+E 15-20

ARE THERE Zs THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y4 AND BEEN INVOLVED WITH ATTs 15-20 IN REASONABLE Bs AND BE POSSIBILITIES WORTH CONSIDERING: No

Hence no occasions

.....
TESTING ATT+C+E 21

POSSIBILITIES WORTH CONSIDERING? None

Hence no occasion

13C. SEEKING A QUESTION (5)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y5 = to decide that paying attention and memorizing material on theme T or from messenger M will not be monotonous

FIND WHETHER THE UNDESIRED HAS ALREADY HAPPENED:
no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

13D-F SEARCHING (5)

.....
TESTING L+E 1-6

ARE LCEs 1-6 INCOMPATIBLE WITH Y5? No

Hence no occasions

.....
TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y5 THAT ARE POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? No

Hence no occasions

.....

TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y5 THAT ARE POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? No

Hence no occasions

.....

TESTING AV+B+C+E 1-12

ARE THERE REASONABLE Bs INVOLVING AVs1-12 AND Y5 THAT ARE POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? No

Hence no occasions

.....

TESTING AV+B+C+E 13

IS THERE A REASONABLE B INVOLVING AV13 AND Y5? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV + high B + high C + high E

Hence OCCASION 32: AV = high (degree of aversion to believing what is invalid)
B = high (degree to which expecting theme T or messenger M to be non-monotonous is seen as believing what is invalid)
C = high (degree of prospect of beliefs about something experienced is followed by salience of the validity of the beliefs)
E = high (degree of prospect of beliefs about something experienced)

***If E is avoidable -

TARGET 1 = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as an AGENT -

32A = to avoid monotony in any messages

***If E is not avoidable -

TARGET 2 = none

.....

TESTING AV+B+C+E 14-20

ARE THERE REASONABLE Bs INVOLVING AVs14-20 AND Y5

THAT ARE POSSIBILITIES WORTH CONSIDERING? No

Hence no occasions

.....
TESTING AV+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING?
None

Hence no occasion

.....
TESTING ATT+B+C+E 1-20

ARE THERE Zs THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Ys AND BEEN INVOLVED WITH ATTs 1-20 IN REASONABLE Bs AND BE POSSIBILITIES WORTH CONSIDERING: No

Hence no occasions

.....
TESTING ATT+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING?
None

Hence no occasion

13C. SEEKING A QUESTION (6)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y6 = to decide that the messenger is not contemptuous

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED:
no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

13D-F SEARCHING (6)

.....
TESTING L+E 1-6

ARE LCEs 1-6 INCOMPATIBLE WITH Y6? No

Hence no occasions

.....
TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y6 THAT ARE
POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? No

Hence no occasions

.....
TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y6 THAT
ARE POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING?

No

Hence no occasions

.....
TESTING AV+B+C+E 1-12

ARE THERE REASONABLE Bs INVOLVING AVs 1-12 AND Y6
THAT ARE POSSIBILITIES OF OCCURRENCE WORTH
CONSIDERING? No

Hence no occasions

.....
TESTING AV+B+C+E 13

IS THERE A REASONABLE B INVOLVING AV13 AND Y6? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
high AV + high B + high C + high E

Hence OCCASION 33: AV = high (degree of aversion
to believing what is invalid)
B = high (degree to which accepting
that a person is uncontentious
when they show signs S is believing
what is invalid)
C = high (degree of presence of a
newly met person that is followed
by salience of the person's
contentiousness)
E = high (degree to which the
messenger is a newly met person
showing signs S)

TARGET = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted
as AGENTS -

33A = to discover something of the practitioners'
existing beliefs, values and regular behaviour

33B = to present material showing respect for some
of the existing beliefs values or regular
behaviour of the users

33C = to adopt a style that conveys
uncontemptuousness

33D = to check for the presence of any material
that might convey that the messenger is
contemptuous

33E = to excise such material

.....
TESTING AV+B+C+E 14-20

ARE THERE REASONABLE Bs INVOLVING AVs14-20 AND Y6?
THAT ARE POSSIBILITIES WORTH CONSIDERING? No

Hence no occasions

.....
TESTING AV+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? None

Hence no occasion

.....
TESTING ATT+B+C+E 1-20

ARE THERE Zs THAT COULD HAVE BEEN ATTENDED TO AS WELL
AS Y6 AND BEEN INVOLVED WITH ATTs 1-20 IN REASONABLE
Bs AND BE POSSIBILITIES WORTH CONSIDERING: No

Hence no occasions

.....
TESTING ATT+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? None

Hence no occasion

13C. SEEKING A QUESTION (7)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y7 = to decide that what is recommended is practicable

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED: no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

13D-F SEARCHING (7)

TESTING L+E 1-6

ARE LCEs 1-6 INCOMPATIBLE WITH Y7? No

Hence no occasions

TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y7 THAT ARE POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? No

Hence no occasions

TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y7 THAT ARE POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? No

Hence no occasions

TESTING AV+B+C+E 1-11

ARE THERE REASONABLE Bs INVOLVING AVs 1-11 AND Y7 THAT ARE POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? No

Hence no occasions

TESTING AV+B+C+E 12

IS THERE A REASONABLE B INVOLVING AV 12 AND Y7? Yes, a component of Y7 being 'considering particular recommendations' and a task being 'considering these

recommendations'.

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV + high B + high C + high E

Hence OCCASION 34: AV = high (degree of aversion to low cost-effectiveness)
B = high (degree to which it is seen as of low cost-effectiveness to consider recommendations that are not demonstrated to be good)
C = high (degree of prospect of considering recommendations that is followed by salience of cost-effectiveness)
E = high (degree to which recommendations are to be considered that are not demonstrated to be good)

TARGET = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

34A = to use practical demonstration

34B = to discover something of the users' past experience

34C = to draw on the practitioner's past experience in making illustrations

.....
TESTING AV+B+C+E 13-20

ARE THERE REASONABLE Bs INVOLVING AVs13-20 AND Y7 THAT ARE POSSIBILITIES WORTH CONSIDERING? No

Hence no occasions

.....
TESTING AV+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? None

Hence no occasion

.....
TESTING ATT+B+C+E 1-20

ARE THERE Zs THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y7 AND BEEN INVOLVED WITH ATTs 1-20 IN REASONABLE Bs AND BE POSSIBILITIES WORTH CONSIDERING: No

Hence no occasions

.....

TESTING ATT+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? None

Hence no occasion

13C. SEEKING A QUESTION (8)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y8 = to decide that the messenger is credible

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED: no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

13D-F SEARCHING (8)

.....
TESTING L+E 1-6

ARE LCEs 1-6 INCOMPATIBLE WITH Y6? No

Hence no occasions

.....
TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y8 THAT ARE POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? No

Hence no occasions

.....
TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y8 THAT ARE POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? No

Hence no occasions

.....
TESTING AV+B+C+E 1-11

ARE THERE REASONABLE Bs INVOLVING AVs 1-11 AND Y8 THAT ARE POSSIBILITIES WORTH CONSIDERING? No

Hence no occasions

.....

TESTING AV+B+C+E 12

IS THERE A REASONABLE B INVOLVING AV 12 AND Y8? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV + high B + high C + high E

Hence OCCASION 35: AV = high (degree of aversion to believing what is invalid)
B = high (degree to which accepting that a person is expert or sincere when they show signs S is seen as believing what is invalid)
C = high (degree of presence of a newly met person that is followed by salience of the person's expertise and sincerity)
E = high (degree to which the messenger is a newly met person showing signs S)

TARGET = E

COMMUNICATOR'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

35A = to adopt a style that conveys expertise and sincerity

35B = to check for the presence of any material that might convey that the messenger was green or insincere

35C = to excise such material

35D = to check for the presence of uncommon terms and expressions

35E = to use common terms and expressions

.....
TESTING AV+B+C+E 13-20

ARE THERE REASONABLE Bs INVOLVING AVs13-20 AND Y8 THAT ARE POSSIBILITIES WORTH CONSIDERING? No

Hence no occasions

.....
TESTING AV+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? None

Hence no occasion

.....
TESTING ATT+B+C+E 1-20

ARE THERE Zs THAT COULD HAVE BEEN ATTENDED TO AS WELL

AS Y5 AND BEEN INVOLVED WITH ATTs 1-20 IN REASONABLE
Bs AND BE POSSIBILITIES WORTH CONSIDERING: No

Hence no occasions

.....
TESTING ATT+C+E 21

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING? None

Hence no occasion

13G. RELATING THE ADOPTED AGENTS TO EACH OTHER

In this section all the agents derived from the foregoing exercise are listed and the list then examined for coherence.

13G.1 LIST OF AGENTS

1A = to provide opportunities for graduated experience (if this is within one's brief and power)

4A = to provide opportunities for practice (if this is within one's brief and power)

5A = to present the message

5B = to find what information is already used on similar occasions

5C = to present advance organizers and other material that will link the already possessed and the new information if there is a gap between them

5D = to use methods that encourage the linking of the presented information with existing knowledge if there is a gap

6A = to assess the problem-solving that is likely to be required in applications by the practitioners

6B = to change the information presented so that, as far as possible, its application does not demand more problem-solving ability than the practitioners possess

7A = to assess any threatened interference from norms that needlessly appear to conflict with the recommendations

7B = to show if necessary that following the recommendations need not appear to conflict with a norm

7C = to provide opportunities for memorizing the information that is to be acquired

8A = to present the information that the practitioner's ability is not at issue in terms of the case in question

8B = to provide opportunities for memorizing the information that is to be acquired

9A = to assess any threatened interference from apparent (not actual) invalidities in the message

9B = to indicate if necessary that the apparent invalidities are not actual invalidities

9C = to provide opportunities for memorizing the information that is to be acquired

10A = to find which Y2s are relevant to the particular case in question

10B = to check whether any Y2 that is relevant is believed to be unimportant

10C = to convey if necessary that Y2 is not unimportant

12A = to check whether any Y2 that is relevant is believed to be ingratiating

12B = to convey if necessary that Y2 is not ingratiating

13A = to check whether any Y2 that is relevant is believed to be uncool

13B = to convey if necessary that Y2 is not uncool

14A = to check whether any Y2 that is relevant is believed to be of low cost-effectiveness

14B = to convey if necessary that Y2 is not of low effectiveness

14C = to convey if necessary that Y₂ is not of high cost

15A = to arrange for supervised Y2-ing where necessary and possible

16A = to look for threatened signs of imminent threat, promise or insult

16B = to forestall or accommodate and limit any signs of imminent threat promise and insult

16C = not to introduce signs of imminent threat promise or insult as far as possible

17A = to assess the threat of low energy

17B = to act against the threat of low energy if necessary

17C = not to add to a threat of low energy

18A = to check the level of noise and the strength of signal

18B = to strengthen the signal if necessary and possible

18C = to diminish noise if necessary and possible

19A = to assess threatened ambiguity (including vagueness) and misinterpretation

19B = to remove ambiguity

19C = to warn against threatened misinterpretations

20A = to identify the nature, length, frequency and number of contacts there will be between communicator and practitioner (i.e. the contact conditions)

20B = to check that there is not too much material for the contact conditions

20C = to reduce the amount of material if necessary to suit the contact conditions (by excision and shift to greater generality)

20D = to adjust the organization of the presentation to suit the contact conditions

20E = to check for the presence of uncommon terms and expressions

20F = to use common terms and expressions

21A = to check for threatened distractions

21B = to forestall or accommodate and limit distractions if necessary

21C = not to introduce distractions

22A = to check for the presence of uncommon terms and expressions

22B = to use common terms and expressions

22C = to use concrete illustrations

22D = to use various illustrations

22E = to find what information is already used on similar occasions

22F = to find any information that is essential for understanding the presentation and that is not already possessed

22G = to present any information that is essential for understanding the presentation and that is not already possessed

22H = to check for the presence of any demand for information that is inessential for understanding the presentation

22I = to eliminate any such demand

22J = to present advance organizers and other material that will link the already possessed and the new information if there is a gap between them

22K = to use methods that encourage the linking of the presented information with existing knowledge if there is a gap

23A = to indicate that active memorizing is necessary

23B = to provide opportunities for memorizing the information that is to be acquired

25A = to convey that memorizing is not wet

25B = to provide opportunities for memorizing the information that is to be acquired

27A = to indicate that taking in the message will have some desired effects

27B = to indicate consciousness of the cost to learners and interest in (if not action towards) minimizing them

27C = to provide opportunities for memorizing the information that is to be acquired

29A = to use discussion

29B = to distinguish existing beliefs values and regular behaviour of the practitioners that is fully acknowledgeable or partially acknowledgeable

29C = to acknowledge appropriately some existing beliefs values or regular behaviour of the practitioners

29D = to indicate that the communicator has some inside knowledge of the field in which the practitioner practises

29E = to present information from psychology or elsewhere that justifies the recommendations

29F = to provide opportunities for memorizing the information that is to be acquired

30A = to assess any threatened interference from practitioners' existing beliefs that are underpinned and that could conflict with the recommendations

30B = to argue if necessary around or above such beliefs

30C = to provide opportunities for memorizing the information that is to be acquired

30D = to check for the presence of misleading expressions

30E = to replace misleading expressions

30F = to assess any threatened interference from the practitioners' possessing concepts that are too coarse

30G = to refine such concepts as necessary

30H = to assess any threatened interference from the practitioners' possessing incorrect but not underpinned beliefs

30I = to correct such beliefs as necessary

30J = to assess any threatened interference from practitioners' faulty 'intuitive statistics'

30K = to warn as necessary against faulty 'intuitive statistics'

30L = to provide opportunities for memorizing the information that is to be acquired

31A = to assess the threat of counter-arguments

31B = to demolish weak versions of strongly threatened counter-arguments

31C = to show if necessary that beliefs involved in counter-arguments may owe something to motives other than the search for validity

31D = to provide opportunities for memorizing the information that is to be acquired

32A = to avoid monotony

33A = to discover something of the practitioners' existing beliefs, values and regular behaviour

33B = to present material showing respect for some of the existing beliefs values or regular behaviour of the practitioners

33C = to adopt a style that conveys
uncontemptuousness

33D = to check for the presence of any material that
might convey that the messenger is contemptuous

33E = to excise such material

34A = to use practical demonstration

34B = to discover something of the practitioners'
past experience

34C = to draw on the practitioner's past experience
in making illustrations

35A = to adopt a style that conveys expertise and
sincerity

35B = to check for the presence of any material that
might convey that the messenger was green or
insincere

35C = to excise such material

35D = to check for the presence of uncommon terms and
expressions

35E = to use common terms and expressions

13G.2 IDENTICALS

There is some REPETITION:

- check for uncommon terms and expressions (20E, 22A,
35D)

use common terms and expressions (20F, 22B, 35E)

- use advance organizers and other appropriate
material for linking the presented information with
existing knowledge (5C, 22J)

- use methods that encourage the integration of new
and old information (5D, 22K)

- provide (where it is within one's remit) conditions
for any Y2s that are necessary (1A, 4A)

- allow time for memorizing (7C, 8B, 9C, 23B, 25B,
27B, 29F, 30C, 30L, 31D)

- check for threatened ambiguity and
misinterpretation (19A, 19C)

There is some OVERLAP:

'to use concrete illustrations from the practitioner's past' is included in 'to use concrete illustrations' but must not be submerged in it.

There are some CLOSE RELATIONS

- give the impression of being expert, trustworthy and uncontentiousness (33C, 35A)
- check for the presence of any material that indicates that the messenger is contemptuous, inexperienced or untrustworthy (33D, 35B)
- remove any material that indicates that the messenger is contemptuous, inexperienced or untrustworthy (33E, 35C)
- to use demonstrations (22C) and - to use concrete illustrations (34A)
- check whether Y2-ing is seen as important, not ingratiating, cool, and worth an effort (10B, 12A, 13A, 14A)
- convey if necessary that Y2-ing is important, not ingratiating, cool, and worth an effort (10C, 12B, 13B, 14B)
- discover something of receivers' existing beliefs, values, past behaviour (33A)
- discover existing underpinned beliefs that might conflict with the message (30A)
- discover existing not underpinned beliefs that are incorrect (30H)
- discover coarse concepts and beliefs (30F)
- discover existing knowledge of the topic (5D, 22F)
- discover past experience (34B)

13G.3 CONTRADICTIONS

Arguing against existing thinking need not be inconsistent with showing some agreement with the thinking to be changed, as suggested in j or acknowledging, as suggested in i, that there was some

some justification for the thinking to be changed

Common terms could be misleading: of course common terms may be less precise than special terms. But in such cases it may be possible to introduce the ideas in common terms first and move on to the special terms later before misinterpretation threatens

source/message: in arguing against existing beliefs you could damage your own credibility

old knowledge: eliminate unnecessary knowledge, give necessary preliminary knowledge, say existing concepts and beliefs are unrefined, say existing beliefs are wrong, respect existing beliefs, use advance organizers

13G.4 MUTUAL INDEPENDENCE

The rest are all independent of each other

13H. COMMENTARY

FURTHER USE

This chapter allows the proposed standard process to

be finalized. This will be done in chapter 14.

FEASIBILITY

The standard process, and its use with the eclectic list of testable variables from psychology, are clearly feasible.

COMPLICATION

Many sub-problems were found and incorporated. This reflects in part the involvement with different time-periods, for example when the information is given and when it is used.

SUPERFICIALITY

There is a degree of superficiality. But the chapter is addressed to a very general group of receivers - it must be left to them to work out how the general recommendations would be put into effect in specific circumstances. Also it is the present purpose just to indicate where things come in, not to write a chapter about advance organizers or to give a full discussion of methods of teaching or communication.

CHAPTER FOURTEEN

IMPLICATIONS OF THE STUDY OF PRACTITIONERS' NOT USING INFORMATION AS INTENDED

Now for some implications of chapter 13's standard application of a good eclectic psychology to the problem of practitioners' not using as intended the information they are given. There are changes to be made to chapter 8's standard process, chapter 9's list of roles in the process, and chapter 10's account of the use of the standard to analyse applications at large.

This chapter sets out (A) the changes to the chapter 8 list of properties, and (B) the changes to chapter 8's more algorithmic account, (C) the changes to chapter 9, (D) the changes to chapter 10, and (E) comments.

14A. CHANGES IN THE LIST OF PROPERTIES

Property 2 (relevant to the receiver) can now have added:

Making sure before furnishing information that the receiver agrees that the problem is worth dealing with

Making sure after furnishing information that the receiver agrees that the problem has been dealt with

SECTION 10 (as full as is consistent with having other properties and meeting local requirements) can now have added:

Saying as much if there is no element in a particular occasion that can be changed

Making clear the weight of the information given

Property 15 - furnishing information in such a way that it will be used as intended - can now be replaced by the list of agents in chapter 13.

14B. CHANGES IN THE ALGORITHM

The algorithmic version of the proposed standard process as set out in chapter 8 is now altered as follows. All the alterations are additions; and apart from the addition to stage A, the additions all take the form of added stages following from the last existing stage, H.

To show where the various steps came from, the numbers in parentheses refer to the numbers given in chapter 13 to the agents and the occasions from which they

were derived.

Notes and examples are added to show feasibility in some cases where it might be questioned.

B. RECEIVERS

B.12 TRY TO PROCEED ONLY WITH RECEIVERS WHO AGREE THAT THE PROBLEM IS WORTH DEALING WITH

B.13 SUCCESSFULLY PROCEED ONLY WITH RECEIVERS WHO AGREE THAT THE PROBLEM IS WORTH DEALING WITH

I. CONSIDERING COMMUNICATION

I.1 TRY TO CONSIDER COMMUNICATION ONLY WHEN THE RECEIVER IS NOT THE DERIVER

I.2 SUCCESSFULLY CONSIDER COMMUNICATION ONLY WHEN THE RECEIVER IS NOT THE DERIVER

I.3 TRY TO CONSIDER COMMUNICATION WHENEVER THE RECEIVER IS NOT THE DERIVER

I.4 SUCCESSFULLY CONSIDER COMMUNICATION WHENEVER THE RECEIVER IS NOT THE DERIVER

J. GROUPING AGENTS

J.1 TRY TO GROUP the surviving agents so that those involving related or overlapping actions are together

J.2 SUCCESSFULLY GROUP the surviving agents so that those involving related or overlapping actions are together

K. ADDING MATERIAL ON THE TOPIC

K.1 TRY TO FIND WHAT INFORMATION IS ALREADY USED ON SIMILAR OCCASIONS (agents 5B and 22E as derived in chapter 7)

K.2 SUCCESSFULLY FIND WHAT INFORMATION IS ALREADY USED ON SIMILAR OCCASIONS

It would be feasible to do this through informal contacts with trainees. It does not matter if a proportion of the examples used refer to experiences of only part of the audience.

K.3 TRY TO FIND ANY INFORMATION THAT IS ESSENTIAL FOR UNDERSTANDING THE PRESENTATION AND THAT IS NOT ALREADY POSSESSED (22F)

K.4 SUCCESSFULLY FIND ANY INFORMATION THAT IS ESSENTIAL FOR UNDERSTANDING THE PRESENTATION AND THAT IS NOT ALREADY POSSESSED

The remarks on K.2 apply here also.

K.5 TRY TO PRESENT ANY INFORMATION THAT IS ESSENTIAL FOR UNDERSTANDING THE PRESENTATION AND THAT IS NOT ALREADY POSSESSED (22G)

K.6 SUCCESSFULLY PRESENT ANY INFORMATION THAT IS ESSENTIAL FOR UNDERSTANDING THE PRESENTATION AND THAT IS NOT ALREADY POSSESSED

K.7 TRY TO PRESENT ADVANCE ORGANIZERS (Ausubel 1960, Derry 1984, Mayer, 1984) AND OTHER MATERIAL THAT WILL LINK THE ALREADY POSSESSED AND THE NEW INFORMATION IF THERE IS A GAP BETWEEN THEM (5C, 22J)

K.8 SUCCESSFULLY PRESENT ADVANCE ORGANIZERS (Ausubel 1960, Derry 1984, Mayer, 1984) AND OTHER MATERIAL THAT WILL LINK THE ALREADY POSSESSED AND THE NEW INFORMATION IF THERE IS A GAP BETWEEN THEM

K.9 TRY TO ASSESS THE PROBLEM-SOLVING THAT IS LIKELY TO BE REQUIRED IN APPLICATIONS BY THE PRACTITIONER (6A)

K.10 SUCCESSFULLY ASSESS THE PROBLEM-SOLVING THAT IS LIKELY TO BE REQUIRED IN APPLICATIONS BY THE PRACTITIONER

This would indicate imagining cases and considering in detail the application of the information.

K.11 TRY TO CHANGE THE INFORMATION PRESENTED SO THAT, AS FAR AS POSSIBLE, ITS APPLICATION DOES NOT DEMAND MORE PROBLEM-SOLVING ABILITIES THAN THE PRACTITIONER POSSESSES (6B)

K.12 SUCCESSFULLY CHANGE THE INFORMATION PRESENTED SO THAT, AS FAR AS POSSIBLE, ITS APPLICATION DOES NOT DEMAND MORE PROBLEM-SOLVING ABILITIES THAN THE PRACTITIONER POSSESSES

This is done by showing how general principles work in many different cases.

K.13 TRY TO PRESENT INFORMATION FROM PSYCHOLOGY OR ELSEWHERE THAT JUSTIFIES THE RECOMMENDATIONS (29E)

K.14 SUCCESSFULLY PRESENT INFORMATION FROM PSYCHOLOGY OR ELSEWHERE THAT JUSTIFIES THE RECOMMENDATIONS

This is not problematical, except that one has to gauge the impact of quoting psychology - it might make some people less convinced. Quite a lot of justification may be necessary because the position it argues against is seductive.

The justification need not rely much on pure psychology.

K.15 TRY TO ASSESS THE THREAT OF COUNTER-ARGUMENTS (31A)

K.16 SUCCESSFULLY ASSESS THE THREAT OF COUNTER-ARGUMENTS

K.17 TRY TO PRESENT ARGUMENTS AGAINST WEAK FORMS OF STRONGLY THREATENED COUNTER-ARGUMENTS (31B)

K.18 SUCCESSFULLY PRESENT ARGUMENTS AGAINST WEAK FORMS OF STRONGLY THREATENED COUNTER-ARGUMENTS

This is not problematical once the arguments have been identified.

K.19 IF THERE IS NO ELEMENT IN A PARTICULAR OCCASION THAT CAN BE CHANGED, TRY TO FURNISH THIS INFORMATION WHERE APPROPRIATE

K.20 IF THERE IS NO ELEMENT IN A PARTICULAR OCCASION THAT CAN BE CHANGED, SUCCESSFULLY FURNISH THIS INFORMATION WHERE APPROPRIATE

K.21 TRY TO MAKE CLEAR THE WEIGHT OF THE INFORMATION GIVEN

K.22 SUCCESSFULLY MAKE CLEAR THE WEIGHT OF THE INFORMATION GIVEN

L ADD MATERIAL ON THE RECEIVERS

L.1 TRY TO DISCOVER SOMETHING OF THE PRACTITIONERS' EXISTING BELIEFS, VALUES AND REGULAR BEHAVIOUR (33A)

L.2 SUCCESSFULLY DISCOVER SOMETHING OF THE PRACTITIONERS' EXISTING BELIEFS, VALUES AND REGULAR BEHAVIOUR

The same applies to this as to K.2.

L.3 TRY TO PRESENT MATERIAL SHOWING RESPECT FOR SOME OF THE EXISTING BELIEFS, VALUES OR REGULAR BEHAVIOUR OF THE PRACTITIONERS (33B)

L.4 SUCCESSFULLY PRESENT MATERIAL SHOWING RESPECT FOR SOME OF THE EXISTING BELIEFS, VALUES OR REGULAR BEHAVIOUR OF THE PRACTITIONERS

An example might clarify this: one could say 'I see why people believe this'. There could be a complication here, the danger of appearing wet. It might avoid this to adopt sometimes the somewhat different tone of 'funnily enough that's wrong'. It is always a matter of some subtlety to convey a particular tone.

L.5 TRY TO DISCOVER SOMETHING OF THE PRACTITIONERS' PAST EXPERIENCE (34B)

L.6 SUCCESSFULLY DISCOVER SOMETHING OF THE PRACTITIONERS' PAST EXPERIENCE

This has been commented upon earlier in the chapter

L.7 TRY TO PROVIDE ILLUSTRATIONS FROM THE PRACTITIONERS' PAST EXPERIENCE (34C)

L.8 SUCCESSFULLY PROVIDE ILLUSTRATIONS FROM THE PRACTITIONERS' PAST EXPERIENCE

L.9 TRY TO DISTINGUISH EXISTING BELIEFS VALUES AND REGULAR BEHAVIOUR OF THE PRACTITIONERS THAT IS FULLY ACKNOWLEDGEABLE OR PARTIALLY ACKNOWLEDGEABLE (29B)

L.10 SUCCESSFULLY DISTINGUISH EXISTING BELIEFS VALUES AND REGULAR BEHAVIOUR OF THE PRACTITIONERS THAT IS FULLY ACKNOWLEDGEABLE OR PARTIALLY ACKNOWLEDGEABLE

This is akin to the first task in I.2

L.11 TRY TO ACKNOWLEDGE APPROPRIATELY SOME EXISTING BELIEFS, VALUES OR BEHAVIOUR OF THE PRACTITIONERS (29C)

L.12 SUCCESSFULLY ACKNOWLEDGE APPROPRIATELY SOME EXISTING BELIEFS, VALUES OR BEHAVIOUR OF THE PRACTITIONERS

Acknowledge may be full or partial. An example might clarify the notion of partial acknowledgement: it might involve some such remarks as 'There's a lot in what you say, but now that you're going to specialize in this field you need to go into the complications a bit more'.

L.13 TRY TO ASSESS ANY THREATENED INTERFERENCE FROM THE PRACTITIONERS' POSSESSING CONCEPTS THAT ARE TOO COARSE (30F)

L.14 SUCCESSFULLY ASSESS ANY THREATENED INTERFERENCE FROM THE PRACTITIONERS' POSSESSING CONCEPTS THAT ARE TOO COARSE

This is akin to the first task under I.2

L.15 TRY TO REFINE IF NECESSARY SOME EXISTING CONCEPTS OF THE PRACTITIONERS (30G)

L.16 SUCCESSFULLY REFINE IF NECESSARY SOME EXISTING CONCEPTS OF THE PRACTITIONERS

L.17 TRY TO ASSESS ANY THREATENED INTERFERENCE FROM THE PRACTITIONERS' POSSESSING INCORRECT BUT NOT UNDERPINNED BELIEFS (30H)

Underpinned or profound ideas are dealt with later.

L.18 SUCCESSFULLY ASSESS ANY THREATENED INTERFERENCE FROM THE PRACTITIONERS' POSSESSING INCORRECT BUT NOT UNDERPINNED BELIEFS

L.19 TRY TO CORRECT IF NECESSARY SOME NOT UNDERPINNED BELIEFS OF THE PRACTITIONERS (30I)

L.20 SUCCESSFULLY CORRECT IF NECESSARY SOME NOT UNDERPINNED BELIEFS OF THE PRACTITIONERS

One might need to watch cases where the belief is an outcome of a value.

L.21 TRY TO ASSESS ANY THREATENED INTERFERENCE FROM FAULTY INTUITIVE STATISTICS (30J)

L.22 SUCCESSFULLY ASSESS ANY THREATENED INTERFERENCE FROM FAULTY INTUITIVE STATISTICS

L.23 TRY TO WARN IF NECESSARY AGAINST FAULTY INTUITIVE STATISTICS (30K)

L.24 SUCCESSFULLY WARN IF NECESSARY AGAINST FAULTY INTUITIVE STATISTICS

One would want to guard against conveying that self-justification and intuitive statistics are always wrong or inherently bad.

L.25 TRY TO FIND WHICH Y2s ARE RELEVANT TO THE PARTICULAR CASE IN QUESTION (10A)

L.26 SUCCESSFULLY FIND WHICH Y2s ARE RELEVANT TO THE PARTICULAR CASE IN QUESTION

L.27 TRY TO CHECK WHETHER ANY RELEVANT Y2 IS SEEN AS UNIMPORTANT, INGRATIATING, UNCOOL OR OF LOW COST-EFFECTIVENESS (10B, 12A, 13A, 14A)

L.28 SUCCESSFULLY CHECK WHETHER ANY RELEVANT Y2 IS SEEN AS UNIMPORTANT, INGRATIATING, UNCOOL OR OF LOW COST-EFFECTIVENESS

L.29 TRY TO CONVEY IF NECESSARY THAT Y2ING IS NOT UNIMPORTANT, NOT INGRATIATING, COOL, AND WORTH AN EFFORT (10C, 12B, 13B, 14B)

L.30 SUCCESSFULLY CONVEY IF NECESSARY THAT Y2ING IS NOT UNIMPORTANT, NOT INGRATIATING, COOL, AND WORTH AN EFFORT

L.31 TRY TO INDICATE THAT ACTIVE MEMDRIZING IS NECESSARY (23A)

L.32 SUCCESSFULLY INDICATE THAT ACTIVE MEMORIZING IS NECESSARY

There is a danger of doing it in a manner that would fall foul of some other requirements (e.g. not to be appear green).

L.33 TRY TO PRESENT THE INFORMATION THAT THE PRACTITIONER'S ABILITY IS NOT AN ISSUE IN TERMS OF THE CASE IN QUESTION (8A)

L.34 SUCCESSFULLY PRESENT THE INFORMATION THAT THE PRACTITIONER'S ABILITY IS NOT AN ISSUE IN TERMS OF THE CASE IN QUESTION

M.ADD MATERIAL ON THE MESSAGE

M.1 TRY TO ASSESS ANY THREATENED INTERFERENCE FROM PRACTITIONERS EXISTING BELIEFS THAT ARE UNDERPINNED AND THAT COULD CONFLICT WITH THE RECOMMENDATIONS (30A)

M.2 SUCCESSFULLY ASSESS ANY THREATENED INTERFERENCE FROM PRACTITIONERS EXISTING BELIEFS THAT ARE UNDERPINNED AND THAT COULD CONFLICT WITH THE RECOMMENDATIONS

M.3 TRY TO ARGUE IF NECESSARY AROUND OR ABOVE SUCH BELIEFS (30B)

M.4 SUCCESSFULLY ARGUE IF NECESSARY AROUND OR ABOVE SUCH BELIEFS

M.5 TRY TO ASSESS ANY THREATENED INTERFERENCE FROM APPARENT (NOT ACTUAL) INVALIDITIES IN THE MESSAGE (9A)

M.6 SUCCESSFULLY ASSESS ANY THREATENED INTERFERENCE FROM APPARENT (NOT ACTUAL) INVALIDITIES IN THE MESSAGE

This could be done by examining the message from the point of view of the receiver.

M.7 TRY TO INDICATE IF NECESSARY THAT APPARENT INVALIDITIES ARE MISLEADING (9B)

M.8 SUCCESSFULLY INDICATE IF NECESSARY THAT APPARENT INVALIDITIES ARE MISLEADING

M.9 TRY TO ASSESS ANY THREATENED INTERFERENCE FROM NORMS THAT NEEDLESSLY APPEAR TO CONFLICT WITH THE RECOMMENDATIONS (7A)

M.10 SUCCESSFULLY ASSESS ANY THREATENED INTERFERENCE FROM NORMS THAT NEEDLESSLY APPEAR TO CONFLICT WITH THE RECOMMENDATIONS

This requires familiarity with the field.

M.11 TRY TO SHOW IF NECESSARY THAT FOLLOWING THE RECOMMENDATIONS NEED NOT APPEAR TO BREAK A NORM (7B)

M.12 SUCCESSFULLY SHOW IF NECESSARY THAT FOLLOWING THE RECOMMENDATIONS NEED NOT APPEAR TO BREAK A NORM

This is not problematical, if one is ingenious enough to think of ways of reconciling the two. A little covert preparation, and maybe a little dissimulation, would seem inevitable.

M.13 TRY TO INDICATE THAT TAKING IN THE MESSAGE WILL

HAVE SOME DESIRED EFFECTS (27A)

M.14 SUCCESSFULLY INDICATE THAT TAKING IN THE MESSAGE
WILL HAVE SOME DESIRED EFFECTS

M.15 TRY TO INDICATE CONSCIOUSNESS OF COSTS TO THE
LEARNER AND INTEREST IN (IF NOT ACTION TOWARDS)
MINIMIZING THEM (27B)

M.16 SUCCESSFULLY INDICATE CONSCIOUSNESS OF COSTS TO
THE LEARNER AND INTEREST IN (IF NOT ACTION TOWARDS)
MINIMIZING THEM

N. ADD MATERIAL ON MESSENGERS

N.1 TRY TO INDICATE THAT THE COMMUNICATOR HAS SOME
INSIDE KNOWLEDGE OF THE FIELD IN WHICH THE
PRACTITIONERS PRACTICE (29D)

N.2 SUCCESSFULLY INDICATE THAT THE COMMUNICATOR HAS
SOME INSIDE KNOWLEDGE OF THE FIELD IN WHICH THE
PRACTITIONERS PRACTICE

This is not problematical for someone who has inside
knowledge.

N.3 TRY TO SHOW IF NECESSARY THAT BELIEFS INVOLVED IN
COUNTER-ARGUMENTS MAY SERVE MOTIVES OTHER THAN
VALIDITY (31C)

N.4 SUCCESSFULLY SHOW IF NECESSARY THAT BELIEFS
INVOLVED IN COUNTER-ARGUMENTS MAY SERVE MOTIVES OTHER
THAN VALIDITY

This is not problematical except that one must not go
too far.

O. IDENTIFY THE NATURE, LENGTH, FREQUENCY AND NUMBER
OF CONTACTS BETWEEN COMMUNICATOR AND PRACTITIONER
i.e. the contact conditions

O.1 TRY TO IDENTIFY THE NATURE, LENGTH, FREQUENCY AND
NUMBER OF CONTACTS BETWEEN COMMUNICATOR AND
PRACTITIONER (Agent 20A in chapter 14)

O.2 SUCCESSFULLY IDENTIFY THE NATURE, LENGTH,
FREQUENCY AND NUMBER OF CONTACTS BETWEEN COMMUNICATOR
AND PRACTITIONER

P. EXCISE THEMES

P.1 TRY TO CHECK FOR THE PRESENCE OF ANY MATERIAL THAT MIGHT CONVEY THAT THE MESSENGER IS CONTEMPTUOUS (33D)

P.2 SUCCESSFULLY CHECK FOR THE PRESENCE OF ANY MATERIAL THAT MIGHT CONVEY THAT THE MESSENGER IS CONTEMPTUOUS

P.3 TRY TO EXCISE SUCH MATERIAL (33E)

P.4 SUCCESSFULLY EXCISE SUCH MATERIAL

This might require some careful work.

P.5 TRY TO CHECK FOR THE PRESENCE OF ANY MATERIAL THAT MIGHT CONVEY THAT THE MESSENGER IS GREEN OR INSINCERE (35B)

P.6 SUCCESSFULLY CHECK FOR THE PRESENCE OF ANY MATERIAL THAT MIGHT CONVEY THAT THE MESSENGER IS GREEN OR INSINCERE

P.7 TRY TO EXCISE SUCH MATERIAL (35C)

P.8 SUCCESSFULLY EXCISE SUCH MATERIAL

P.9 TRY TO CHECK FOR THE PRESENCE OF ANY DEMAND FOR INFORMATION THAT IS INESSENTIAL FOR UNDERSTANDING THE RECOMMENDATIONS (22H)

P.10 SUCCESSFULLY CHECK FOR THE PRESENCE OF ANY DEMAND FOR INFORMATION THAT IS INESSENTIAL FOR UNDERSTANDING THE RECOMMENDATIONS

This requires analysis.

P.11 TRY TO ELIMINATE ANY SUCH DEMAND (22I)

P.12 SUCCESSFULLY ELIMINATE ANY SUCH DEMAND

P.13 TRY TO CHECK THAT THE AMOUNT OF MATERIAL IS NOT TOO GREAT FOR THE CONTACT CONDITIONS

This could easily happen.

P.14 SUCCESSFULLY CHECK THAT THE AMOUNT OF MATERIAL IS NOT TOO GREAT FOR THE CONTACT CONDITIONS

P.15 TRY TO REDUCE MATERIAL TO SUIT THE TIME AVAILABLE

P.16 SUCCESSFULLY REDUCE MATERIAL TO SUIT THE TIME AVAILABLE

P.17 TRY TO CHECK THAT THERE IS NOT TOO MUCH MATERIAL FOR THE CONTACT CONDITIONS (20B)

P.18 SUCCESSFULLY CHECK THAT THERE IS NOT TOO MUCH MATERIAL FOR THE CONTACT CONDITIONS

P.19 TRY TO REDUCE THE AMOUNT OF MATERIAL OR SHIFT TO GREATER GENERALITY AS APPROPRIATE TO SUIT THE CONTACT CONDITION (20C)

It seems odd to shorten by way of adding something, but adding some new information may allow more old information to be discarded.

P.20 SUCCESSFULLY REDUCE THE AMOUNT OF MATERIAL OR SHIFT TO GREATER GENERALITY AS APPROPRIATE TO SUIT THE CONTACT CONDITION

Q. ADJUST THE ORGANIZATION OF THE PRESENTATION TO SUIT THE CONTACT CONDITIONS

Q.1 TRY TO ADJUST THE ORGANIZATION OF THE PRESENTATION TO SUIT THE CONTACT CONDITIONS (20D)

Q.2 SUCCESSFULLY ADJUST THE ORGANIZATION OF THE PRESENTATION TO SUIT THE CONTACT CONDITIONS

This should not be difficult if, with additions and excisions, the amount of material to be communicated is appropriate for the time available.

R. PLAN CHOICE OF METHODS

R.1 TRY TO USE METHODS THAT ENCOURAGE THE LINKING OF THE PRESENTED INFORMATION WITH EXISTING KNOWLEDGE IF THERE IS A GAP (5D, 22K)

R.2 SUCCESSFULLY USE METHODS THAT ENCOURAGE THE LINKING OF THE PRESENTED INFORMATION WITH EXISTING KNOWLEDGE IF THERE IS A GAP

Examples would be Socratic tutoring, and (within the confines of writing a textbook) not making the headings subdivisions of the discipline of psychology.

R.3 TRY TO USE DISCUSSION (Bane, 1925) (29A)

R.4 SUCCESSFULLY USE DISCUSSION

This is not problematical, but it should be done in such a way that the appropriate actions are decided upon with peer support or by people deciding for themselves, certainly not seen to be coming from the lecturer. This is why discussion was recommended in the present context. (Of course other forms of discussion may be useful for other purposes.)

R.5 TRY TO USE PRACTICAL DEMONSTRATION (34A)

R.6 SUCCESSFULLY USE PRACTICAL DEMONSTRATION

Not just any practical work: it must serve to demonstrate the point that is to be demonstrated i.e. that a particular recommendation is practicable; or it must serve as a concrete illustration of something that is difficult to understand.

R.7 TRY TO PROVIDE OPPORTUNITIES FOR MEMORIZING WHERE THERE IS ANYTHING TO MEMORIZE (7C, 8B, 9C, 23B, 25B, 27C, 29F, 30C, 30L, 31D)

R.8 SUCCESSFULLY PROVIDE OPPORTUNITIES FOR MEMORIZING WHERE THERE IS ANYTHING TO MEMORIZE

This is not difficult to do, though it may be difficult to remember.

R.9 TRY TO PROVIDE (WHERE IT IS WITHIN ONE'S REMIT AND WHERE IT IS RELEVANT) OPPORTUNITIES FOR GRADUATED EXPERIENCE AND PRACTICE (1A, 4A)

R.10 SUCCESSFULLY PROVIDE (WHERE IT IS WITHIN ONE'S REMIT AND WHERE IT IS RELEVANT) OPPORTUNITIES FOR GRADUATED EXPERIENCE AND PRACTICE

R.11 TRY TO SUPERVISE YZING WHERE NECESSARY AND POSSIBLE (15A)

R.12 SUCCESSFULLY SUPERVISE YZING WHERE NECESSARY AND POSSIBLE

These do not present conceptual difficulties, though there may be obstacles in certain circumstances.

S. PLAN STYLE OF EXECUTION

S.1 TRY TO CHECK LEVEL OF NOISE AND STRENGTH OF SIGNAL (18A)

S.2 SUCCESSFULLY CHECK LEVEL OF NOISE AND STRENGTH OF SIGNAL

S.3 TRY TO STRENGTHEN THE SIGNAL IF NECESSARY AND POSSIBLE (18B)

S.4 SUCCESSFULLY STRENGTHEN THE SIGNAL IF NECESSARY AND POSSIBLE

S.5 TRY TO DIMINISH THE NOISE IF NECESSARY AND POSSIBLE (18C)

S.6 SUCCESSFULLY DIMINISH THE NOISE IF NECESSARY AND POSSIBLE

S.7 TRY TO ASSESS THREATENED AMBIGUITY (INCLUDING VAGUENESS) AND MISINTERPRETATION (19A, 19C)

S.8 SUCCESSFULLY ASSESS THREATENED AMBIGUITY (INCLUDING VAGUENESS) AND MISINTERPRETATION

S.9 TRY TO REMOVE AMBIGUITY (19B)

S.10 SUCCESSFULLY REMOVE AMBIGUITY

S.11 TRY TO WARN AGAINST ANY THREATENED MISINTERPRETATIONS (19D)

S.12 SUCCESSFULLY WARN AGAINST ANY THREATENED MISINTERPRETATIONS

S.13 TRY TO ASSESS THE THREAT OF LOW ENERGY (17A)

S.14 SUCCESSFULLY ASSESS THE THREAT OF LOW ENERGY

S.15 TRY TO ACT AGAINST LOW ENERGY IF NECESSARY (17B)

S.16 SUCCESSFULLY ACT AGAINST LOW ENERGY IF NECESSARY

This is not a great problem: it is easy to change the ventilation.

S.17 TRY TO CHECK FOR THREATENED DISTRACTIONS (21A)

S.18 SUCCESSFULLY CHECK FOR THREATENED DISTRACTIONS

This is not difficult given forethought and local knowledge.

S.19 TRY TO FORESTALL OR ACCOMMODATE AND LIMIT DISTRACTIONS IF NECESSARY (21B)

S.20 SUCCESSFULLY FORESTALL OR ACCOMMODATE AND LIMIT DISTRACTIONS IF NECESSARY

This is not difficult but may call for some skill.

S.21 TRY TO AVOID INTRODUCING DISTRACTIONS (21C)

S.22 SUCCESSFULLY AVOID INTRODUCING DISTRACTIONS

This may call for some self-restraint.

S.23 TRY TO LOOK FOR THREATENED SIGNS OF IMMINENT THREAT PROMISE OR INSULT (16A)

S.24 SUCCESSFULLY LOOK FOR THREATENED SIGNS OF IMMINENT THREAT PROMISE OR INSULT

This calls for forethought and local knowledge

S.25 TRY TO FORESTALL OR ACCOMMODATE AND LIMIT ANY SIGNS OF IMMINENT THREAT, PROMISE, AND INSULT IF

POSSIBLE (16B)

S.26 SUCCESSFULLY FORESTALL OR ACCOMMODATE AND LIMIT ANY SIGNS OF IMMINENT THREAT, PROMISE, AND INSULT IF POSSIBLE

This requires skill

S.27 TRY TO AVOID INTRODUCING SIGNS OF IMMINENT THREAT, PROMISE OR INSULT IF POSSIBLE (16C)

S.28 SUCCESSFULLY AVOID INTRODUCING SIGNS OF IMMINENT THREAT, PROMISE OR INSULT IF POSSIBLE

This requires skill

S.29 TRY TO USE CONCRETE ILLUSTRATIONS (22C)

S.30 SUCCESSFULLY USE CONCRETE ILLUSTRATIONS

S.31 TRY TO USE VARIED ILLUSTRATIONS (22D)

S.32 SUCCESSFULLY USE VARIED ILLUSTRATIONS

This is not a problem given some imagination, knowledge of the field and knowledge of the audience.

S.33 TRY TO CHECK FOR THE PRESENCE OF UNCOMMON TERMS AND EXPRESSIONS (20E, 22A, 35D)

S.34 SUCCESSFULLY CHECK FOR THE PRESENCE OF UNCOMMON TERMS AND EXPRESSIONS

S.35 TRY TO USE COMMON TERMS AND EXPRESSIONS (20F, 22B, 35E)

S.36 SUCCESSFULLY USE COMMON TERMS AND EXPRESSIONS

to use common terms and expressions, could be more troublesome: it requires thought about the technical information.

S.37 TRY TO CHECK FOR THE PRESENCE OF MISLEADING EXPRESSIONS (30D)

S.38 SUCCESSFULLY CHECK FOR THE PRESENCE OF MISLEADING EXPRESSIONS

S.39 TRY TO REPLACE ANY MISLEADING EXPRESSIONS (30E)

S.40 SUCCESSFULLY REPLACE ANY MISLEADING EXPRESSIONS

S.41 TRY TO GIVE THE IMPRESSION OF BEING UNCONTEMPTUOUSNESS (33C)

S.42 SUCCESSFULLY GIVE THE IMPRESSION OF BEING UNCONTEMPTUOUSNESS

not difficult if true

S.43 TRY TO GIVE THE IMPRESSION OF BEING EXPERT, AND SINCERE (35A)

S.44 SUCCESSFULLY GIVE THE IMPRESSION OF BEING EXPERT, AND SINCERE

This is not difficult for someone who IS expert and sincere.

S.45 TRY TO CONVEY THAT IT IS NOT WET TO MEMORIZE (25A)

S.46 SUCCESSFULLY CONVEY THAT IT IS NOT WET TO MEMORIZE

This is not problematical given some social subtlety.

S.47 TRY TO AVOID MONOTONY (32A)

S.48 SUCCESSFULLY AVOID MONOTONY

The last task is not problematical if one remembers to do it.

T. ENSURE AGREEMENT

T.1 TRY TO MAKE SURE THAT THE CLIENT AGREES THAT THE PROBLEM HAS BEEN DEALT WITH. If NOT, REPEAT SECTION I

T.2 SUCCESSFULLY MAKE SURE THAT THE CLIENT AGREES THAT THE PROBLEM HAS BEEN DEALT WITH. If NOT, REPEAT SECTION I

14C. CHAPTER 9 REVISITED

The following changes (all additions) can now be made to the list of decisions required of derivers. They apply to followers, adaptors and designers of processes of application whenever the receiver is not the same person as the deriver.

The categories are defined as in chapter 9

14C.1 DECISIONS REQUIRED OF A FURNISHER OF INFORMATION

whether the receiver agrees that the problem being dealt with is worth dealing with

whether the receiver agrees that the problem has been dealt with

what information is already held by the practitioner

what information is essential for understanding the presentation and not already possessed

what would be suitable advance organizers

what problem-solving ability is possessed by the receiver

what change in the information presented would put it within the problem-solving abilities of the receiver

what information would justify the recommendations

how strong is the threat of counter-arguments

what would be arguments against weak forms of strongly threatened counter-arguments

what are some of the receiver's existing beliefs, values and regular behaviour

what would show respect for the identified existing beliefs, values or regular behaviour of the receiver

what are some of the receiver's past experiences

what would be illustrations from the receiver's past experience

what existing beliefs values and regular behaviour of the receiver are fully acknowledgeable or partially acknowledgeable

how strong is the threat of interference from the receiver's possessing concepts that are too coarse, faulty statistical beliefs, or other incorrect but not underpinned beliefs

whether any relevant Y2 is seen as unimportant, ingratiating, uncool or of low cost-effectiveness

how to convey that Y2ing is not unimportant, not ingratiating, cool, and worth an effort

how strong is the threat of interference from practitioners existing beliefs that are underpinned and that could conflict with the recommendations
how to argue around or above such beliefs

how strong is the threat of interference from apparent (not actual) invalidities in the message

how strong is the threat of interference from norms that needlessly appear to conflict with the recommendations

how to show that following the recommendations need not appear to break a norm

how to indicate that one has some inside knowledge of the field in which the receiver practices

how to show that beliefs involved in counter-arguments may serve motives other than validity

whether any material is present that might convey that the furnisher of information is contemptuous, green or insincere

whether the amount of material is too great for the contact conditions

how to shift to greater generality

how to use methods that encourage the linking of the presented information with existing knowledge, discussion, practical demonstration, concrete illustrations, varied illustrations

how to provide opportunities for graduated experience

and practice

whether the level of noise and strength of signal are suitable

how strong are the threats of ambiguity (including vagueness) and misinterpretation

how strong is the threat of low energy

how strong is the threat of distraction

how to forestall or accommodate and limit distraction

how to avoid introducing distraction

how strong is the threat of signs of imminent threat
promise or insult

how to forestall or accommodate and limit any signs
of imminent threat, promise, and insult

how to avoid introducing signs of imminent threat,
promise or insult

whether uncommon terms and expressions are used

how to use common terms and expressions

whether there are misleading expressions

how to replace misleading expressions

how to give the impression of being uncontentious,
expert and sincere

how to convey that it is not yet
to memorize

how to avoid monotony

14C.2 SOURCES

WHERE PSYCHOLOGY MUST BE INVOLVED:

Nowhere

WHERE PSYCHOLOGY MAY BE INVOLVED:

what information is already held by the practitioner

what problem-solving ability is possessed by the
receiver

what information would justify the recommendations

how strong is the threat of counter-arguments

what are some of the receiver's existing beliefs,

values and regular behaviour

what would show respect for the identified existing beliefs, values or regular behaviour of the receiver

what are some of the receiver's past experiences

what would be illustrations from the receiver's past experience

whether any relevant Y2 is seen as unimportant, ingratiating, uncool or of low cost-effectiveness

how to convey that Y2ing is not unimportant, not ingratiating, cool, and worth an effort

how strong is the threat of interference from practitioners existing beliefs that are underpinned and that could conflict with the recommendations

how strong is the threat of interference from norms that needlessly appear to conflict with the recommendations

whether any material is present that might convey that the furnisher of information is contemptuous, green or insincere

whether the amount of material is too great for the contact conditions

how to provide opportunities for graduated experience and practice

whether the level of noise and strength of signal are suitable

how strong are the threats of ambiguity (including vagueness) and misinterpretation

how strong is the threat of low energy

how strong is the threat of distraction

how to forestall or accommodate and limit distraction

how to avoid introducing distraction

how strong is the threat of signs of imminent threat promise or insult

how to forestall or accommodate and limit any signs of imminent threat, promise, and insult

how to avoid introducing signs of imminent threat, promise or insult

how to give the impression of being un contemptuous,

expert and sincere

how to convey that it is not wet
to memorize

how to avoid monotony

WHERE PSYCHOLOGY CANNOT BE INVOLVED:

whether the receiver agrees that the problem being
dealt with is worth dealing with

whether the receiver agrees that the problem has been
dealt with

what information is essential for understanding the
presentation and not already possessed

what would be suitable advance organizers

what change in the information presented would put it
within the problem-solving abilities of the receiver

what would be arguments against weak forms of
strongly threatened counter-arguments

what existing beliefs values and regular behaviour of
the receiver are fully acknowledgeable or partially
acknowledgeable

how strong is the threat of interference from the
receiver's possessing concepts that are too coarse,
faulty statistical beliefs, or other incorrect but
not underpinned beliefs

how to argue around or above such beliefs

how strong is the threat of interference from
apparent (not actual) invalidities in the message

how to show that following the recommendations need
not appear to break a norm

how to indicate that one has some inside knowledge of
the field in which the receiver practices

how to show that beliefs involved in
counter-arguments may serve motives other than
validity

how to shift to greater generality

how to use methods that encourage the linking of the
presented information with existing knowledge,
discussion, practical demonstration, concrete
illustrations, varied illustrations

whether uncommon terms and expressions are used

how to use common terms and expressions

whether there are misleading expressions
how to replace misleading expressions

14C.3 TYPES OF NON-PSYCHOLOGICAL KNOWLEDGE

WHERE COMMON INTELLIGENCE MAY AND PSYCHOLOGY MAY NOT
BE INVOLVED

whether the receiver agrees that the problem being
dealt with is worth dealing with

whether the receiver agrees that the problem has been
dealt with

what information is essential for understanding the
presentation and not already possessed

what change in the information presented would put it
within the problem-solving abilities of the receiver

what would be arguments against weak forms of
strongly threatened counter-arguments

what would be illustrations from the receiver's past
experience

what existing beliefs values and regular behaviour of
the receiver are fully acknowledgeable or partially
acknowledgeable

how to argue around or above such beliefs

how strong is the threat of interference from
apparent (not actual) invalidities in the message

how to show that following the recommendations need
not appear to break a norm

how to show that beliefs involved in
counter-arguments may serve motives other than
validity

how to shift to greater generality

whether uncommon terms and expressions are used

how to use common terms and expressions

whether there are misleading expressions

how to replace misleading expressions

WHERE COMMON INTELLIGENCE OR PSYCHOLOGY MAY BE
INVOLVED

In deciding -

what information would justify the recommendations
how strong are the threats of ambiguity (including
vagueness) and misinterpretation

WHERE KNOWLEDGE OF THE RECEIVER MAY AND PSYCHOLOGY
MAY NOT BE INVOLVED

Nowhere

WHERE KNOWLEDGE OF THE RECEIVER OR PSYCHOLOGY MAY BE
INVOLVED

In deciding -

what information is already held by the receiver

what problem-solving ability is possessed by the
receiver

what are some of the receiver's existing beliefs,
values and regular behaviour

what are some of the receiver's past experiences

how strong is the threat of interference from the
receiver's possessing concepts that are too coarse,
faulty statistical beliefs, or other incorrect but
not underpinned beliefs

whether any relevant Y2 is seen as unimportant,
ingratiating, uncool or of low cost-effectiveness

how strong is the threat of interference from
practitioners existing beliefs that are underpinned
and that could conflict with the recommendations

how strong are the threats of ambiguity (including
vagueness) and misinterpretation

how strong is the threat of low energy

how to give the impression of being un contemptuous,
expert and sincere

how to convey that it is not wet
to memorize

whether any material is present that might convey
that the furnisher of information is contemptuous,
green or insincere

what would show respect for the identified existing
beliefs, values or regular behaviour of the receiver

how to convey that Y2ing is not unimportant, not

ingratiating, cool, and worth an effort

WHERE KNOWLEDGE OF THE PARTICULAR CONDITIONS MAY AND
PSYCHOLOGY MAY NOT
BE INVOLVED

Nowhere

WHERE KNOWLEDGE OF THE PARTICULAR CONDITIONS OR
PSYCHOLOGY MAY BE INVOLVED

In deciding -

how strong is the threat of counter-arguments

whether any relevant Y2 is seen as unimportant,
ingratiating, uncool or of low cost-effectiveness

how strong is the threat of interference from norms
that needlessly appear to conflict with the
recommendations

how to indicate that one has some inside knowledge of
the field in which the receiver practices

how strong is the threat of low energy

how strong is the threat of distraction

how to give the impression of being uncontentious,
expert and sincere

how to convey that it is not wet
to memorize

whether any material is present that might convey
that the furnisher of information is contemptuous,
green or insincere

WHERE KNOWLEDGE OF SIMILAR CONDITIONS AND PEOPLE MAY
AND PSYCHOLOGY MAY NOT BE INVOLVED

Nowhere

WHERE KNOWLEDGE OF SIMILAR CONDITIONS AND PEOPLE OR
KNOWLEDGE OF PSYCHOLOGY MAY BE INVOLVED

In deciding -

what information is already held by the receiver

what problem-solving ability is possessed by the
receiver

what are some of the receiver's existing beliefs,
values and regular behaviour

what are some of the receiver's past experiences

how strong is the threat of counter-arguments

what would show respect for the identified existing beliefs, values or regular behaviour of the receiver

how strong is the threat of interference from the receiver's possessing concepts that are too coarse, faulty statistical beliefs, or other incorrect but not underpinned beliefs

how strong is the threat of interference from norms that needlessly appear to conflict with the recommendations

how strong are the threats of ambiguity (including vagueness) and misinterpretation

how strong is the threat of low energy

how strong is the threat of signs of imminent threat promise or insult

how to forestall or accommodate and limit any signs of imminent threat, promise, and insult

how to avoid introducing signs of imminent threat, promise or insult

WHERE KNOWLEDGE OF SPECIALIZED TECHNIQUES MAY AND PSYCHOLOGY MAY NOT BE INVOLVED

what would be suitable advance organizers

whether the amount of material is too great for the contact conditions

how to use methods that encourage the linking of the presented information with existing knowledge, discussion, practical demonstration, concrete illustrations, varied illustrations

WHERE KNOWLEDGE OF SPECIAL TECHNIQUES OR PSYCHOLOGY MAY BE INVOLVED

how to provide opportunities for graduated experience and practice

whether the level of noise and strength of signal are suitable

how to forestall or accommodate and limit distraction

how to avoid introducing distraction

14D. CHAPTER 10 REVISITED

Ch 10 could have its list of departures added to. It would be tedious and serve no purpose to write them all out again here, and they all lead to furnished information's not being used as intended.

14F. COMMENTARY

There is now quite a long list of demands for common intelligence, and knowledge of people and circumstances similar to those being dealt with. There is a lesser (in volume) demand for knowledge of particular people and circumstances, and there is a not very voluminous demand for knowledge of special techniques.

CHAPTER FIFTEEN

PLANS FOR THE FOLLOWING CASE STUDY

This chapter covers (A) the selection of the question, (B) the selection of the novices, (C) the selection of the problems and subjects, (D) the selection of the methods, (E) the selection of the experts, and (F) the particular questions in subsequent chapters.

15A. THE SELECTION OF THE QUESTION

In a nutshell the question is how well generic psychology compares with other sources of information where they compete in accounts of two problems facing a group of practitioners.

The practitioners will be novices, because they are believed to be at that stage in their practice where knowledge is most explicit and has its greatest effect on practice.

The standard process of chapter 8 will be used with the good eclectic psychology of chapter 12, because according to chapter 11 this is the best, the most cost-effective information that psychology has to offer.

The competing accounts will be the novices' own accounts, the accounts of applications other than the psychological standard one, and the accounts of experts.

15B. THE SELECTION OF THE NOVICES

The novices are seen as the receivers of the competing accounts. Therefore the particular novices must be chosen before the problems and subjects so as to make sure that the problems dealt with have actually been thought about by the receivers.

To increase the likelihood that the receivers have thought about the problems, the population is closely

specified and the exercise is described as a case study though not the study of a single person.

It follows that random sampling is not involved. Given the size of even the largest cohort dealt with (167), a random sample would have had to include well over half for representativeness to be ensured.

The chosen population of novices is of schoolteachers, trainees, pre-service, graduates, 30 per study, in groups, attending training in different cohorts of the same course in the same English university.

15B.1 WHY SCHOOLTEACHERS?

It is helpful that in the teaching profession written and detailed plans for action are acceptable and normal. In many cases serving teachers have to write formal plans of their lessons for perusal by their superiors. In all known cases trainee teachers have to do so. The study can be done with teachers without asking people to do anything unusual; and therefore some artifacts can be avoided.

There is a comparative simplicity about the work of teachers in that they work in structured and predictable situations. A complete change of plan need seldom be forced by unforeseen circumstances.

15B.2 WHY TRAINEES?

It is easier with trainees than with others to assume that they will take part in these studies in a spirit of cooperativeness. It is likely to be axiomatic as far as trainees are concerned that talking and thinking influence behaviour.

Trainees are likely to be reflecting more than others upon the practical problems of teaching.

15B.3 WHY PRE-SERVICE?

Pre-service training for teaching is about the basics.

Pre-service trainees are less likely than others to be set in their ways, and more likely to have the characteristics desired of novices - see section 15A.

Pre-service trainees have little or nothing in the way of past practice to justify.

15B.4 WHY POST-GRADUATES?

A class of postgraduates normally combines many different experiences. and disciplines of thought.

And they should be mature in their attitude to the interview, for example not intimidated by the thought that a lecturer would hear what they said.

15B.5 WHY 30 PER STUDY?

Because aiming for a statistical significance criterion of $p = 0.05$, and test power to be 0.8, I could work with an effect size of 25 units of proportion either side of 50% by having 30 respondents (Cohen, 1977).

15B.6 WHY IN GROUPS?

It was intended to diminish apprehension that might have been caused if single students were selected.

15B.7 WHY DIFFERENT COHORTS OF THE SAME COURSE?

This allows fresh but very similar groups to be used for different studies. For example the timescale would not allow the same group to be used both to identify the problems and to discuss the problems once identified.

15C. THE SELECTION OF THE PROBLEMS AND SUBJECTS

The problems dealt with are the two problems of dealing with pupils' psyches that are said to be most frequent and most bothersome by a sample of the novices - that is the matter of the first study to follow.

15D. THE SELECTION OF THE METHODS

Studies of the accounts of novices might look at both their beliefs or at their intentions, might ask what they think the antecedents of their problems are or what they think the agents of change of their problems are, might ask for their thoughts in either speech or writing.

The purpose here is to take in both alternatives in each case, because the answer obtained might vary with the choice of alternative. The study of lesson plans will be one of the ways of putting this into effect.

Also it is intended to find conditions conducive to cooperation, and circumstances similar to those in which real thinking about practice occurs, and to dealing only with the salient.

Two accounts will be declared substantially different if more than one third of the factors in either are rejected by the other.

The novices are treated as a group. A factor will be regarded as salient for novices if it is mentioned by more than half of them.

15D.1 WHY LESSON PLANS?

Lesson plans suit the subject of problem 2. They are usually at a level of detail (i.e. not too much) that allows simple analysis. I am interested in intentions more than in actual behaviour, which may have been subject to the buffetings of circumstance. Mental plans I take to be in effect synonymous with intentions. And in this case written plans are a good indication of mental plans.

15D.2 WHY CONDITIONS CONDUCTIVE TO COOPERATION?

The ideas of Grice are useful here. In his 1967 William James lectures at Harvard, included by Cole & Morgan (1975), Grice discusses the notion of a contract between speaker and listener. If speaker and listener are intending to co-operate, they will follow a number of 'maxims' such as 'be relevant' and

'do everything necessary to be understood'. For instance when the respondent says 'THE BOY WENT TO SEE THE HEAD. HE SAID HIS PARENTS WERE GETTING A DIVORCE' what may look ambiguous at first sight is not ambiguous in context if the speaker is acting on the assumption that the listener will regard the second statement as relevant to the first. The fact that there is potential for amusement here only reinforces the point that there is a normal expectation of one meaning. There is no danger of misunderstanding - the ambiguity exists only on paper. I want to be able to assume that the maxims of cooperation are being followed. This is not trite. Some situations of interest to psychologists may not allow the comforting assumptions described in the foregoing to be made. For example in conversations in physicians' consulting rooms time is short, the participants in the conversations may be unfamiliar with each others' backgrounds, and technical terms may be used.

15D.3 WHY CONDITIONS SIMILAR TO THOSE IN WHICH PRACTICE IS CONTEMPLATED?

Because the thoughts produced in those conditions could be different from the thoughts produced in other conditions, for example in recreational settings conditions where a purpose may be to amuse or to gain social kudos. The intention to have a

setting comparable to the one in which thinking is really done.

A special aspect of this is salience. There is a danger in any study of dredging up thoughts that would hardly otherwise occur to the respondent. That would be particularly unhelpful in this case. Therefore the notion of salience is used, the intention being to elicit and record only thoughts that are salient in circumstances resembling those in which thinking about practice really takes place.

15E. THE SELECTION OF THE EXPERTS

In this case the experts required are people who are experienced practitioners but able to be explicit and articulate about their practice, people who are good, that is respected, practitioners, and people who are experts in communication as well as in teaching. Appropriate publications by suitable authors will be sought.

They should be English in case the problems are in areas where different styles and norms prevail in different countries.

The experts should not be purporting to apply

psychology, though they may well have read psychology among other things - one could never find an expert guaranteed never to have had a psychological thought.

15F. THE PARTICULAR QUESTIONS IN SUCCEEDING CHAPTERS

(a) Which two problems are salient for the novices will be investigated in chapter 16

(b) What information the psychological standard produces for problem 1 will be investigated in chapter 17

(c) What information the psychological standard produces for problem 2 will be investigated in chapter 18

(d) Chapters 19 and 20 will sort out some methodic preliminaries for succeeding chapters

(e) What other applications produce for both problems will be investigated in chapter 21

(f) How the novices' accounts compare to the psychological standard accounts and the accounts of the other applications will be investigated in chapter 22

(g) the experts' accounts of problem 1 will be compared with the novices' accounts and the psychological standard account in chapter 23

(h) Chapter 24 will assess what has been learned in the case study.

CHAPTER SIXTEEN

A CHOICE OF PRACTICAL PROBLEMS

This chapter deals with the first part of the case study. The sections cover (A) the aims, (B) procedure - obtaining respondents, (C) procedure - collecting the data, (D) procedure - analysing the data, (E) the results, and (F) commentary.

16A THE AIMS

16A.1 IN GENERAL

The general purpose is to find problems to which psychology can be applied (to test the feasibility of the proposed procedure) and to which the respondents in chapters 17 and 18 have given some thought as

practitioners (so that their thoughts can be compared with the psychological accounts).

16A.2 IN PARTICULAR

1. To find respondents as designated in chapter 15.
2. To ask each to name in writing (freely composed) the most frequent and the most bothersome problems they encountered in practical teaching (following Cruickshank et al, 1974).
3. To select problems of dealing with pupils' psyches.
4. To form categories of the problems selected.
5. Of these to select the two most mentioned problems for further study (for the definition of 'most mentioned' see section 9D.4 below.

16A.3 DISCUSSION

Why most frequent and most bothersome? Because they give an indication of what has been most thought about (following Cruickshank et al, 1974).

Why pupils' psyches? To ensure that the problems are problems to which psychology may be applied (in later

chapters) and which the trainees approach as practitioners.

Why two in number? Because there should be more confidence in a procedure that has been applied in two cases than a procedure that has been applied in one; and more than two cases are beyond present resources.

16B THE PROCEDURE - OBTAINING RESPONDENTS

A whole cohort was selected.

All those present when the study was carried out participated. There were some absentees (22 or 15%).

It is hard to say whether absentees would have had different problems from those present: they could not if followed up have participated under the same conditions as the others. But the findings and the use of them are such that whatever their responses the missing 15% could hardly have made a difference.

Apart from those outlined above the only other characteristic of note is that the institution in question was an English university.

The number obtained was 145. The cohort as a whole

was 59% female, with average age 23, graduates in a number of disciplines, science and non-science, from 22 different institutions. (These data were unavailable for the respondents because of anonymity.)

16C THE PROCEDURE - COLLECTING THE DATA

16C.1 THE CIRCUMSTANCES IN WHICH THE RESPONSES WERE MADE.

Normal tutorial groups (one tutor and on average 8 students, all specialists in the same subject) were meeting for normal purposes in the tutor's room in the university. I was not present. The groups were visited by one of two clerical workers unknown to the trainees - each went to half of the tutorial groups and conducted the collection of trainees' remarks. Each participant was given a blank 5"x3" card before the questions were delivered. The tutors had given permission and professed themselves interested in the results.

Discussion: The tutorial group was used because it is an occasion of compulsory attendance, of reflection upon teaching practice, and of discussion of trainees' problems. The clerical workers (two

because one could not get round all the groups in the time available) were used to reassure the respondents that their responses really were anonymous. Cards were used to discourage longwindedness, ease data handling, facilitate the preservation of anonymity, and remove any pressure to answer unwillingly.

16C.2 THE TIMING OF THE COLLECTION OF THE DATA

During school practice trainees attended in the University on Wednesday afternoons while spending the rest of the week in schools. The study was conducted in week 17 of the 30 week course. Before week 17 the course contains 3 weeks in a first school, 8 weeks on campus, 4 weeks vacation, and 5 weeks in a second school. Therefore trainees have had time for experience and reflection.

16C.3 THE BRIEFING OF THE RESPONDENTS.

The tutors told the trainees at the beginning of the tutorials (a) that they would be taking part in an exercise designed to make the course more responsive to trainees' needs, (b) that to say too much about it beforehand could prejudice the responses, and (c) that the whole thing would be discussed more fully later.

16C.4 THE STIMULI AND THEIR DELIVERY

The clerical workers read out the following to each group:

We are going to ask you to record on these cards your answers to two questions.

You may add your name or remain anonymous as you wish.

It is important that you write down what first comes to mind when you hear the questions. If you delay, then rationalization, considerations of social acceptability and other influences may distort the answer. So please write down what first comes to mind.

The questions are:

What has been causing you most bother in this present teaching practice? and What problem has faced you most frequently on teaching practice?

Question 1: What has been causing you most bother in this present teaching practice?

(AFTER A PAUSE) Question 2: What problem has faced you most frequently on teaching practice?

The clerical workers had these instructions:

If, and only if, someone asks, please say that they may answer one question and not the other and that they may give the same answer to both questions.

When the answers have been written, please remind the students to check that they have indicated clearly which is their answer to Question 1 (bother) and which to Question 2 (frequency).

16C.5 RESPONSE

Most respondents mentioned one frequent and one bothersome problem. A few mentioned two or none under one of the headings. In all there were 161

mentions of bothersome problems and 151 mentions of frequent problems.

16C.6 RECORDING

The respondents did their own recording by writing on the cards.

16D THE PROCEDURE - ANALYSING THE DATA

16D.1 CATEGORIZATION

The problems as expressed in trainees' own words were categorized as follows. (a) Bothersome and frequent problems were combined. (b) Problems expressed in identical terms were categorized together. (c) Where one term subsumed another, the less often mentioned was assimilated to the more often mentioned.

In every case in fact where this arose the more often mentioned was the superordinate. Other cases, for example overlap, did not in fact arise.

16D.2 ASSESSMENT OF AGGREGATE FREQUENCY AND BOTHERSOMENESS

Frequency and bothersomeness were combined as follows: the categories of problems were ranked separately for frequency and bothersomeness according to the number of respondents mentioning the category; and the rankings were added. If a category had no mentions under one of the headings, it was ranked last for that heading.

16E THE RESULTS

Indiscipline and lack of interest were the problems selected for further study.

16E.1 PROBLEMS OF DEALING WITH PUPILS' PSYCHES

Table 16.1 lists the categories of problems of dealing with pupils' psyches in rank order from most-thought-about at the top. The table gives the numbers mentioning bothersomeness (B) and frequency (F) from which the overall ranking was calculated.

PREPARATION is vague, possibly includes PREPARATION FOR INTEREST and is outnumbered if INTEREST and PREPARATION FOR INTEREST are combined.

TABLE 16.1
Trainees' problems with pupils' psyches

DISCIPLINE (B59, F61)
PREPARATION (B16, F16)
INTEREST (B14, F11)
PREPARATION OF LESSONS FOR INTEREST (B6, F8)
PREPARATION OF LESSONS FOR ABILITY (B5, F8)
ABILITY (B1, F3)
ORGANIZATION OF ACTIVITIES (B1, F2)

TABLE 16.2
Trainees' problems of any kind

DISCIPLINE (B59, F61)
PERSONAL PROBLEMS (B39, F28)
PREPARATION (B16, F16) and CIRCUMSTANCES (B20, F14)
INTEREST (B14, F11)
PREPARATION OF LESSONS FOR INTEREST (B6, F8)
PREPARATION OF LESSONS FOR ABILITY (B5, F8)
ABILITY (B1, F3)
ORGANIZATION (B1, F2)

Indiscipline and lack of interest are prominent compared to other problems of dealing with pupils.

16E.2 ALL PROBLEMS

Table 16.2 lists the important categories of all problems in rank order from most-thought-about at the top. The table gives the number mentioning bothersomeness (B) and frequency (F) from which the overall ranking was calculated.

Personal problems and circumstances clearly loom quite large; but indiscipline and lack of interest are still quite prominent.

16F COMMENTARY

Discussion is included in the foregoing sections.

The purpose of this study was simply to find problems reported by this population of novices in the case study.

All of the problems in 16E.2 are important in that all have capacity for impeding the work of teaching and learning.

CHAPTER SEVENTEEN

A STANDARD APPLICATION OF FORMAL PSYCHOLOGY FOR NEW SCHOOLTEACHERS FACING INDISCIPLINE FROM PUPILS

Having in chapter 16 identified this as a problem much thought about by certain trainee teachers, in this chapter I shall try to produce psychological information for dealing with this problem. The purposes are to allow the assessment of the feasibility of the first part of the chapter 8 procedure when applied to a particular case, and if this is satisfactory, to have an account that can be used in a study of the potential impact of psychological information.

The main local requirement is that only antecedents including variables from formal psychology be

considered.

I shall set acceptable weight at one of the options suggested in chapter 5C - (the most ambitious): when there is

(i) knowledge of one and only one occurrence, and any number of non-occurrences, of O with the same person in highly similar circumstances, or (ii) knowledge of one and only one occurrence, and any number of non-occurrences, of O with a highly similar person in the same circumstances, or (iii) knowledge of two or more occurrences, and any number of non-occurrences, of O with highly similar persons in highly similar circumstances

The following simplifications are adopted: I assume no opportunity to go on searching after a practical trial. I assume I know what will be producible from any user and any communicator.

The following abbreviations are used: POR = producible on request; PAW = producible at will; NPOR = not producible on request; and NPAW = not producible at will. Y is a particular desired behaviour and Z is a particular behaviour incompatible with Y.

Explanations (typically where the first choice of target or agent has been passed over) are enclosed in

asterisks. They are not repeated when similar cases appear subsequently. Agents are numbered not consecutively but according to the occasion to which they refer, so that they can be easily traced at the end of the exercise. Wherever it has been necessary to refer to formal psychology in assessing future incidence, the reference has been given.

Sections ABC and DEF of the process will be taken together, DEF repeated for each separate desired behaviour.

17A-C INITIAL ASSIGNMENT

IDENTIFY THE PROBLEM: disruptive behaviour in groups of schoolpupils during lessons

FIND WHETHER THE PROBLEM IS DEFINED AS WIDELY AS COMMISSIONED: Done

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED: No (therefore there may be some scope for prevention of some targets)

IF NOT, DECIDE HOW MUCH TO SEEK PREVENTION OF TARGETS: Only where ready termination is impossible

IDENTIFY THE SUBJECT: pupils (Y1 and Y3) and groups of pupils (Y2) in classes the trainee teachers will have at some point in the future.

IDENTIFY THE RECEIVER: groups of trainee schoolteachers

FIND THE RECEIVER'S ABILITY TO ACCEPT COSTS: Normal

FIND WHETHER THE RECEIVER IS THE SUBJECT OR A PRACTITIONER: a practitioner (called 'teacher' in this chapter). Teacher's behaviour will be sought before pupil's behaviour, agents will include doing teacher's behaviour and asking for pupil's behaviour, new sub-problems will arise when teacher's behaviour

is NPAW or pupil's behaviour is NPOR.

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y1 = following all the classroom rules the teacher wishes to be observed (regardless of respect).

DEFINITION: Anything that breaches the standards of behaviour required is included. For example students may walk out of the class without asking permission when that is forbidden, one student may damage another's book, hit another student or shout.

DISCUSSION: Delinquency outside the lesson may be rule breaking; but I propose to concentrate on rules that are specific to the classroom.

Y2 = giving respect to a particular teacher

DEFINITION: Lack of respect for and lack of willing cooperation with a particular teacher. Indiscipline means for example in the teacher's presence making catcalls and noises when the teacher's back is turned, writing rude remarks on the blackboard, or throwing things at each other.

Y2 is not the same as Y1 and discipline is not the same as compliance: a teacher could achieve an appearance of good order by force, while some of the undesired behaviour continued, albeit circumspectly.

DISCUSSION: indiscipline is a group activity: (a) concerted disruption - Classes will often coordinate their pranks. This may be done beforehand or in performance: there can be an understanding among pupils as there is in a good jazz ensemble. They take turns leading and providing backing; and they seem to know what the others are going to do next, even when they have not planned in advance. If one leader is taken out, another will probably arise to carry on the bad work. (b) a disruptive pupil needs the safety in numbers and the audience that the other pupils provide, or (c) there is a contagion of hilarity.

Y3 = refusing to encourage ringleaders of disrespect.

Needs to be separated from Y2 because Y2 and Y3 are different behaviours and hence may have different factors.

Following is part of the problem: by common observation most of those present will be involved to some extent, playing some part, even if it only to join in when laughter is occasioned.

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED: no
(therefore there may be some scope for prevention of
some targets)

IF NOT, DECIDE HOW MUCH TO SEEK PREVENTION OF
TARGETS: only where ready termination is impossible

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT
DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: done

17D-F SEARCHING (1)

Y1 = pupils following the teacher's rules

.....
TESTING L+E 1-2

ARE THE LCEs INCOMPATIBLE WITH Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING L+E 3

IS LCE3 INCOMPATIBLE WITH Y1?
Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low L
+ moderate E (where X is stridency, sharpness)

Hence OCCASION 1: L = low (threshold for LCE to be
aggressive, and resistance to X)
E = moderate (nearness to threshold
and incidence of X)

TARGET = E

TEACHER'S BEHAVIOUR: PAW and therefore adopted as
AGENTS -

1A = to look out for signs of turbulence

1B = to avoid stridency

1C = judiciously to use monotony and lack of
intensity

.....
TESTING L+E 4

IS LCE 4 INCOMPATIBLE WITH Y1? Yes

hilarity

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate L + high E (where X is hilarity)

Hence OCCASION 2: L = moderate (threshold for LCE to
be reckless and resistance to X)
E = high (nearness to threshold,
and incidence of X)

TARGET = E

TEACHER'S BEHAVIOUR: PAW and therefore adopted as
AGENTS -

2A = to look out for signs that overexcitement is
threatened

2B = to avoid humour when overexcitement threatens

2C = judiciously to use monotony and lack of
intensity

.....TESTING L+E 5-6

ARE THE LCEs INCOMPATIBLE WITH Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING A+E 1-7

DO THEY REFER TO COMPONENTS OF Y1? No

Hence no occasion

.....
TESTING A+E 8

DO THEY REFER TO A COMPONENT OF Y1? Yes.

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low A
+ high E

Hence OCCASION 3: A = low (degree of possession of
knowledge of rules)
E = high (demand for knowledge of
rules)

TARGET = to terminate and avoid A

PUPIL'S BEHAVIOUR FOR CHANGE OF A: NPOR and therefore
adopted as a new Y -

Y4 = to pick up knowledge of the rules when
originally presented

TEACHER'S BEHAVIOUR: PAW and therefore adopted as an AGENT -

3A = to provide opportunities for learning the rules

.....
TESTING A+E 9

DO THEY REFER TO A COMPONENT OF Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
(the present case is not one in which there would often be an overapplication of the rules)

Hence no occasion

.....
TESTING A+E 10

DO THEY REFER TO A COMPONENT OF Y1? No

Hence no occasion

.....
TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y1? No

Hence no occasions

.....
TESTING AV+B+C+E 1

IS THERE A REASONABLE B INVOLVING AV1 AND Y1? Yes

POSSIBILITIES OF OCCURRENCE

Hence OCCASION 4: AV = high (degree of aversion to monotony)
B = moderate (strength of connection believed to exist between monotony and observing the rules)
C = moderate (degree to which threatened monotony is salient following the prospect of any task)
E = high (degree to which there is a task to observe the rules)

TARGET = to avoid B. (E is unchangeable, AV and C likewise)

PUPIL'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore adopted as a new Y -

Y5 = to decide on any previous occasion that observing the rules is not monotonous

.....
TESTING AV+B+C+E 2-10

ARE THERE REASONABLE Bs INVOLVING AVs2-10 AND Y1? No
Hence no occasions

.....
TESTING AV+B+C+E 11

ARE THERE REASONABLE Bs INVOLVING AV11 AND Y1? Yes

Hence OCCASION 5: AV = to agreeing with someone who has a low opinion of one
B = high (degree of connection seen between observing the rules and agreeing with an institution that has a low opinion of one)
C = moderate (degree to which the opinion of one is salient whenever agreement is in question)
E = high (degree to which agreement is requested)

TARGET = change B

PUPIL'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore adopted as a new Y -

Y6 = to decide that the school is not contemptuous of one

.....
TESTING AV+B+C+E 12

ARE THERE REASONABLE Bs INVOLVING AV12 AND Y1? Yes

Hence OCCASION 6: AV - high (aversion to making an undue effort)
B = high (degree of association seen between obeying effortful rules with teacher T and making an undue effort - because teacher T cannot detect)
C = salience of effort when a teacher who cannot detect is present)
E = high (degree to which teacher T is present)

TARGET IF E IS CHANGEABLE = to terminate E

TEACHER'S BEHAVIOUR: PAW and therefore adopted as an AGENT -

6A = to move to another school

TARGET IF E CANNOT BE TERMINATED: to avoid B

PUPIL'S BEHAVIOUR FOR AVOIDANCE OF B: NPOR and therefore adopted as a new Y -

Y7 = to adopt the belief in early meetings with the teacher that the teacher can detect

.....
TESTING AV+B+C+E 13-20

ARE THERE REASONABLE Bs INVOLVING AVs13-20 AND Y1? No

Hence no occasions

.....
TESTING AV+C+E 21

IS THERE A REASONABLE B INVOLVING AV21 AND Y1? No

Hence no occasions

.....
TESTING ATT+B+C+E 1

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y1 AND BEEN INVOLVED WITH ATT1 IN A REASONABLE B? Yes: rule breaking could be seen as leading to amusement, and the net value of this could outweigh losing a teacher's friendship or receiving less well taught lessons

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate ATT +

Hence OCCASION 7: ATT = moderate (strength of attraction to discontinuity and intensity)
B = moderate (degree of association seen between rule-breaking with teacher T and discontinuity/intensity)
C = moderate (degree to which rule-breaking with teacher T is salient when rules exist and teacher T is present)
E = high (degree to which rules exist and teacher T is present)

TARGET = to terminate E (the presence of teacher T)

TEACHER'S BEHAVIOUR: PAW and therefore adopted as an AGENT -

7A = to move to another school

TARGET IF E IS NOT CHANGEABLE = to avoid B

PUPILS' BEHAVIOUR FOR CHANGE OF B: NPQR and therefore adopted as a new Y -

Y8 = to decide in early meetings with teacher T that rule-breaking is not amusing with teacher T

.....TESTING ATT+B+C+E
2-19

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y1 AND BEEN INVOLVED WITH ATTs2-19 IN A REASONABLE B? No

Hence no occasions

.....
TESTING ATT+B+C+E 20

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y1 AND BEEN INVOLVED WITH ATT20 IN A REASONABLE B? Yes

Hence OCCASION 8: ATT = high (degree of attraction to end N)
B = high (degree of connection seen between end N and behaviour that is against the rules)
C = high (degree to which salience of N follows any situation in which there is low distraction)
E = low (degree of distraction)

TARGET = to avoid E

TEACHER'S BEHAVIOUR: PAW and therefore adopted as an AGENT -

SA = to make the lesson interesting enough to distract from N

.....
TESTING ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y1 AND BEEN INVOLVED WITH ATT21 IN A REASONABLE B? No

Hence no occasion

17.D-F SEARCHING (2)

Y2 = being respectful to the teacher

.....
TESTING L+E 1-6

ARE THE LCEs INCOMPATIBLE WITH Y2? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y2? No

Hence no occasion

.....
TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y2? No

Hence no occasions

.....
TESTING AV+B+C+E 1-20

ARE THERE REASONABLE Bs INVOLVING AVs1-20 AND Y2? No

Hence no occasions

.....
TESTING AV+C+E 21

IS THERE A REASONABLE B INVOLVING AV21 AND Y2? No

Hence no occasion

.....
TESTING ATT+B+C+E 1

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y2 AND BEEN INVOLVED WITH ATT1 IN A REASONABLE B? Yes: being disrespectful could relieve monotony, and the net value of this could outweigh losing a teacher's friendship or receiving less well taught lessons

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: moderate ATT +moderate B + moderate C + high E

Hence OCCASION 9: ATT = moderate (strength of attraction to relief of monotony)
B = moderate (ragging teacher T is

seen as a means to relieve
monotony)
C = moderate (degree to which high
salience of ragging follows the
appearance of teacher T)
E = high (presence of teacher T)

TARGET FOR TERMINATING = E

TEACHER'S BEHAVIOUR: PAW and therefore adopted as an
AGENT -

9A = to move to another school

TARGET FOR AVOIDING: B

PUPIL'S BEHAVIOUR FOR CHANGE OF B: NPOR and
therefore adopted as a new Y -

Y9 = to acquire the belief that this teacher is
not raggable

.....
TESTING ATT+B+C+E 2

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS
WELL AS Y2 AND BEEN INVOLVED WITH ATT2 IN A
REASONABLE B? No

Hence no occasion

.....
TESTING ATT+B+C+E 3

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS
WELL AS Y2 AND BEEN INVOLVED WITH ATT3 IN A
REASONABLE B? Yes:

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate AV +

Hence OCCASION 10: ATT = moderate (strength of
attraction to agreeableness)
B = moderate (strength of
connection believed to exist
between agreeableness - social
kudos among one's mates - and being
disrespectful to this teacher)
C = moderate (degree to which high
salience of B follows the presence
of particular teacher and one's
reference group)
E = high (presence of particular
teacher and one's reference group)

TARGET FOR TERMINATING: E

TEACHER'S BEHAVIOUR: PAW and therefore adopted as an

AGENT -

10A = to move to another school

TARGET FOR AVOIDING: B

PUPIL'S BEHAVIOUR FOR CHANGE OF B: NPOR and therefore adopted as a new Y -

Y9 = to acquire the belief that this teacher is not raggable

.....TESTING ATT+B+C+E
4-20

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y2 AND BEEN INVOLVED WITH ATT_s4-20 IN REASONABLE Bs? No

Hence no occasions

.....
TESTING ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y2 AND BEEN INVOLVED WITH ATT₂₁ IN A REASONABLE B? No

Hence no occasion

17D-F. SEARCHING (3)

Y3 = refusing to follow the ringleaders of rulebreaking or disrespectfulness, when it is happening

.....
TESTING L+E 1-6

ARE THE LCEs INCOMPATIBLE WITH Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y3? No

Hence no occasion

.....
TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y3? No

Hence no occasions

.....
TESTING AV+B+C+E 1-2

ARE THERE REASONABLE Bs INVOLVING AVs1-2 AND Y3? No

Hence no occasions

.....
TESTING AV+B+C+E 3

IS THERE A REASONABLE B INVOLVING AV3 AND Y3? Yes:

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate AV +

Hence OCCASION 11: AV = moderate (strength of
aversion to disaffiliation)
B = moderate (strength of
connection believed to exist
between disaffiliation and refusing
to follow the ringleaders)
C = moderate (degree to which high
salience of B follows the presence
of one's reference group)
E = high (degree to which one's
reference group is present)

TARGET for terminating or avoiding = none

.....
TESTING AV+B+C+E 4-20

ARE THERE REASONABLE Bs INVOLVING AVs4-20 AND Y3? No

Hence no occasions

.....
TESTING AV+C+E 21

IS THERE A REASONABLE B INVOLVING AV21 AND Y3? NO

Hence no occasion

.....
TESTING ATT+B+C+E 1-20

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS
WELL AS Y2 AND BEEN INVOLVED WITH ATTs1-20 IN
REASONABLE Bs? No

Hence no occasions

.....
TESTING ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS
WELL AS Y3 AND BEEN INVOLVED WITH ATT21 IN A
REASONABLE B? No

Hence no occasion

17C. SEEKING A QUESTION (4)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y4 = to pick up knowledge of the rules when they are presented originally

FIND WHETHER THE UNDESIRED HAS ALREADY HAPPENED: no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

.....
17D-F. SEARCHING (4)

.....
TESTING L+E 1-6

ARE THE LCEs INCOMPATIBLE WITH Y4? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING A+E 1-3

DO THEY REFER TO COMPONENTS OF Y4? No

Hence no occasion

.....
TESTING A+E 4

DO THEY REFER TO A COMPONENT OF Y4? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

high E could be present: traffic and weather noise, coughing of room-mates, soft or poorly enunciated speaking by the giver of information

moderate D could be present: the sensory acuity of some people even at its maximum leaves something to be desired.

Hence OCCASION 12: A = moderate (degree of possession of deciphering ability)
E = high (demand for deciphering ability)

TARGET: to avoid E (A cannot be change in the short term - unless by putting on eyeglasses etc)

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

12A = to look for threatened noise and check signal strength

12B = to weaken the noise and amplify the signal as necessary

.....TESTING A+E 5

DO THEY REFER TO A COMPONENT OF Y4? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 13: A = moderate (degree of possession of ability to resolve ambiguity)
E = high (degree of ability to resolve ambiguity demanded)

TARGET: to avoid E (A cannot be change in the short term)

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

13A = to check for threatened ambiguities (including vagueness)

13B = to eliminate ambiguities

13C = to discuss any misinterpretations of the rules that are likely to occur

.....CITESTING A+E 6

DO THEY REFER TO A COMPONENT OF Y4? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 14: A = moderate (degree of possession of attentional capacity)
E = high (degree of attentional capacity demanded)

TARGET = to avoid E

TEACHER'S BEHAVIOUR: PAW and therefore adopted as an AGENT -

14A = to make the presentation as short as possible

.....TESTING A+E 7

DO THEY REFER TO COMPONENTS OF Y4? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 15: A = moderate (ability to
concentrate)
E = high (demand for concentration)

TARGET = to avoid E (A cannot be changed in the short
term)

TEACHER'S BEHAVIOUR: PAW and therefore adopted as
AGENTS -

15A = to look for signs that distractions are
imminent

15B = to forestall or accommodate distractions

.....TESTING A+E 8-10

DO THEY REFER TO COMPONENTS OF Y4? No

Hence no occasions

.....
TESTING A+E 11-12

DO THEY REFER TO COMPONENTS OF CONSIDERING Y4? No

Hence no occasions

.....
TESTING A+E 13

DO THEY REFER TO COMPONENTS OF CONSIDERING Y4? Yes:
some people do not know that active memorizing may be
an issue

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 16: A = moderate (degree of possession
of accessible knowledge)
E = high (demand for accessible
knowledge)

TARGET: to avoid A. (E not changeable)

PUPILS' BEHAVIOUR FOR AVOIDANCE OF A: POR therefore
see Agent 16B

TEACHER'S BEHAVIOUR: PAW therefore adopted as AGENTS
-

16A = to present the information that active
memorizing is often necessary

16B = to ask the pupils to acquire this information

.....TESTING A+E 14-15

DO THEY REFER TO A COMPONENT OF CONSIDERING Y4? No

Hence no occasions

.....
TESTING AV+B+C+E 1-20 AND AV+C+E 21

ARE THERE REASONABLE Bs INVOLVING AVs 1-21 AND Y4?
No

Hence no occasions

.....
TESTING ATT+B+C+E 1-20 AND ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y4 AND BEEN INVOLVED WITH ATTs 1-21 IN REASONABLE Bs? No

Hence no occasions

17C. SEEKING A QUESTION (5)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y5 = to decide that rule-observance may be interesting

FIND WHETHER THE UNDESIRED HAS ALREADY HAPPENED: no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

.....
17D-F. SEARCHING (5)

.....
TESTING L+E 1-6

ARE THE LCEs INCOMPATIBLE WITH Y5? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....

TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y5? No

Hence no occasion

.....

TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y5? No

Hence no occasions

.....

TESTING AV+B+C+E 1-12

ARE THERE REASONABLE Bs INVOLVING AVs 1-12 AND Y5?

No

Hence no occasions

.....

TESTING AV+B+C+E 13

IS THERE A REASONABLE B INVOLVING AV13 AND Y5? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV + high B + high C + high E

Hence OCCASION 17: AV = high (degree of aversion to believing what is invalid)
B = high (degree of invalidity seen in making a judgement counter to experience)
C = high (degree to which aversive experience with observing the rules is salient when observing the rules is in prospect)
E = high (degree of experience of monotony with observing the rules)

TARGET IF E IS AVOIDABLE: to avoid E
TEACHER'S BEHAVIOUR: PAW therefore adopted as an AGENT

17A = not to allow observing the rules to be associated with boredom on any occasion

TARGET IF E IS NOT AVOIDABLE: none

.....

TESTING AV+B+C+E 14-20 AND AV+C+E 21

ARE THERE REASONABLE Bs INVOLVING AVs 14-21 AND Y5?

No

Hence no occasions

.....
TESTING ATT+B+C+E 1-20 AND ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y5 AND BEEN INVOLVED WITH ATTs 1-21 IN REASONABLE Bs? No

Hence no occasions

17C. SEEKING A QUESTION (6)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y6 = to decide that the school is not contemptuous of me

FIND WHETHER THE UNDESIRED HAS ALREADY HAPPENED: no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

.....
17D-F. SEARCHING (6)

.....
TESTING L+E 1-6

ARE THE LCEs INCOMPATIBLE WITH Y6? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y6? No

Hence no occasion

.....
TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y6? No

Hence no occasions

.....
TESTING AV+B+C+E 1-12

ARE THERE REASONABLE Bs INVOLVING AVs 1-12 AND Y6?

No

Hence no occasions

.....
TESTING AV+B+C+E 13

IS THERE A REASONABLE B INVOLVING AV13 AND Y6? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV
+ high B + high C+ high E

Hence OCCASION 18: AV = high (degree of aversion to
believing what is invalid)
B = high (degree to which
uncontemptuousness is seen as
counter to experience)
C = high (degree to which
contemptuousness is salient
following a history of signs of
contempt)
E = high (degree of presence of
signs of contempt)

TARGET - to avoid E

TEACHER'S BEHAVIOUR: PAW therefore adopted as an
AGENT -

18A = not to show any signs of contempt

.....TESTING AV+B+C+E
14-20 AND AV+C+E 21

ARE THERE REASONABLE Bs INVOLVING AVs 14-21 AND Y6?
No

Hence no occasions

.....
TESTING ATT+B+C+E 1-20 AND ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS
WELL AS Y6 AND BEEN INVOLVED WITH ATTs 1-21 IN
REASONABLE Bs? No

Hence no occasions

17C. SEEKING A QUESTION (7)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y7 - pupils adopting the belief in early meetings that the teacher is capable of detecting

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED: no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

.....

17D-F. SEARCHING (7)

.....

TESTING L+E 1-6

ARE THE LCEs INCOMPATIBLE WITH Y7? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....

TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y7? No

Hence no occasion

.....

TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y7? No

Hence no occasions

.....

TESTING AV+B+C+E 1-12

ARE THERE REASONABLE Bs INVOLVING AVs 1-12 AND Y7?
No

Hence no occasions

.....

TESTING AV+B+C+E 13

ARE THERE REASONABLE Bs INVOLVING AV13 AND Y7? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV + high B + high C + high E

Hence OCCASION 19: AV = high (degree of aversion to believing what is invalid)
B = high (degree of validity seen in inferring low ability to detect from early failure in detection by a newly met person)
C = high (degree to which detecting prowess is salient when a teacher is newly met)
E = high (degree to which a newly met teacher demonstrates failures in detection)

TARGET = to avoid E

TEACHER'S BEHAVIOUR: PAW therefore adopted as AGENTS

19A = to give oneself easy detection tasks

19B = not to place heavy demands on one's own attention

.....
TESTING AV+B+C+E 14-20 AND AV+C+E 21

ARE THERE REASONABLE Bs INVOLVING AVs 14-21 AND Y7?
No

Hence no occasions

.....
TESTING ATT+B+C+E 1-20 AND ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y7 AND BEEN INVOLVED WITH ATTs 1-21 IN REASONABLE Bs? No

Hence no occasions

17C. SEEKING A QUESTION (8)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y8 = to decide that rule-breaking is not amusing with teacher T on an early meeting

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED: no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

.....
17D-F. SEARCHING (8)

.....
TESTING L+E 1-6

ARE THE LCEs INCOMPATIBLE WITH Y8? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....
TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y8? No

Hence no occasion

.....
TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y8? No

Hence no occasions

.....
TESTING AV+B+C+E 1-12

ARE THERE REASONABLE Bs INVOLVING AVs 1-12 AND Y8?
No

Hence no occasions

.....
TESTING AV+B+C+E 13

IS THERE A REASONABLE B INVOLVING AV13 AND Y8? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV
+ high B + high C + high E

Hence OCCASION 20: AV = high (degree of aversion to
believing what is invalid)
B = high (degree of validity seen
in inferring that rule-breaking is
amusing with teacher T if teacher T
throws tantrums when rules are
broken)
C = high (degree to which amusement
value is salient when any teacher
is newly met)
E = high (degree to which a new
teacher is present who throws
tantrums)

TARGET = to avoid E

TEACHER'S BEHAVIOUR: PAW and therefore adopted as an AGENT -

20A = to avoid making rule breaking as such a relief from boredom (as one might for example by throwing a tantrum)

.....TESTING AV+B+C+E 14-20 AND AV+C+E 21

ARE THERE REASONABLE Bs INVOLVING AVs 14-21 AND Y8? No

Hence no occasions

..... TESTING ATT+B+C+E 1-20 AND ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y8 AND BEEN INVOLVED WITH ATTs 1-21 IN REASONABLE Bs? No

Hence no occasions

17C. SEEKING A QUESTION (9)

FIND ONE OR MORE DESIRED BEHAVIOURS (Ys) IN CERTAIN CIRCUMSTANCES:

Y9 = pupils in a class adopting the view upon first meeting a teacher that the teacher is not ragable

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED: no

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

..... 17D-F. SEARCHING (9)

..... TESTING L+E 1-6

ARE THE LCEs INCOMPATIBLE WITH Y9? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

Hence no occasion

.....

TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y9? No

Hence no occasion

.....

TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y9? No

Hence no occasions

.....

TESTING AV+B+C+E 1-12

ARE THERE REASONABLE Bs INVOLVING AVs 1-12 AND Y9?
No

Hence no occasions

.....

TESTING AV+B+C+E 13

IS THERE A REASONABLE B INVOLVING AV13 AND Y9? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV + high B + high C + moderate E

Hence OCCASION 21: AV = high (degree of aversion to
believing what is invalid
B = high (degree of validity seen
in inferring raggedness from a
show of difference from existing
unragged teachers or unfamiliarity)
C = high (degree to which
raggedness is salient when a new
teacher is met)
E = moderate (degree to which a new
teacher shows difference from
existing unragged teachers,
unfamiliarity)

TARGET = to avoid E

TEACHER'S BEHAVIOUR: PAW and therefore adopted as
AGENTS -

21A = to find out how unragged teachers in the new
school look and the standards of pupil behaviour
they require

21B = to discover whether there are ragged
colleagues who might be compared (e.g. all those
teaching the same subject)

21C = for a short period to conform to the
standards and superficial appearance of all, or

(if all are not the same, comparable) unragged
colleagues .

21D = to engineer superficial differences of
appearance from comparable ragged colleagues if
they exist.

21E = to avoid showing unfamiliarity through
dithering, inconsistency, or nervousness

.....
TESTING AV+B+C+E 14-20 AND AV+C+E 21

ARE THERE REASONABLE Bs INVOLVING AVs 14-21 AND Y9?
No

Hence no occasions

.....
TESTING ATT+B+C+E 1-20 AND ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS
WELL AS Y9 AND BEEN INVOLVED WITH ATTs 1-21 IN
REASONABLE Bs? No

Hence no occasions

17G. SEEKING CONSISTENCY

This section lists all the agents derived from the foregoing procedure, and asks which are identical, which contradictory and which mutually independent.

17G.1 LIST OF ALL AGENTS

1A = to look out for signs of turbulence

1B = to avoid stridency

1C = judiciously to use monotony and lack of intensity

2A = to look out for signs that overexcitement is threatened

2B = to avoid humour when overexcitement threatens

2C = judiciously to use monotony and lack of intensity

3A = to provide opportunities for learning the rules

6A = to move to another school

7A = to move to another school

8A = to make the lesson interesting enough to distract from an undesired tendency

9A = to move to another school

10A = to move to another school

12A = to look for threatened noise and check signal strength

12B = to weaken the noise and amplify the signal as necessary

13A = to check for threatened ambiguities (including vagueness)

13B = to eliminate ambiguities

13C = to discuss any misinterpretations of the rules that are likely to occur

14A = to make the presentation short enough to be taken in

15A = to look for signs that distractions are imminent

15B = to forestall or accommodate distractions

16A = to present the information that active memorizing is often necessary

16B = to ask the pupils to acquire this information

17A = not to allow observing the rules to be associated with boredom on any occasion

18A = not to show any signs of contempt

19A = to give oneself easy detection tasks

19B = not to place heavy demands on one's own attention

20A = to avoid making rule breaking as such a relief from boredom (as one might for example by throwing a tantrum)

21A = to find out how unragged teachers in the new school look and the standards of pupil behaviour they require

21B = to discover whether there are ragged colleagues who might be compared (e.g. all those teaching the same subject)

21C = for a short period to conform to the standards and superficial appearance of all, or (if all are not the same, comparable) unragged colleagues

21D = to engineer superficial differences of appearance from comparable ragged colleagues if they exist.

21E = to avoid showing unfamiliarity through dithering, inconsistency, or nervousness

17G.2 COHERENCE OF AGENTS

There are some identical agents in the list - 6A, 7A, 8A and 9A - to move to another school (in certain circumstances), and 1C and 2C - to use monotony judiciously.

All the others are mutually independent.

17I-T COMMUNICATION

To demonstrate feasibility this section identifies some points where the provisions of sections I-T of the proposed standard might come into play if the foregoing information were to be given to the trainees who are the subjects of this case study.

TRY TO ASSESS THE PROBLEM-SOLVING THAT IS LIKELY TO BE REQUIRED IN APPLICATIONS BY THE PRACTITIONER

In this case problem solving is likely to be involved because (a) the information will be used in a variety of circumstances, and (b) the circumstances are complex. For example a trainee schoolteacher may be observing the teaching of an experienced teacher when that teacher leaves the room. The trainee wonders whether to take over the class or not. The information (advice to be like other teachers) is there, but if it has been presented only in terms of being like other teachers in dress, there is a problem for the practitioner to solve.

TRY TO CHANGE THE INFORMATION PRESENTED SO THAT, AS FAR AS POSSIBLE, ITS APPLICATION DOES NOT DEMAND MORE PROBLEM-SOLVING ABILITIES THAN THE PRACTITIONER

POSSESSES

In the case of the example above the advice 'be like other good teachers' needed to be reiterated in terms of many concrete examples, including the one quoted or something close to it.

TRY TO PRESENT INFORMATION FROM PSYCHOLOGY OR ELSEWHERE THAT JUSTIFIES THE RECOMMENDATIONS

In this case one would find reports of research in 'interpersonal perception' that would support some of the statements.

An example of justification might be justification of the position that it is normally possible to avoid but not to terminate the belief that a teacher is raggable. After one has given the impression of raggability, it does not matter how punitive one is, it does not matter who one gets to help one. Unless you do something very spectacular, of the order of saving someone's life, the original impression that you are raggable will stick. It is easy to confirm this by observing that very often the most punitive teachers are the ones with the worst discipline. Once a teacher has been judged raggable, it is likely that the teacher will be ragged; and as long as a teacher is ragged, she or he must go on looking raggable. There is little scope for classes to

change their minds about teachers' ragability. If a class rags a teacher, there is little he or she can do to avoid appearing ridiculous, no matter how hard the teacher tries. Indeed the harder teachers try, the more ridiculous they will probably look. Good disciplinarians are good not because of how wonderfully they cope when insults are being chanted at them but because insults are never chanted at them. Every teacher is in a sense ragable. Even if you do everything the same as other teachers who are not ragged, after the ragging has started it is likely to continue.

TRY TO ASSESS THE THREAT OF COUNTER-ARGUMENTS

Examples of these are that good discipline depends on 'the teacher's personality', that it cannot be learned, and that it cannot be analysed.

TRY TO PROVIDE ILLUSTRATIONS FROM THE PRACTITIONERS' PAST EXPERIENCE

The following examples show points that are illustratable from common experiences that the audience may well recognize.

An illustration of the possibility of unconsidered aggression might be: 'If you have ever had a car

break down on the way to an important appointment and felt like kicking the offending vehicle, you will know what it is to experience a great welling up of anger so that you feel you will burst if you do not express it in some way. You have all probably in your time slammed a door, kicked a piece of furniture, or shouted at someone who happened to be near. You did not give it much consideration'.

An illustration of the link between unconsidered aggression and insult, and on the definition of insult, might be: 'If you come home tired and looking forward to a bit of cosy domesticity, and you are met with someone snapping at you "You said you'd be here two hours ago.....etc.", it takes a lot of control to avoid the natural tendency to snap back. Before you know where you are, you can be quite angry. One of the things that can make us angry like this is people approaching us aggressively or stridently.'

An illustration of pupils' using teachers' appearance to judge their raggability might be: 'When you see someone across a crowded room at a party, you first see a type, a follower of a certain fashion, a show-off, or whatever. You judge people at parties on their appearance, their bearing, the way they move, their physique, their facial expressions, their voices, their clothes. Only later, if you get close

enough, will you find out what is behind the cover.'

An illustration of the fact that other people's impressions of us are not always what we think they are going to be might be: 'You can go to a party hoping to create the impression of being a strong and silent type and find that the impression that has been taken is of a shy or moody type. Therefore it is over-optimistic to assume that just because you want a class to read you as friendly, they will do so.'

An illustration of the futility of trying to reprimand or reason classes out of a state of high excitement might be: 'If you try telling someone who is high through inebriation to "stop fooling around" you will probably get nowhere. People in that state need to be taken home, put to bed, removed from circulation and given time to get back to normal. Talking to them can calm them down if the voice is soothing and monotonous; but reasoning is irrelevant. People who are high are not deciding to go on being high after a careful consideration of various courses of action.'

An illustration of pupils' use of stereotypes to judge teachers' raggability might be: 'If a friend tells you that they have been dating someone new, and goes on to tell you that the new partner is an

accountant, you will probably find yourself using a stereotype.'

TRY TO ASSESS ANY THREATENED INTERFERENCE FROM THE PRACTITIONERS' POSSESSING CONCEPTS THAT ARE TOO COARSE

An example of a coarse concept that might be used in thinking about discipline is 'respect' of pupils for teachers. To be respected can mean to have your ability or skill acknowledged. That is certainly not enough for good discipline. To be respected can mean to be treated with deference, to be unapproachable. That is at best irrelevant and is possibly inimical to good discipline. Only where to be respected means to have one's unraggability acknowledged does the concept of respect fit the case. The coarseness in that case arises from using a term with a number of meanings.

Other cases of coarseness in relation to PAD are not distinguishing ragging from other disruptive behaviour of pupils, and being too satisfied with 'home background' as a factor in indiscipline - it may be a variable associated with indiscipline but that does not identify what influences behaviour in school when it take place.

TRY TO ASSESS ANY THREATENED INTERFERENCE FROM THE

PRACTITIONERS' POSSESSING INCORRECT BUT NOT
UNDERPINNED BELIEFS

There are a number of examples of unprofound beliefs that are incorrect according to the psychological account in this chapter:

that one is likely to achieve good discipline by force

that intervention by a superior is likely to reduce one's raggability

that one needs a special personality ingredient to obtain good discipline

that one cannot learn how to obtain good discipline

TRY TO ASSESS ANY THREATENED INTERFERENCE FROM
FAULTY INTUITIVE STATISTICS

Examples could be the self-serving nature of a belief that home background is the most important influence on behaviour in school, and the thinking that (i) other trainees succeed who do not follow the recommendations here, and (ii) if one can, all can.

TRY TO CHECK WHETHER ANY RELEVANT Y2 IS SEEN AS
UNIMPORTANT, INGRATIATING, UNCOOL OR OF LOW
COST-EFFECTIVENESS

An example of what might be found in this case is
practising: practising is quite likely to be seen
as unimportant, ingratiating, uncool and not worth
the effort. (I am not talking about what is
called 'teaching practice' because that is
practice in the sense practical work not in the
sense rehearsal.)

TRY TO PRESENT THE INFORMATION THAT THE
PRACTITIONER'S ABILITY IS NOT AN OBSTACLE

Examples of doing it could be (a) giving the
information that many new teachers have problems
with at least one class and that there is hope
provided they are not ragged by all their classes,
and (b) giving the information that it is normal
in first meetings for classes to be pretty quiet
(because they are watching): there will be time
for the new teacher to react because the class is
waiting to see the reaction.

TRY TO ASSESS ANY THREATENED INTERFERENCE FROM
PRACTITIONERS' EXISTING BELIEFS THAT ARE UNDERPINNED
AND THAT COULD CONFLICT WITH THE RECOMMENDATIONS

Examples of such beliefs in this case from my first
hand experience include:

that indiscipline can be combatted effectively by
appealing to individual pupils

that if things go wrong, the pupils are entirely
to blame

that one is likely to be judged on how sympathetic
or friendly one is

that the impression on pupils of the teacher's
character is likely to be unimportant for
discipline

that a teacher is likely to be able to win back
the cooperation of a class after a bad start

that teachers will always achieve good discipline
by 'being themselves' or 'doing what comes
naturally' without deliberate planning

that the best way of handling many incidents is to

ignore them

TRY TO ARGUE IF NECESSARY AROUND OR ABOVE SUCH BELIEFS

Examples of what trainees might need to be told include:

It is only efficient and sensible from the pupils' point of view to assess your raggability quickly. It is not disparaging them to say that this is what they will do. If you wish to warn them not to judge on superficial appearance, that is all right but to have an impact you will have to be established with the pupils, and this establishment will have to take place in accordance with the pupils' existing ways of thinking.

You are not being asked to adopt a false personality: once you are assessed as not raggable, pupils will turn their attention to other aspects of your personality and you can then show them as much of your true self as you like. In the first meeting your choice is to send signals that you are raggable or to send signals that you are unraggable. And obviously the signals must be signals the pupils will recognize. All you are doing is communicating with the

pupils.

If you use rules in the way I have suggested here you will avoid being the kind of teacher who hectors students all the time, who seems always to be laying down the law. If you want to minimize rules in your classroom, rules can help you do this, paradoxically; but they must be the kind of rules that are very carefully spelled out to start with, and then adhered to exactly as they are gradually phased out. In other words they must be disappearing rules.

TRY TO ASSESS ANY THREATENED INTERFERENCE FROM APPARENT (NOT ACTUAL) INVALIDITIES IN THE MESSAGE

Examples of apparent invalidities in this case:

It may appear that it is unrealistic to recommend taking note if a pupil gives a false name on first meeting - how will a trainee know whether the name is false? But the rest of the class will know that the name is false, and it will often be easy to spot that something is up by the behaviour of the spectators if not that of the perpetrator.

It may appear unrealistic to recommend much more preparation etc than serving teachers are seen to do. But the fact that experienced teachers do not

do something does not show that trainees need not do it: some of the things that one does with little attention when practised take much attention to begin with.

It may appear implausible that young children are good people-readers, implausible to anyone who confuses the ability to read people and the ability to talk about reading people.

TRY TO CHECK ANY THREATENED INTERFERENCE FROM NORMS THAT NEEDLESSLY APPEAR TO CONFLICT WITH THE RECOMMENDATIONS

Examples of norms that may be relevant in this case:

a norm of not appearing to work hard (this is contrary to the recommendation in the foregoing account to do a lot of preparation).

a norm of taking advice from old hands and seniors (their advice may not harmonize with the recommendations in the foregoing account)

TRY TO INDICATE THAT TAKING IN THE MESSAGE WILL HAVE SOME DESIRED EFFECTS

In this case it is easy to point out that the

difference between good and bad discipline is the difference between being effective and happy as a teacher and the opposites.

TRY TO INDICATE THAT THE COMMUNICATOR HAS SOME INSIDE KNOWLEDGE OF THE FIELD IN WHICH THE PRACTITIONERS PRACTICE

For example in this case that children are often high after Physical Education lessons.

TRY TO CHECK FOR THE PRESENCE OF ANY MATERIAL THAT MIGHT CONVEY THAT THE MESSENGER IS GREEN OR INSINCERE

The second could easily happen in this case: the communicator could say things which convey a remoteness from the reality of everyday teaching.

TRY TO REDUCE MATERIAL TO SUIT THE TIME AVAILABLE

For demonstration purpose one might imagine being given two half-hour presentations each followed by discussion. In that case these might be retained as the most important recommendations:

1. Look the part but do not look afraid to be different.

2. When tested, show that you notice things and that you are decisive and consistent.

3. Avoid giving signs of anxiety, look the part in small ways, and take care over small tests.

4. Be careful that you are strict in the right way.

5. Do not be a pep talker.

6. Make it easy by avoiding fancy lessons at first, and rehearsing in your imagination.

TRY TO ADJUST THE ORGANIZATION OF THE PRESENTATION TO SUIT THE CONTACT CONDITIONS

Still imagining the two half-hour slots -

divide into separate coherent bits and give each a heading, e.g. 1 and 3 under the heading Look The Part, 2, 4, 5, 6, under the heading Meet The Challenge.

(not ploughing through until the end of the first half-hour, stopping suddenly, starting the second half-hour part way through something, and finishing in a rush or leaving in complete.)

TRY TO PROVIDE (WHERE WITHIN ONE'S REMIT AND RELEVANT) OPPORTUNITIES FOR GRADUATED EXPERIENCE AND PRACTICE

In this case graduated experience is certainly necessary: trainee teachers can worry about their performance (Cruickshank et al, 1974) and this can be damaging by leading to the trainees' being too self-conscious in class (and therefore not conscious enough of pupils' needs), to their being uninteresting through shyness, to their not giving an impression of confidence, to their not being steady enough, and to their not engaging the children sufficiently.

Also relevant in this case is guarding against the accumulation of insults to oneself.

TRY TO ASSESS THREATENED AMBIGUITY (INCLUDING VAGUENESS) AND MISINTERPRETATION

Example: trainees may think they are being advised to be strict with pupils or not strict when they are in fact being advised to let nothing pass (to be strict in one sense) but not to be strident (not to be strict in another sense.), tenacious of purpose but not pugnacious

Example: trainees could think they were being advised to be like other teachers when the intended advice was to be like other teachers in some ways for a little time.

Example: trainees could think they were being advised to dress casually or to dress formally when the intended advice was to dress in the way conventional in the particular school attended.

Example: when the intended advice was to use their own personas to make lessons interesting, teachers could think they were being advised to act as if they were auditioning for a Las Vegas nightspot.

Example: trainees could think they were being advised to be like their pupils when the intended advice was to know their pupils.

Example: it may be advisable for teachers to become familiar with the names of some disc jockeys and soap opera characters. But that does not mean that teachers must change their own tastes in music or literature. Some may think it does mean that, and accordingly reject the idea.

TRY TO USE CONCRETE ILLUSTRATIONS

(a) To put across the point that a newcomer will not

necessarily be able to match an experienced teacher in doing things quickly and also while attending to something else, one could get some mileage out of comparing teaching with car driving.

(b) The foregoing account suggests that new teachers should not let any transgression go unnoticed in the first lesson. This leaves scope for misinterpretation of what is meant by 'transgression'. It could be helpful to give an example in this vein: 'If you have said DON'T LEAVE YOUR SEAT WITHOUT PUTTING YOUR HAND UP AND WAITING FOR ME TO GIVE YOU PERMISSION, then do nothing else but watch for a minute or two. Probably someone will leave a seat. You will be able to notice this right away; and you should show that you have noticed it.

(c) The foregoing account suggests that trainees should work out their policies before going into their first classroom. This is rather vague about what policies are involved. Trainees may be unable to think of any policy to work out. Therefore concrete examples of policy questions would be helpful and could include these: Should pupils be allowed to leave their seats without asking permission? Should they be allowed to talk while they are doing written work? Should they have to put their hands up and wait to be asked before they address the teacher? And should they line up outside

the door before they come in to the room?

(d) Subtle distinctions can be easier to make clear in concrete terms. A psychologist could say that one way to avoid a lot of barking of orders by the teacher is for the teacher to teach pupils a detailed routine. The distinction here may not be understood, because both barking orders and training in routines are part of what some think of as a regimental approach.

(e) Concrete example to distinguish punishing with personal aggression and punishing without personal aggression: This would have to be a demonstration complete with different tones of voice and different types of speech by the teacher. In the less personal case the teacher says (in a tone with a hint of regret) 'You've broken the rules; you know what that means'; in the more personal case the teacher says (in a tone of pleasurable anticipation) 'Right I've got you this time. I promised myself I would' (and so forth).

(f) Concrete example to show that teacher's attention need not be reinforcing: It may seem a good idea to reward a teenage boy for attending well to some work by showing the work to the rest of the class and complimenting the boy in public. But there are some teenage boys for whom this would be very

embarrassing.

(g) Concrete example to show that different things are reinforcing for different people: maybe having to sweep up the leaves from the schoolyard would have a weakening effect on some pupils. But there are probably other pupils who would quite enjoy sweeping the leaves.

TRY TO REPLACE ANY MISLEADING EXPRESSIONS

Example: the maxim 'know about disc jockeys and soap operas' while recommended would raise hackles: people might feel they were being asked to be like the pupils rather than know what the pupils are like.

A better way of putting it would be the maxim 'know your pupils.'

Example: 'concentrate on what they think of you' might raise hackles. Better would be 'how the recommendations teachers give pupils about the value of hard work, the joy of reading, or whatever, will be coloured by the teacher's character as seen by the pupils'.

17U. COMMENTARY

That completes a run-through of the proposed standard

process, applying a good eclectic psychology to the problem of new teachers' facing lack of discipline from their pupils.

CHAPTER EIGHTEEN

A STANDARD APPLICATION OF FORMAL PSYCHOLOGY FOR NEW SCHOOLTEACHERS FACING LACK OF INTEREST FROM PUPILS

Having in chapter 16 identified this as a problem much thought about by certain trainee teachers, in this chapter I shall try to produce psychological information for dealing with this problem. The purposes are to allow the assessment of the feasibility of the first part of the chapter 8 procedure when applied to a particular case, and if this is satisfactory, to have an account that can be used in a study of the potential impact of psychological information.

The main local requirement is that only antecedents including variables from formal psychology be

considered.

I shall set acceptable weight at one of the options suggested in chapter 5C - (the most ambitious): when there is

(i) knowledge of one and only one occurrence, and any number of non-occurrences, of Q with the same person in highly similar circumstances, or (ii) knowledge of one and only one occurrence, and any number of non-occurrences, of Q with a highly similar person in the same circumstances, or (iii) knowledge of two or more occurrences, and any number of non-occurrences, of Q with highly similar persons in highly similar circumstances

The following simplifications are adopted: I assume no opportunity to go on searching after a practical trial. I assume I know what will be producible from any user and any communicator.

The following abbreviations are used: POR = producible on request; PAW = producible at will; NPOR = not producible on request; and NPAW = not producible at will. Y is a particular desired behaviour and Z is a particular behaviour incompatible with Y.

Explanations (typically where the first choice of target or agent has been passed over) are enclosed in

asterisks. They are not repeated when similar cases appear subsequently. Agents are numbered not consecutively but according to the occasion to which they refer, so that they can be easily traced at the end of the exercise. Wherever it has been necessary to refer to formal psychology in assessing future incidence, the reference has been given.

Sections ABC and DEF of the process will be taken together, DEF repeated for each separate desired behaviour.

18A-C INITIAL ASSIGNMENT

IDENTIFY THE PROBLEM: lack of interest

FIND WHETHER THE PROBLEM IS DEFINED AS WIDELY AS COMMISSIONED: Done

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED: No (therefore there may be some scope for prevention of some targets)

IF NOT, DECIDE HOW MUCH TO SEEK PREVENTION OF TARGETS: Only where ready termination is impossible

IDENTIFY THE SUBJECT: the pupils taken by the trainee teachers

IDENTIFY THE RECEIVER: groups of trainee schoolteachers

FIND THE RECEIVER'S ABILITY TO ACCEPT COSTS: Normal

FIND WHETHER THE RECEIVER IS THE SUBJECT OR A PRACTITIONER: a practitioner (called 'teacher' in this chapter). Teacher's behaviour will be sought before pupil's behaviour, agents will include doing teacher's behaviour and asking for pupil's behaviour, new sub-problems will arise when teacher's behaviour is NPAW or pupil's behaviour is NPOR

FIND ONE OR MORE DESIRED BEHAVIOURS IN CERTAIN

CIRCUMSTANCES:

Y1 = following a lesson as instructed and when there is no indiscipline

Y2 = over and above Y1 to engage in some exploratory thinking on the topic of the lesson

Y3 = making an undirected contribution (over and above Y1 and Y2) - for example asking a question, making an unsolicited comment, going to the library to find further reading

DISCUSSION:

you can have signals of detachment but still interest is there - this is OK.

FIND WHETHER THE UNDESIRE HAS ALREADY HAPPENED: no (therefore there may be some scope for prevention of some targets)

IF NOT, DECIDE HOW MUCH TO SEEK PREVENTION OF TARGETS: only where ready termination is impossible

CHECK THAT Ys ARE ABSENT OR LIKELY TO BE ABSENT DESPITE BEING WILLED OR REQUESTED: done

FIND WHETHER Ys ARE EXPECTABLE: yes

18D-F. SEARCHING (1)

Y1 = paying attention when told to do so and when there is no indiscipline

.....
TESTING L+E 1

IS LCE1 INCOMPATIBLE WITH Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

.....
TESTING L+E 2-3

ARE LCEs 2-3 INCOMPATIBLE WITH Y1? No

Hence no occasions

.....
TESTING L+E 4

IS LCE4 INCOMPATIBLE WITH Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate L + high E (X being hilarity)

Hence OCCASION 1: L = moderate (threshold to LCE for reckless approach, and resistance to X)
E = high (nearness to threshold, and incidence of X)

TARGET = E *by the rule of thumb to try changing E first*

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

1A: to look for early signs of hilarity

AGENT 1B: to introduce calmness as soon as signs of hilarity are present

AGENT 1C: not do anything to increase hilarity when there is any sign of its presence

.....
TESTING L+E 5

IS LCE5 INCOMPATIBLE WITH Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate L + high E (where X is the experience of being evaluated)

Hence OCCASION 2: L = moderate (threshold for LCE to worry, and resistance to X)
E = high (nearness to threshold, and incidence of X)

TARGET = to avoid E *E cannot readily be terminated once present*

TEACHER'S BEHAVIOUR: PAW and therefore adopted as an AGENT -

2A = to frame invitations to respond so that they are not seen as tests

.....
TESTING L+E 6

IS LCE 6 INCOMPATIBLE WITH Y1? No

Hence no occasion

.....
TESTING A+E 1

DO THEY REFER TO A COMPONENT OF Y1? No

Hence no occasion

.....
TESTING A+E 2

DO THEY REFER TO A COMPONENT OF Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low A
+ moderate E

Hence OCCASION 3: A = low (degree of energy
possessed)
E = moderate (degree of energy
demanded)

TARGET = to avoid or terminate A (E cannot be
changed)

PUPILS' BEHAVIOUR FOR CHANGE OF A: POR and therefore
see Agent 3C

TEACHER'S BEHAVIOUR: PAW and therefore adopted as
AGENTS -

3A = to look for early signs of depressed energy
(e.g. a suppressed yawn)

3B = to ventilate the room and relieve monotony as
soon as signs are present

3C = to ask pupils for physical movement as soon
as signs are present

.....
TESTING A+E 3

DO THEY REFER TO A COMPONENT OF Y1? No

Hence no occasion

.....
TESTING A+E 4

DO THEY REFER TO A COMPONENT OF Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 4: A = moderate (degree of possession
of ability to decipher)
E = high (degree of demand for
ability to decipher)

TARGET = E (A unchangeable assuming that any
necessary eyeglasses and other aids are being used)

TEACHER'S BEHAVIOUR: PAW and therefore adopted as
AGENTS

4A = to look for noise and check signal strength

4B = to weaken noise and strengthen the signal
where necessary

.....
TESTING A+E 5

DO THEY REFER TO A COMPONENT OF Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 5: A = moderate (degree of possession
of ability to resolve ambiguities)
E = high (degree of demand for
ability to resolve ambiguities)

TARGET = to avoid or terminate E (A not changeable in
the short term)

TEACHER'S BEHAVIOUR: PAW and therefore adopted as
AGENTS -

5A = to look for ambiguities

5B = to remove any ambiguities found

.....TESTING A+E 6

DO THEY REFER TO A COMPONENT OF Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 6: A = moderate (degree of possession
of capacity to attend)
E = high (degree of demand for
capacity for attend)

TARGET = to avoid or terminate E (A not changeable in
the short term)

TEACHER'S BEHAVIOUR: PAW and therefore adopted as
AGENTS -

6A = to monitor the number of different major
themes or points being presented

6B = to reduce it if necessary (by excisions and
shifts to higher levels of generality)

.....
TESTING A+E 7

DO THEY REFER TO A COMPONENT OF Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E ('demand for ability to

concentrate' being manifest as the presence of potential distractions)

Hence OCCASION 7: A = moderate (degree of possession of ability to concentrate)
E = high (degree of demand for ability to concentrate)

TARGET: E (A not changeable in the short term)

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

7A = to look for signs that distractions are imminent

7B = to forestall the distractions or accommodate

.....
TESTING A+E 8

DO THEY REFER TO COMPONENTS OF Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low A (where 'knowledge' is the knowledge required to understand what is presented) + moderate E

Hence OCCASION 8: A = low (degree of possession of the knowledge required to understand what is presented)
E = moderate (degree of knowledge assumed in what is presented)

TARGET 1 = to avoid or terminate E (IF the presentation can be altered enough while still serving its purpose)

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

8A = to check the presentation for any demand for knowledge that is not possessed

8B = to make the presentation in another way

TARGET 2 = to avoid A (IF the presentation cannot be altered enough while still serving its purpose)

PUPILS' BEHAVIOUR FOR CHANGE OF A: POR and therefore see Agent 8D

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

8A = to check the presentation for any demand for knowledge that is not possessed

8C = to provide any knowledge that is essential

for understanding the presentation or abandon the presentation

8D = to ask pupils to acquire this knowledge

.....
TESTING A+E 9

DO THEY REFER TO A COMPONENT OF Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:
moderate A + high E

Hence OCCASION 9: A = moderate (degree of possession
of abilities to solve problems)
E = high (degree of demand for
abilities to solve problems)

TARGET = to avoid or terminate E (A cannot be changed
in the short term)

TEACHER'S BEHAVIOUR: PAW and therefore adopted as
AGENTS -

9A = to check the presentation for any demand for
abilities to solve problems that the pupils may
not possess

9B = to alter the presentation so that it calls
only for problem-solving abilities that the
pupils possess

.....
TESTING A+E 10

DO THEY REFER TO A COMPONENT OF Y1? No

Hence no occasion

.....
TESTING A+E 11-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
(that Y1 is considered is assumed in the brief)

Hence no occasion

.....
TESTING AV+B+C+E 1

IS THERE A REASONABLE B INVOLVING AV1 AND Y1?
Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV
+ moderate B + moderate C + high E

Hence OCCASION 10: AV = high (degree of aversion to
monotony)

B = moderate (strength of connection believed to exist between monotony and Y1)
C = moderate (degree to which salience of B follows the prospect of a task)
E = high (degree to which a task is in prospect)

TARGET = to avoid B (to terminate B is likely to be difficult; E is unchangeable, AV and C are not changeable in the short term)

PUPILS' BEHAVIOUR FOR AVOIDANCE OF B: POR and therefore see Agent 10B

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

10A = to give what will be recognized as signals that the lesson will not be monotonous

10B = to ask (not necessarily literally) the pupils to recognize these signals

.....
TESTING AV+B+C+E 2-11

ARE THERE REASONABLE Bs INVOLVING AVs 2-11 AND Y1? No

Hence no occasions

.....
TESTING AV+B+C+E 12

ARE THERE REASONABLE BS INVOLVING AV12 AND Y1? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV + moderate B + moderate C + high E

Hence OCCASION 11: AV = high (degree of aversion to low cost-effectiveness)
B = moderate (strength of connection believed to exist between Y1 and making an undue effort)
C = moderate (degree to which salience of B follows the prospect of a task)
E = high (degree to which a task is in prospect)

TARGET = to avoid B (to terminate B is likely to be difficult; E is unchangeable, AV and C are not changeable in the short term)

PUPILS' BEHAVIOUR FOR AVOIDANCE OF B: POR and therefore see Agent 11B

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

11A = to give the information that Y1 will have effects valued by the pupils at costs regarded by them as not very high

11B = to ask the pupils to acquire this information

.....
TESTING AV+B+C+E 13-20 AND AV+C+E 21

ARE THERE REASONABLE Bs INVOLVING AVs 13-21 AND Y1?
No

Hence no occasions

.....
TESTING ATT+B+C+E 1-20 AND ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y1 AND BEEN INVOLVED WITH ATTs 1-21 IN REASONABLE Bs? No

Hence no occasions

18D-F. SEARCHING (2)

Y2 = pupil to engage in exploratory thinking on the theme

.....
TESTING L+E 1-6

ARE THE LCEs INCOMPATIBLE WITH Y2? No

Hence no occasions

.....
TESTING A+E 1-10

DO THEY REFER TO COMPONENTS OF Y2? No

Hence no occasions

.....
TESTING A+E 11-12

DO THEY REFER TO COMPONENTS OF CONSIDERING Y2? No

Hence no occasions

.....
TESTING A+E 13

DO THEY REFER TO COMPONENTS OF CONSIDERING Y2? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: low A + high E

Hence OCCASION 12: A = low (degree of possession of the knowledge that exploratory thinking is an option)
E = high (degree of demand for the knowledge that exploratory thinking is an option)

TARGET = to avoid A

PUPIL'S BEHAVIOUR FOR CHANGE OF A: POR and therefore see Agent 12B

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

12A = to provide the information that exploratory thinking is an option

12B = to ask the pupils to acquire this information

.....TESTING A+E 14-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y2? Yes
POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
Hence no occasions

.....
TESTING AV+B+C+E 1-8

ARE THERE REASONABLE Bs INVOLVING AVs1-8 AND Y2? No
Hence no occasions

.....
TESTING AV+B+C+E 9

IS THERE A REASONABLE B INVOLVING AV9 AND Y2? Yes
POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV + high B + high C + high E

Hence OCCASION 13: AV = high (degree of aversion to
that which clashes with a desired
self-concept)
B = high (degree of connection
believed to exist between Y2 and
the object of aversion)
C = high (degree to which salience
of B follows a situation in which
one is observed)
E = high (degree to which one is
observed)

TARGET = to avoid B

PUPILS' BEHAVIOUR FOR CHANGE OF B: POR and therefore
see Agent 13B

TEACHER'S BEHAVIOUR: PAW and therefore adopted as
AGENTS -

13A = to portray exploratory thinking as what
seems cool to the pupils

13B = to ask the pupils to accept this

.....
TESTING AV+B+C+E 10

IS THERE A REASONABLE B INVOLVING AV10 AND Y2? No
Hence no occasion

.....
TESTING AV+B+C+E 11

IS THERE A REASONABLE B INVOLVING AV11 AND Y2? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV + high B + moderate C + high E

Hence OCCASION 14: AV = high (aversion to agreeing with someone who has a low opinion of one)
B = high (degree of connection believed to exist between Y2 and the object of aversion)
C = moderate (degree to which salience of B follows the prospect of any work for a teacher)
E = high (degree to which work for a teacher is in prospect)

TARGET - to avoid B

PUPILS' BEHAVIOUR FOR AVOIDANCE OF B: POR and therefore see Agent 14B

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

14A = to give what will be seen as signals of uncontentiousness

14B = to ask the pupils to recognize the signs

.....TESTING AV+B+C+E
12-20 AND AV+C+E 21

ARE THERE REASONABLE Bs INVOLVING AVs 12-21 AND Y2?
No

Hence no occasions

.....
TESTING ATT+B+C+E 1-20 AND ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS WELL AS Y2 AND BEEN INVOLVED WITH ATTs 1-21 IN REASONABLE Bs? No

Hence no occasions

18D-F. SEARCHING (3)

Y3 = making undirected contributions (over and above Y1)

.....
TESTING L+E 1

IS LCE1 INCOMPATIBLE WITH Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

.....
TESTING L+E 2-4

ARE LCEs 2-4 INCOMPATIBLE WITH Y3? No

Hence no occasions

.....
TESTING L+E 5

IS LCE5 INCOMPATIBLE WITH Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
if the foregoing measures have been taken

.....
TESTING L+E 6

IS LCE 6 INCOMPATIBLE WITH Y3? No

Hence no occasion

.....
TESTING A+E 1

DO THEY REFER TO A COMPONENT OF Y3? No

Hence no occasion

.....
TESTING A+E 2

DO THEY REFER TO A COMPONENT OF Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
if the foregoing measures have been taken

.....
TESTING A+E 3-5

DO THEY REFER TO COMPONENTS OF Y3? No

Hence no occasion

.....
TESTING A+E 6-7

DO THEY REFER TO A COMPONENT OF Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

.....
TESTING A+E 8

DO THEY REFER TO A COMPONENT OF Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:

moderate A (where 'knowledge' is the knowledge of how to make undirected contributions) + high E

Hence OCCASION 15: A = moderate (degree of possession of knowledge of how to make undirected contributions)
E = high (demand of knowledge of how to make undirected contributions)

TARGET = to avoid or terminate A

PUPILS' BEHAVIOUR FOR CHANGE OF A: POR and therefore see Agent 15B

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

15A = to present information on how undirected contributions might be made

15B = to ask the pupils to acquire this information

.....TESTING A+E 9-10

DO THEY REFER TO COMPONENTS OF Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

.....
TESTING A+E 11-12

DO THEY REFER TO COMPONENTS OF CONSIDERING Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

.....
TESTING A+E 13

DO THEY REFER TO A COMPONENT OF Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING:

Hence OCCASION 16: A = low (degree of possession of knowledge that it is open to one to make undirected contributions)
E = high (demand for knowledge that it is open to one to make undirected contributions)

TARGET = to avoid or terminate A

PUPILS' BEHAVIOUR FOR CHANGE OF A: POR and therefore see Agent 16B

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

16A = to present the information that it is open to pupils to make undirected contributions

16B = to ask the pupils to acquire this information

.....
TESTING A+E 14-15

DO THEY REFER TO COMPONENTS OF CONSIDERING Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none

.....
TESTING AV+B+C+E 1-2

IS THERE A REASONABLE B INVOLVING AVs1-2 AND Y3?
Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
if the foregoing measures have been taken

.....
TESTING AV+B+C+E 3

IS THERE A REASONABLE B INVOLVING Y3 AND AV3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high
AV (where 'disaffiliation' is from classmates) +
moderate B + moderate C + high E

Hence OCCASION 17: AV = high (degree of aversion to disaffiliation from classmates)
B = moderate (strength of connection believed to exist between Y3 and disaffiliation from classmates - because it breaks a norm against being too cooperative with the teacher)
C = moderate (degree to which salience of B follows the prospect of action in the presence of a reference group)
E = high (degree to which action is in prospect and a reference group is present)

TARGET = to avoid B (to terminate B is probably too difficult; to change E is impossible; to change AV and C is impossible in the short term)

PUPILS' BEHAVIOUR FOR AVOIDANCE OF B: POR and therefore see Agent 17B

TEACHER'S BEHAVIOUR: PAW and therefore adopted as AGENTS -

17A = to portray the making of undirected contributions as not being too cooperative with the teacher

17B = to ask the pupils to accept this portrayal

..... TESTING AV+B+C+E
4-8

ARE THERE REASONABLE Bs INVOLVING AVs 4-8 AND Y3? No

Hence no occasions

.....
TESTING AV+B+C+E 9

IS THERE A REASONABLE B INVOLVING AV9 AND Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: high AV + moderate B + moderate C + high E

Hence OCCASION 18: AV = high (degree of aversion to what clashed with a desired self-concept)
B = moderate (strength of connection believed to exist between Y3 and doing what is incongruous with a desired self-concept - because it is seen as ingratiating)
C = moderate (degree to which salience of B follows the prospect of action)
E = high (degree to which action is in prospect)

TARGET = to avoid B ((to terminate B is probably too difficult; to change E is impossible; to change AV and C is impossible in the short term)

PUPILS' BEHAVIOUR FOR AVOIDANCE OF B: POR and therefore see Agent 18B

TEACHER'S BEHAVIOUR: PAWand therefore adopted as AGENTS -

18A = to portray the making of undirected contributions as not ingratiating

18B = to ask the pupils to accept this portrayal

..... TESTING AV+B+C+E
10

IS THERE A REASONABLE B INVOLVING AV10 AND Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING

Hence OCCASION 19: AV = high
(degree of aversion to failure)
B = moderate (strength of
connection believed to exist
between Y3 and failure)
C = moderate (degree to which
salience of B follows the prospect
of evaluated action)
E = high (degree to which evaluated
action is in prospect)

TARGET = to avoid or terminate E

TEACHER'S BEHAVIOUR: PAW and therefore adopted as
AGENTS -

19A = to avoid explicit evaluations on the occasion
in question

19B = to try to arrange things so that the pupil
succeeds in her own estimation

19C = where failures occur to say things to avoid
the interpretation of inability

.....TESTING AV+B+C+E
11

IS THERE A REASONABLE B INVOLVING AV11 AND Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
if the foregoing measures have been taken

.....
TESTING AV+B+C+E 12

IS THERE A REASONABLE B INVOLVING AV12 AND Y3? No

Hence no occasion

.....
TESTING AV+B+C+E 13

IS THERE A REASONABLE B INVOLVING AV13 AND Y3? Yes

POSSIBILITIES OF OCCURRENCE WORTH CONSIDERING: none
if the foregoing measures have been taken

.....
TESTING AV+B+C+E 14-20 AND AV+C+E 21

ARE THERE REASONABLE Bs INVOLVING AVs 14-21 AND Y3?
No

Hence no occasions

.....
TESTING ATT+B+C+E 1-20 AND ATT+C+E 21

IS THERE ANY Z THAT COULD HAVE BEEN ATTENDED TO AS
WELL AS Y3 AND BEEN INVOLVED WITH ATTs 1-21 IN
REASONABLE Bs? No

Hence no occasions

18G. RELATING THE ADOPTED AGENTS TO EACH OTHER

This section will list all the agents derived from the foregoing and assess the consistency between them.

18G.1 LIST OF AGENTS

PS51 = to look for early signs of hilarity (1A)

PS52 = to introduce calmness as soon as signs of hilarity are present (1B)

PS53 = not do anything to increase hilarity when there is any sign of its presence (1C)

PS54 = to frame invitations to respond so that they are not seen as tests (2A)

PS55 = to look for early signs of depressed energy (e.g. a suppressed yawn) (3A)

PS56 = to ventilate the room and relieve monotony as soon as signs are present (3B)

PS57 = to ask the pupils for physical movement as soon as signs are present (3C)

PS58 = to look for noise and check signal strength (4A)

PS59 = to weaken noise and strengthen the signal where necessary (4B)

PS60 = to look for ambiguities (5A)

PS61 = to remove any ambiguities found (5B)

PS62 = to monitor the number of different major themes or points being presented (6A)

PS63 = to reduce it if necessary (by excisions and shifts to higher levels of generality) (6B)

PS64 = to look for signs that distractions are imminent (7A)

PS65 = to forestall the distractions or accommodate them (7B)

PS66 = to check the presentation for any demand for knowledge that is not possessed (8A)

PS67 = to make the presentation in another way (8B)

PS68 = to provide any knowledge that is essential for understanding the presentation or to abandon the presentation (8C)

PS69 = to ask the pupils to acquire this knowledge (8D)

PS70 = to check the presentation for any demand for abilities to solve problems that the pupils may not possess (9A)

PS71 = to alter the presentation so that it calls only for problem-solving abilities that the pupils possess (9B)

PS72 = to give what will be recognized as signals that the lesson will not be monotonous (10A)

PS73 = to ask (not necessarily literally) pupils to recognize the signs (10B)

PS74 = to give the information that Y1 will have effects valued by the pupils at costs regarded by them as not very high (11A)

PS75 = to ask the pupils to acquire the information (11B)

PS76 = to provide the information that exploratory thinking is an option (12A)

PS77 = to ask the pupils to acquire the information (12B)

PS78 = to portray exploratory thinking as what seems cool to the pupils (13A)

PS79 = to ask the pupils to accept the portrayal (13B)

PS80 = to give what will be seen as signals of uncontentiousness (14A)

PS81 = to ask the pupils to recognize the signs (14B)

PS82 = to present information on how undirected contributions might be made (15A)

PS83 = to ask the pupils to acquire the information (15B)

PS84 = to present the information that it is open to pupils to make undirected contributions (16A)

PS85 = to ask the pupils to acquire the information (16B)

PS86 = to portray the making of undirected contributions as not being too cooperative with the teacher (17A)

PS87 = to ask the pupils to accept the portrayal (17B)

PS88 = to portray the making of undirected contributions as not ingratiating (18A)

PS89 = to ask the pupils to accept the portrayal (18B)

PS90 = to avoid explicit evaluations on the occasions in question (19A)

PS91 = to try to arrange things so that the pupil succeeds in her own estimation (19B)

PS92 = where failures occur to say things to avoid the interpretation of inability (19C)

18G.2 CONSISTENCY OF THE LIST

A number of agents are to ask the pupils to acquire information (different in each case) or to accept portrayals (different in each case) or to recognize signs (different in each case).

Otherwise there are no identical agents, and all are mutually independent.

18H. COMMENTARY

No sub-problems were identified here, reflecting the greater number of pupil behaviours that were regarded as producible on request, and the shorter time-scale of this problem compared to indiscipline - indiscipline harks back to previous occasions more than does lack of interest. Nevertheless 42 agents were adopted. If one had simply used free association to go from 'lack of interest' to 'not paying attention' to research in psychology into 'attention', one would have missed some important agents.

CHAPTER NINETEEN

METHODS OF COMPARISON

This chapter discusses some methodic points in preparation for subsequent chapters, in which comparisons are going to be made among psychological accounts, novices accounts, experts accounts and the accounts of other appliers.

The sections cover (A) factors in the psychological standard (PS) account of lack of discipline rendered into generally comparable form, (B) factors in the PS account of lack of interest rendered into generally comparable form, (C) faults in lesson plans implied by the PS account, (D) manifestations of the foregoing in novices' writing, and (E) categorizing factors in novices' speech, and (F) comparing accounts from different sources.

19A. FACTORS IN THE PSYCHOLOGICAL STANDARD (PS)
ACCOUNT OF LACK OF DISCIPLINE

The list of occasions or of agents of change in chapter 17 would not be satisfactory for the purposes of subsequent chapters because nothing in the same form is likely to be found anywhere else.

To allow comparisons I have extracted from the account of lack of discipline in chapter 17 factors which combine the agent recommended and the crucial element in each relevant and weighty occasion of the absence of the desired behaviour, together with the targetted element from the occasion.

I have continued with one bit of collapsing required for the purposes of communication - i.e. agents 3, 12, and 16 merged.

The result is this list of factors representing the psychological standard (PS). The numbers at the end of each give the numbering as it was in chapter 17.

PS01 use monotony against stimulation to aggressiveness (1)

PS02 use monotony against stimulation to recklessness (2)

PS03 communicate better when instructions are beyond pupils' ken or ability to decipher or memorize (3, 12, 16)

PS04 forestall distraction when enough is threatened to make pupils unable to concentrate on instructions (15)

PS05 move to another school against being present where one is confirmed in pupils' eyes as an ineffective detector (6)

PS06 move to another school against being present where one is confirmed in pupils' eyes as a ridiculous responder to rule-breaking (7)

PS07 add interest to rule-following when rule-breaking is very interesting (8)

PS08 add interest to rule-following when it is very uninteresting (17)

PS09 move to another school against being present where one is confirmed in pupils' eyes as raggable (9)

PS10 move to another school against being present where one is confirmed in pupils' eyes as one whom pupils can gain kudos with their peers by defying (10)

PS11 procure clarity when rules have more ambiguity than the pupils can resolve (13)

PS12 produce brevity when there are more rules than the pupils can attend to (14)

PS13 convey respect against stimulation to reciprocal antipathy (18)

PS14 arrange easy tasks against assessment of one's effectiveness as a detector (19)

PS15 plan reduction of confusion against assessment of one's effectiveness as a detector (19)

PS16 use calmness against assessment of one's ridiculousness in responding to rule-breaking (20)

PS17 use appearance vis-s-vis other teachers against assessment of one's raggability defiability and ability to detect (21)

PS18 convey non-greenness against assessment of one's raggability defiability and ability to detect (21)

19B. FACTORS IN THE PS ACCOUNT OF LACK OF INTEREST

A similar exercise to that described in section 19A yields this list of factors from the psychological standard (PS) in accounts of lack of interest.

PS51 = to look for early signs of hilarity (1A)

PS52 = to introduce calmness as soon as signs of hilarity are present (1B)

PS53 = not do anything to increase hilarity when there is any sign of its presence (1C)

PS54 = to frame invitations to respond so that they are not seen as tests (2A)

PS55 = to look for early signs of depressed energy (e.g. a suppressed yawn) (3A)

PS56 = to ventilate the room and relieve monotony as soon as signs are present (3B)

PS57 = to ask the pupils for physical movement as soon as signs are present (3C)

PS58 = to look for noise and check signal strength (4A)

PS59 = to weaken noise and strengthen the signal where necessary (4B)

PS60 = to look for ambiguities (5A)

PS61 = to remove any ambiguities found (5B)

PS62 = to monitor the number of different major themes or points being presented (6A)

PS63 = to reduce it if necessary (by excisions and shifts to higher levels of generality) (6B)

PS64 = to look for signs that distractions are imminent (7A)

PS65 = to forestall the distractions or accommodate them (7B)

PS66 = to check the presentation for any demand for knowledge that is not possessed (8A)

PS67 = to make the presentation in another way (8B)

PS68 = to provide any knowledge that is essential for understanding the presentation or to abandon the presentation (8C)

PS69 = to ask the pupils to acquire this knowledge (8D)

PS70 = to check the presentation for any demand for abilities to solve problems that the pupils may not possess (9A)

PS71 = to alter the presentation so that it calls only for problem-solving abilities that the pupils possess (9B)

PS72 = to give what will be recognized as signals that the lesson will not be monotonous (10A)

PS73 = to ask (not necessarily literally) pupils to recognize the signs (10B)

PS74 = to give the information that Y1 will have effects valued by the pupils at costs regarded by them as not very high (11A)

PS75 = to ask the pupils to acquire the information (11B)

PS76 = to provide the information that exploratory thinking is an option (12A)

PS77 = to ask the pupils to acquire the information (12B)

PS78 = to portray exploratory thinking as what seems cool to the pupils (13A)

PS79 = to ask the pupils to accept the portrayal (13B)

PS80 = to give what will be seen as signals of uncontentiousness (14A)

PS81 = to ask the pupils to recognize the signs (14B)

PS82 = to present information on how undirected contributions might be made (15A)

PS83 = to ask the pupils to acquire the information (15B)

PS84 = to present the information that it is open to pupils to make undirected contributions (16A)

PS85 = to ask the pupils to acquire the information

(16B)

PS86 = to portray the making of undirected contributions as not being too cooperative with the teacher (17A)

PS87 = to ask the pupils to accept the portrayal (17B)

PS88 = to portray the making of undirected contributions as not ingratiating (18A)

PS89 = to ask the pupils to accept the portrayal (18B)

PS90 = to avoid explicit evaluations on the occasions in question (19A)

PS91 = to try to arrange things so that the pupil succeeds in her own estimation (19B)

PS92 = where failures occur to say things to avoid the interpretation of inability (19C)

19C. CHARACTERISTICS OF LESSON PLANS DERIVABLE FROM
THE PSYCHOLOGICAL STANDARD ACCOUNT OF LACK OF
INTEREST

The only agents relevant to lesson plans are as follows (with the numbers they were given in section 19C). Each is expressed in terms of the 'fault' that might be seen in a lesson plan.

PSF1 - including too many major points or themes AND no recognition of the danger of this - PS62, PS63

PSF2 - including no striking departure from monotony AND no recognition of the danger of monotony - PS72

PSF3 - including no attempt to discover existing knowledge or problem-solving ability AND no recognition of the danger of this omission - PS66, PS70

PSF4 - including no attempt to alter a presentation to take account of existing knowledge or problem-solving ability AND no recognition of the

danger of this omission - PS67

I do not wish to argue that these characteristics would be undesirable in every conceivable lesson. I suggest only that they are undesirable in many lessons. And I do not say that lessons without these faults are perfect.

19D. MANIFESTATIONS OF THE FOREGOING CHARACTERISTICS IN NOVICES' WRITING

What should be regarded as too many major points or themes (PSF1)? I suggest more than two themes or more than four major points (remembering that it was a half-hour lesson for Primary school children being planned). One might have paused in applying this rule if there had been examples of very closely related points: but none in fact appeared in the lesson plans analysed.

What should be regarded as a striking departure from monotony (PSF2)? I suggest any use of the unusual or fantastic, any use of incongruity. (An analyst does not know for sure what would be unusual for particular pupils but the planner did not know that either: the analysis looked for what the planner might reasonably have expected to be unusual for the pupils.)

What should be regarded as recognition of the various dangers? I suggest any explicit reference to the undesirable effect, the dangerous practice thing or its opposite.

19E. CATEGORIZING FACTORS IN NOVICES' SPEECH

Categories of factor in the speech of respondents will be formed in the following way.

(a) Factors expressed in identical terms will be categorized together - there is little alternative.

(b) The largest of these categories will be taken as a rough guide to the size to be sought in other categories.

(c) To the extent required to conform to (b), where one term subsumes another, the less often mentioned will be assimilated to the more often mentioned.

19F. COMPARING ACCOUNTS FROM DIFFERENT SOURCES

In what follows the criteria of similarity and of contradiction will be easy to meet: a factor is

regarded as covered if either agent or antecedent is mentioned or part of the antecedent or agent is mentioned or seems to have been intended. For example an application may be credited with recognition of a point that for PS involves moving school even if the application does not go the whole hog with PS in recommending a move of school.

CHAPTER TWENTY

COMPLICATIONS IN THE ANALYSIS OF SPEECH

There are many complications in the analysis of speech that have not been the particular concern of many other users of content analysis. The focus here is not on the structure of content (Collins & Quillian, 1969). And it is in a sense half way between the twin approaches of focussing on the text and focussing on the mind of the provider of the content (Berelson, 1952).

The task is to identify what the respondents regarded and had saliently in mind as possible antecedents of indiscipline.

I should like to be able to steer a course between the unrigorous and the very elaborate.

20A. THE TOPIC

'INDISCIPLINE': anything said in answer to the questions asked should be regarded as concerning indiscipline unless it is clearly meant to be otherwise. Antecedents of the non-psychical would be out, for example, as would antecedents concerning the psyche of the respondent. If a respondent said I BELIEVE P BECAUSE I BELIEVE Q, P and Q were recorded as beliefs but not the reason why Q was believed (which is about the respondent's psyche not indiscipline.) If respondents spoke in terms of the positive discipline rather than indiscipline, it makes no difference except that some care may be needed in marshalling the antecedents for comparison purposes.

Any that have clearly no relation in themselves or in their antecedents to indiscipline should be rejected.

20B. ANTECEDENTS

'ANTECEDENTS': anything going before - (which implies consequents, what comes after.) Any kind of going before includes antecedents of antecedents.

The procedure in outline should be (a) to find consequents not themselves antecedents of something else, (b) to look for antecedents of those, and (c) to look for any antecedents of the antecedents.

And statements cannot simply mean explicit statements following grammatical conventions: it has to mean any antecedent-consequent relation conveyed.

These might be conveyed in any kind of utterance: representative speech acts, rhetorical, exclamations, commands and questions, whether rhetorical or not.

How to find the main point? This will usually be emphasized. The emphasis may be apparent on the printed page - from word order or from a construction. Perhaps two things are juxtaposed as in 'I ASKED HIM TO BRING HIS HOMEWORK AT ELEVEN O'CLOCK AND HE BROUGHT IT AT TWELVE'. Failing that one may have to listen to the voice to assess emphasis.

These points seem to suggest a free for all. But there are some regularities.

Consequents are usually the predicates or part of the predicates of sentences in active grammatical mood with human subjects or passive with human agents.

Hence the search can begin with verbs, as these show where the predicates are. All verbs should be sought, finite and non-finite (i.e. gerunds, infinitives, and participles). In A GIRL SHOUTED the consequent concerns 'shout'; for THE SHOUTING WAS DONE BY A GIRL the consequent concerns 'girl'.

Consequents appear in adjectival clauses, but only in non_defining adjectival clauses. For THE SHOUTING WAS DONE BY A GIRL WHO WAS MALADJUSTED 'maladjusted girl' should be recorded. For THE SHOUTING WAS DONE BY A GIRL, WHO WAS MALADJUSTED' (where the comma or a pause indicated a non-defining adjectival), 'girl' should be recorded (and 'maladjusted' is another consequent.) Consequents also appear in noun clauses, as in I SAW THAT THE GIRL WAS SHOUTING.

Antecedents are found not only in strong statements of cause, like SHOUTING WAS CAUSED BY THE ARRIVAL OF THE TELEVISION CREW. Since all possible antecedents may be of interest, the foregoing statement may be of no less interest with WAS replaced by CAN BE, COULD BE, MAY BE, MIGHT BE, MAY HAVE BEEN, MIGHT HAVE BEEN, POSSIBLY IS, WILL BE, or SOMETIMES IS. The strong word cause might be replaced by 'influence' or some other equivalent. Grammatical tense is immaterial.

Antecedents are sometimes expressed in adverbials:

adverbs, other parts of speech used for adverbial purposes, adverbial phrases, adverbial clauses, and nominative absolute constructions.

The following adverbial clauses usually indicate antecedent conditions: clauses introduced by 'if', 'whenever', 'so long as', or 'provided that'; clauses introduced by 'if and only if'; clauses introduced by 'unless', and clauses introduced by 'because', 'since', or 'due to' (colloquially used).

Adverbials of concession succeeded by 'yet', or 'but' or preceded by 'while', 'whereas' (in its common rather than legal sense) or 'though' might indicate antecedent possibilities (even if they also implied that the possibility was remote.)

Adverbials of purpose introduced by 'so that' 'to', 'lest', 'in order that', and so on usually indicate an antecedent intention.

Adverbials of place and time are difficult. (1) They may state conditions as in 'they did it only on Fridays', or 'they did it every Friday'. They may state occasions, as in 'they did it last Friday'. In these cases they give antecedents. (2) They may state an insufficient condition, as in 'sometimes on Fridays they do it'. This indicates that a possibility is being talked about, and might imply

that there is another possibility or possibilities unnamed. (3) They may be irrelevant to antecedents and consequents, as in 'one day last week he got frustrated and threw the cat out of the window'.

Antecedents are found not only in simple sentences, and not only in adverbials. Antecedents appear in compound sentences, like 'say one thing and they do another'.

200. SALIENCE AND NUMBER OF MENTIONS

Salience is defined as mentioned once or more times because it is impossible to claim that degrees of salience are related to number of mentions.

Something may be repeated as a way of emphasizing it, that is of making sure that the listener has heard it or has understood it. The speaker may think the listener will be surprised by the information or might be so much expecting something else that the point will not get across without emphasis. This emphasis is just the speaker's way of adjusting to the listener, to make sure the point gets across. It does not mean the point is especially salient for the speaker. Therefore this kind of repetition should be treated as one emphatic statement. Sentences may be repeated absent-mindedly to give speakers time to

compose the next things they are going to say. This kind of repetition should be ignored.

20D. QUASI-REPETITION

By the definition of salience already decided, repetition is irrelevant. But what about quasi-repetition that is not quite repetition?

Particular antecedents may well be cited repeatedly but in connection with different consequents, and particular consequents may be cited repeatedly but in connection with different antecedents. That is not the repetition of a complete antecedent-consequent relation, and therefore should be treated as not a repetition.

Synonyms and saying the same thing in a different way should be regarded as not repetition.

What about revision, correction, self-contradiction (as indicated by phrases such as 'or rather')? The choice here is whether one is interested in the first things that come to people's minds or in what people think when they have had some time to mull over. First thoughts should be ignored when they are contradicted by second thoughts - on the grounds that

it is the second thoughts that are the more likely to influence behaviour in the circumstances studied here.

Examples not adding anything to the earlier statement should be ignored.

When there is a coarser and a finer version of a statement, the finer should be recorded except where the coarser is given as a revision of the finer.

ZOE. IMPLICATIONS AND ENTAILMENTS

Ordinary language is full of implications and entailments. The sentence 'the girl with the inferiority complex made three attempts to get my attention' contains much information. The main point is that the number of attempts was three; but the sentence also contains the information that the pupil was female, that she had an inferiority complex, and that she attempted to gain the teacher's attention. One could go further back and say that the sentence includes the information that at least one girl was in the class, that the teacher ignored two attempts to gain attention, and so on. How much of this information can be said to be salient for the speaker?

The policy adopted is to record as salient only the 'background entailment' of the main point, using the notion of ordered entailments (Wilson & Sperber, 1979). In the example above the main point is that the number of attempts was three. The background entailment of this is that some attempts to gain attention were made. None of the other information in the sentence need be regarded as salient, though it may well have been salient in a previous sentence, under the same rule that excluded it in the present sentence.

20F. AMBIGUITY

Words, phrases, and sentences can often have more than one possible meaning. But this does not present a great problem.

Some ambiguities disappear when the context is taken into account. A homonym like 'bear' is ambiguous taken on its own; but in the phrase 'bitten by a bear' there is no ambiguity. 'They were climbing the walls' is an ambiguous phrase but only in a conversation that might equally well cover a children's party and an assault on a castle. In most conversations in which one of these events is likely

to be referred to, the other is most unlikely to be referred to.

Judging that the speaker is following Grice's maxim 'be relevant' makes more apparent ambiguities disappear. Similarly with the 'maxims of quantity' - to offer as much information as necessary for the listener to understand what is intended and to refrain from giving what might be too much information. This means that clarification will be offered if the speaker, as is quite likely, realizes that there is a danger of misunderstanding (and is cooperating with the listener). Suppose someone says 'Boys like talking more than girls. Perhaps they think going with girls is boring.' The second sentence reveals that the first sentence meant 'boys like talking less than they like girls' rather than 'boys like talking less than girls like talking'. If there had been no second sentence in the quotation about boys and girls mentioned previously, it would be almost completely safe to take it that the intended comparison was between boys and girls, not between talking and girls. The second comparison is unusual, even humorous in its unexpectedness; and few speakers would fail to draw attention to this. Most speakers would recognise the danger of being misunderstood if they meant to compare talking to girls; and the speech would be elaborated accordingly. In the absence of elaboration the more

expected meaning should be taken.

20G. NEGATIVE STATEMENTS

Statements that something was NOT an antecedent should be ignored. But sometimes an apparently negative statement implies that while something did not happen on one occasion it might well have happened. For example: 'FOR ONCE IT WASNT THE WEATHER THAT CAUSED THE TROUBLE'. From this it should be recorded that the speaker believes that weather causes trouble.

20H. LITERAL NONSENSE

It cannot be assumed that speakers will adhere to any one set of conventions. On occasion they may follow their own grammatical rules, or may make up a new word or phrase. Statements are often made elliptically, especially in speech, and one can get a fragment of a sentence, which does not make sense on its own. Another kind of nonsense is when the speaker departs from the conventions of any grammar and says something which if the rules of grammar were strictly applied would be nonsense. An example of

this would be some irregular uses of relative pronouns. And there may be slips of the tongue, though most of these will probably be corrected.

Again one relies on the assumptions that the speaker intends to be understood and believes the listener to be cooperating. If the listener understood what the speaker intended, and the conversation went on smoothly, what should be recorded is the understanding that speaker and listener obviously reached. If the listener did not understand or understood wrongly (as would probably have become apparent), the speaker should offer or the listener request clarification; and this should give all the information needed. (It will be possible to consult the listener later, if necessary).

All danger of the recorder's misunderstanding cannot be removed but the danger is small if the right circumstances are created.

201. UNPSYCHOLOGICAL LANGUAGE

In everyday language people use terms that psychologists do not use. It may be possible to regard some of these terms as synonymous with psychological terms. Analysts do not always need to

be able to say that two terms mean exactly the same: it depends on the fineness of the distinctions that are to be drawn. Often everyday terms, even if it is not certain that they mean exactly the same as psychological terms can be classified along with the psychological terms. For example THEY FELT THAT... could be classed with THEY THOUGHT THAT..

Figures of speech are used in ordinary language. For example the metaphor SWINGING FROM THE LIGHTS and RAISING THE ROOF were among the descriptions obtained of indiscipline, and TAME was given as a characteristic of lesson material. These are not difficult to categorize.

But in some cases the everyday terms may encompass more than one psychological category. Examples of these are TOUGH, and HOT AND BOTHERED. Perhaps it is best to regard these as terms describing clusters of characteristics, TOUGH meaning (when the psyche is being talked about) not becoming anxious, depressed or aggressive under conditions in which many people would, and HOT AND BOTHERED meaning energy and frustration tolerance nearly exhausted.

20J. SUBTLETIES

In everyday language some distinctions that an analyst is interested in may be made very unobtrusively. The question arises whether they are so unobtrusive as to be unintentional distinctions.

Examples are TRY TO, WANT TO, DECIDE TO, and BE WILLING TO. These should be treated as different.

Examples are THE LESSON WAS DIFFICULT, where the difficulty is described as a circumstance that the teacher might have no control over, I MADE THE LESSON DIFFICULT, where the teacher's responsibility and ability to make alterations are acknowledged, and THE LESSON WAS DIFFICULT FOR THEM, where the ability of the pupils is the focus. These distinctions would matter if an analyst wanted to ask how much teachers blamed pupils rather than themselves for lesson failures.

It is easy to distinguish THEY WERE PREOCCUPIED from THEY WERE DISTRACTED. The result is the same but the latter description blames circumstances, the former does not.

THE LESSON WAS WELL PREPARED says nothing about its success or failure; but success is implied in the similar but crucially different THE LESSON WAS WELL DESIGNED.

THE CHILDREN WERE DIFFICULT FOR ME TO CONTROL says something about the teacher's ability; but this is not implied in THE CHILDREN WERE DIFFICULT TO CONTROL. Here it is implied that any ordinary teacher would have difficulty. In the first description it is implied that the speaker's ability is less than what speaker and listener know to be the ability of any ordinary teacher.

These distinctions are clear when pointed out; but people who relate psychological language to ordinary language must be careful. Is what psychologists mean by LEARNING the same as FINDING OUT, or the same as WORKING OUT?

20K. VAGUENESS

In ordinary speech some statements of antecedents are not as informative as statements in psychology usually are. For example a variable may be mentioned without saying what variants make what difference, as in IT IS THE ATTENTION THEY GET FROM THEIR PARENTS. Or it may be said only that IT WAS SOMETHING TO DO WITH THE FAMILY, IT WAS MY FAULT, HE INTERVENED. But at least this allows the analyst to answer some questions. Even if all a speaker says is THERE WERE VARIOUS REASONS the analyst may be interested if she

or he is looking at whether more than one antecedent was thought about for some consequent.

Of course some of these statements may not be so vague when taken in context. Maybe there are only two possible variants and one is obviously (to speaker and listener) not meant.

ZOL. COMMENTARY

There are more column inches for the methods than the results. But even the simple approach that this aimed to be had to take account of a number of complications.

CHAPTER TWENTY-ONE

THE PRODUCTS OF NON-STANDARD APPLICATIONS TO THE SALIENT PROBLEMS

This chapter considers applications of knowledge to practice that depart from the standard proposed in chapter 8. Three such applications will be considered: (A) a shower of studies such as a practitioner might collect in a determined search to find research relevant to the problem of lack of discipline, (B) a one-paradigm psychological application to the problem of lack of discipline, and (C) the application to the problem of lack of interest of an eclectic psychology but not following the standard process proposed in chapter 8. The applications are considered in terms of their departures from the psychological standard process, using the methods envisaged in chapter 10. The choice of particular examples was discussed in

chapter 15.

The approaches indicated in chapter 19 are adopted.

In the lists that follow PS factors - identified in chapter 20 - are compared with factors mentioned by the non-standard applications, and some of these factors are given FR or OP numbers for ease of referral by later chapters.

21A. APPLYING A SHOWER OF FINDINGS OF FIELD RESEARCH (FR)

The shower of studies found numbers 27. All the studies are concerned with lack of discipline (inter alia in some cases). They include surveys of pupils' but not teachers' views, observations and case studies, and some correlational studies.

One of the studies, Rutter et al (1979), is heavily criticised and famously (so that a practitioner would know), but the points above survive the criticism I think.

21A.1 NON-DEPARTURES FROM PS - RECOMMENDING THE SAME OR SOMEWHAT THE SAME

Add interest to rule-following when rule-breaking is very interesting (PS07) chimes with this factor:
- pupils' desire to 'have a laugh' (Woods, 1976)

Add interest to rule-following when it is very uninteresting (P58) chimes with these factors:

- learning difficulties (Bird et al, 1981, Galloway 1980, Varlaam 1974, York 1972)
- boredom (Corrigan, 1979)

Procure brevity when there are more rules than the pupils can attend to (SP12) chimes with this factor:

- too many rules (Clegg & Megson 1973, Finlayson & Loughran 1976, Galloway, 1982)

Convey respect against stimulation to reciprocal antipathy (PS13) chimes with these factors:

- pupils' finding 'mucking about' an acceptable excuse for failing academically (Sharp, 1981)
- petty rules (Wertham, 1963)
- the school's marginalising certain pupils (Finlayson & Loughran, 1976; O'Hagan 1977)
- anti-school culture (Hargreaves, 1967 and 1982; Lacey, 1970; Marsh et al, 1978)
- not giving pupils responsibility (Rutter et al, 1979)
- unapproachability of staff (Rutter et al, 1979)
- inflexible, intolerant staff (Clegg & Megson, 1973; Finlayson & Loughran, 1976; Galloway, 1982)
- being in lower sets, streams or bands (Ball, 1981; Galloway, 1982)

Convey non-greenness against assessment of one's raggability, defiability and ability to detect (PS18)

chimes with these factors:

- testing of teacher's tolerance (Beynon & Delamont, 1984; Marsh et al, 1978) -inconsistency in teachers' responses (Topping, 1983)
- teachers' 'with-it-ness' (Kounin, 1970)

21A.2 NON-DEPARTURES FROM PS - OMITTING OR RECOMMENDING AGAINST THE SAME

- not lines, extra work, detention (Rutter et al, 1979)
- not relevance to future employment (Bird et al, 1981)
- not - or relatively little - social background (mainly occupation of father) of pupils (Gray et al, 1983)
- not frequency of corporal punishment (Clegg & Megson, 1973; Maughan & Ouston, 1979; Reynolds & Sullivan, 1981)

21A.3 DEPARTURES - POSSIBLE BLOCKERS FROM THE PS POINT OF VIEW

FR01 - being less than rigorous in enforcing rules (Bird et al, 1981; Reynolds & Sullivan, 1981) may go against Convey non-greenness against assessment of

one's raggability defiability and ability to detect
(PS18)

FRO2- tell the class about yourself and why you enjoy
teaching (Emmer et al, 1984) may go against Use
appearance vis-s-vis other teachers and against
assessment of one's raggability defiability and
ability to detect (PS17)

21A.4 DEPARTURES - PRODUCING INACTIVE AGENTS FROM THE
PS POINT OF VIEW

None

21A.5 DEPARTURES - PRODUCING UNAVAILABLE AGENTS FROM
THE PS POINT OF VIEW

FR5- time of day (Tattum, 1982)

FR6- layout of buildings (Bird et al, 1981, Heal,
1978)

FR7- ethos of school (Gray et al, 1983; Reynolds &
Sullivan, 1981; Rutter et al, 1979)

FR8- smallness of school (Reynolds & Sullivan, 1981)

21A.6 DEPARTURES - TARGETTING THE UNWEIGHTY FROM THE
PS POINT OF VIEW

FR3- relevance of set work to future employment
(Willis, 1978)

FR4- parent-teacher closeness (Clegg & Megson, 1973;
Finlayson & Loughran, 1976; Galloway, 1982)

21A.7 DEPARTURES - COSTLIER THAN NEED BE FROM THE PS
POINT OF VIEW

None

21A.8 DEPARTURES - OMISSIONS - FROM THE PS POINT OF
VIEW

Use monotony against stimulation to aggressiveness
(PS1)

Use monotony against stimulation to recklessness
(PS2)

Communicate better when instructions are beyond
pupils' ken or ability to decipher or memorize (PS3)

Forestall distraction when enough is threatened to
make pupils unable to concentrate on instructions
(PS4)

Move to another school against being present where
one is confirmed in pupils' eyes as an ineffective

detector (PS5)

Move to another school against being present where one is confirmed in pupils' eyes as a ridiculous responder to rule-breaking (PS6)

Move to another school against being present where one is confirmed in pupils' eyes as raggable (PS9)

Move to another school against being present where one is confirmed in pupils' eyes as one whom pupils can gain kudos with their peers by defying (PS10)

Procure clarity when rules have more ambiguity than the pupils can resolve
(PS11)

Arrange easy tasks against assessment of one's effectiveness as a detector (PS14)

Plan reduction of confusion against assessment of one's effectiveness as a detector (PS15)

Use calmness against assessment of one's ridiculousness in responding to rule-breaking (PS16)

Use appearance vis-s-vis other teachers and against assessment of one's raggability defiability and ability to detect (PS17)

21A.9 DEPARTURES - RELATIONS UNCLEAR,
DUPLICATION, CONTRADICTION AGENTS

None in this collection

21B.APPLYING IN ONE PARADIGM (OP)

Wheldall and Merrett (1986) give an example of Applied behaviour Analysis. They leave the reader with 19 points (The actual format is multiple-choice revision questions for the reader, to which the authors later give their answers).

21B.1 NON-DEPARTURES FROM PS - RECOMMENDING THE SAME OR SOMEWHAT THE SAME

Add interest to rule-following when rule-breaking is very interesting (PS07). This chimes with

- If you are faced with a problem in which children spend a lot of time out of their seats, you should provide more interesting things for them to do when they are seated or devise a plan which will reinforce them positively for being in their seats.

- John spends a lot of his time gazing out of the window because the work that he does produce is not reinforced.

Add interest to rule-following when it is very uninteresting (PS08). This chimes with

-If Mary behaves politely enough in school but is cheeky and rude to her mother at home, this is because she is reinforced when she is polite at school

- Charles never speaks in class but is always chattering to his friends in the playground. This is because he finds the attention of his peers in the playground reinforcing.

- The children in class 2B work better for Miss Green than for Mr Cardew. This is because Miss Green is better at giving appropriate encouragement to the children.

21B.2 NON-DEPARTURES FROM PS - OMITTING OR RECOMMENDING AGAINST THE SAME

- Punishment should be avoided in behavioural interventions because it has a number of unwanted side-effects.

21B.3 DEPARTURES - POSSIBLE BLOCKERS FROM THE PS POINT OF VIEW

Move to another school against being present where one is confirmed in pupils' eyes as one whom pupils can gain kudos with their peers by defying (PS10). This does not chime with OPO1- Sometimes behaviour which a teacher is trying to change is being maintained by the child's peers. In this case we have to make the reinforcing event apply to the whole group.

21B.4 DEPARTURES - PRODUCING INACTIVE AGENTS FROM THE PS POINT OF VIEW

None

21B.5 DEPARTURES - PRODUCING UNAVAILABLE AGENTS FROM THE PS POINT OF VIEW

Many of these are unavailable because it is not clear what a practitioner is supposed to do.

OPO2- Teaching is a process concerned with changing behaviour.

OPO3- Learning results from the consequences of our actions.

OPO4- The biggest influence on future behaviour is the consequences of earlier behaviour.

OPO5- Our chief concern should always be with the long-term well being of the person concerned.

OPO6- Positive reinforcers are things that make an action more likely to happen again.

OPO7- If a young child displays a great deal of tantrum behaviour, we can say that he has been taught to behave in that way by his parents.

OPO8- Sometimes behaviour change can be brought about by changing the antecedent conditions (settings). This means changing some element(s) in the environmental situation for the child.

21B.6 DEPARTURES - TARGETTING THE UNWEIGHTY FROM THE PS POINT OF VIEW

OPO9- It may be useful to ignore inappropriate behaviour when attention from you has been reinforcing the behaviour.

OP10- If you are successfully ignoring a particular 'attention-seeking' behaviour, you will expect the behaviour to increase at first and then diminish.

OP11- We call children slow learners because they find it difficult to learn new skills.

OP12- You are helping a rather slow child to master a complex manipulative skill (for example doing up a series of buttons). You should help him almost to the end, leave him to finish (like putting the last and easiest button through the hole) and then reward him.

OP13- Vicarious learning (modelling) is where children learn by watching the behaviour of others and what happens to them.

21B.7 DEPARTURES - COSTLIER THAN NEED BE FROM THE PS POINT OF VIEW

None

21B.8 DEPARTURES - OMISSIONS FROM THE PS POINT OF VIEW

Use monotony against stimulation to aggressiveness (PS01)

Use monotony against stimulation to recklessness (PS02)

Communicate better when instructions are beyond pupils' ken or ability to decipher or memorize (PS03)

Forestall distraction when enough is threatened to make pupils unable to concentrate on instructions (PS04)

Move to another school against being present where one is confirmed in pupils' eyes as an ineffective detector (PS05)

Move to another school against being present where one is confirmed in pupils' eyes as a ridiculous

responder to rule-breaking (PS06)

Move to another school against being present where one is confirmed in pupils' eyes as raggable (PS09)

Procure clarity when rules have more ambiguity than the pupils can resolve (PS11)

Procure brevity when there are more rules than the pupils can attend to (PS12)

Convey respect against stimulation to reciprocal antipathy (PS13)

Arrange easy tasks against assessment of one's effectiveness as a detector (PS14)

Plan reduction of confusion against assessment of one's effectiveness as a detector (PS15)

Use calmness against assessment of one's ridiculousness in responding to rule-breaking (PS16)

Use appearance vis-s-vis other teachers against assessment of one's raggability and defiability (PS17)

Convey non-greenness against assessment of one's raggability and defiability (PS18)

21B.9 DEPARTURES - RELATIONS UNCLEAR,
DUPLICATION, CONTRADICTION AGENTS

None

21C. APPLICATION OF PSYCHOLOGY IN GENERAL (PG)

This is represented here by a textbook by Child (1986). This is a best seller in its class and a glance shows that it contains much information. Therefore it is not a straw man to be criticized.

These recommendations are taken from the summaries (amplified by the text only where necessary for clarity) of the four chapters in which the index locates references to 'interest', 'attention' or 'motivation'

21C.1 NON-DEPARTURES FROM PS - RECOMMENDING THE SAME OR SOMEWHAT THE SAME, even if weaker than need be

PS76 = to provide the information that exploratory thinking is an option

-need for exploration is clearly influential in directing attention (Child, 1986)

PS77 = to ask the pupils to acquire the information

-need for exploration is clearly influential in directing attention (Child, 1986)

PS82 = to present information on how undirected contributions might be made

-need for exploration is clearly influential in directing attention (Child, 1986)

PS83 = to ask the pupils to acquire the information

-need for exploration is clearly influential in directing attention (Child, 1986)

PS84 = to present the information that it is open to pupils to make undirected contributions

-need for exploration is clearly influential in directing attention (Child, 1986)

PS85 = to ask the pupils to acquire the information

-need for exploration is clearly influential in directing attention (Child, 1986)

PS91 = to try to arrange things so that the pupil succeeds in her own estimation

-children tasting success and failure - in that order - are most likely to continue the struggle to achieve (Child, 1986)

21C.2 NON-DEPARTURES FROM PS - OMITTING OR RECOMMENDING AGAINST THE SAME

None

21C.3 DEPARTURES - POSSIBLE BLOCKERS FROM THE PS POINT OF VIEW

-children tasting success and failure - in that order - are most likely to continue the struggle to achieve (Child, 1986)

21C.4 DEPARTURES - PRODUCING INACTIVE AGENTS FROM THE PS POINT OF VIEW

None

21C.5 DEPARTURES - PRODUCING UNAVAILABLE AGENTS FROM THE PS POINT OF VIEW

-physical or social deprivations pertaining to basic human needs have a direct effect on the direction and intensity of attention (Child, 1986)

-fatigue has a detrimental effect on attentiveness (Child, 1986)

-a basic level of arousal is needed in the first place for attention to be attracted and once this level has been passed the individual's attention increases usefully. Beyond an optimum level ...attention becomes adversely affected (Child, 1986)

-need for curiosity is clearly influential in directing attention (Child, 1986)

-need for exploration is clearly influential in directing attention (Child, 1986)

-need for manipulation is clearly influential in directing attention (Child, 1986)

-children with extravert qualities are more likely to wilt and become distracted during long periods of attentive activity and to work at a lower level or sensory susceptibility than introverts. (Child, 1986)

-where children are physiologically satisfied there is every likelihood that they will go on to seek the intellectual satisfactions provided at school (Child, 1986)

-where children feel secure and wanted there is every likelihood that they will go on to seek the intellectual satisfactions provided at school (Child, 1986)

-where children have the opportunity to grow in confidence, independence and self-esteem through achievement, there is every likelihood that they will go on to seek the intellectual satisfactions provided at school (Child, 1986)

-the classroom should be designed to take advantage of the ready-made characteristics that young children become puzzled by their environment, they poke around, question, and show inquisitiveness, they manipulate and inspect most things that come within reach. (Child, 1986)

-incentives are a very necessary part of the teacher's life (Child, 1986)

21C.6 DEPARTURES - TARGETTING THE UNWEIGHTY FROM THE PS POINT OF VIEW

-the intensity of a stimulus can attract attention (Child, 1986)

-novel stimuli attract attention (Child, 1986)

-a variable or changeable stimulus demands our attention (Child, 1986)

-distributed presentations have a better chance of being noticed than rapid regular presentations (Child, 1986)

-certain colours are more attractive than others (e.g. more attention paid to coloured than to black, more to red and white than to black and white) (Child, 1986)

-high-pitched sounds are more likely to be listened to than low-pitched sounds when the two are presented simultaneously (Child, 1986)

-conditioned and habitual stimuli are likely to be picked out from other stimuli can operate to assist or defeat the teachers' intentions (Child, 1986)

-verbal cues are employed to orient pupils (Child, 1986)

-physical cues are employed to orient pupils (Child,

1986)

-events in which the child has already gained an interest are more likely to attract attention (Child, 1986)

-teachers must ensure that the goals children give themselves are adequate and realistic for each child (Child, 1986)

-the teacher must beware of consistently underestimating or overestimating the capabilities of a child (Child, 1986)

-the sooner people know the outcome of their work the more likely it is that they will be reinforced to continue learning - always provided they meet with sufficient success (Child, 1986)

-praise and reproof from a respected teacher are powerful incentives (Child, 1986)

21C.7 DEPARTURES - COSTLIER THAN NEED BE FROM THE PS POINT OF VIEW

None

21C.8 DEPARTURES - OMISSIONS FROM THE PS POINT OF VIEW

PS51 = to look for early signs of hilarity

PS52 = to introduce calmness as soon as signs of hilarity are present

PS53 = not do anything to increase hilarity when there is any sign of its presence

PS54 = to frame invitations to respond so that they are not seen as tests

PS55 = to look for early signs of depressed energy (e.g. a suppressed yawn)

PS56 = to ventilate the room and relieve monotony as soon as signs are present

PS57 = to ask the pupils for physical movement as soon as signs are present

PS58 = to look for noise and check signal strength

PS59 = to weaken noise and strengthen the signal where necessary

PS60 = to look for ambiguities

PS61 = to remove any ambiguities found

PS62 = to monitor the number of different major themes or points being presented

PS63 = to reduce it if necessary (by excisions and shifts to higher levels of generality)

PS64 = to look for signs that distractions are imminent

PS65 = to forestall the distractions or accommodate them

PS66 = to check the presentation for any demand for knowledge that is not possessed

PS67 = to make the presentation in another way

PS68 = to provide any knowledge that is essential for understanding the presentation or to abandon the presentation

PS69 = to ask the pupils to acquire this knowledge

PS70 = to check the presentation for any demand for abilities to solve problems that the pupils may not possess

PS71 = to alter the presentation so that it calls only for problem-solving abilities that the pupils possess

PS72 = to give what will be recognized as signals that the lesson will not be monotonous

PS73 = to ask (not necessarily literally) pupils to recognize the signs

PS74 = to give the information that Y1 will have effects valued by the pupils at costs regarded by them as not very high

PS75 = to ask the pupils to acquire the information

PS78 = to portray exploratory thinking as what seems cool to the pupils

PS79 = to ask the pupils to accept the portrayal

PS80 = to give what will be seen as signals of uncontentiousness

PS81 = to ask the pupils to recognize the signs

PS86 = to portray the making of undirected contributions as not being too cooperative with

the teacher

PS87 = to ask the pupils to accept the portrayal

PS88 = to portray the making of undirected contributions as not ingratiating

PS89 = to ask the pupils to accept the portrayal

PS90 = to avoid explicit evaluations on the occasions in question

PS92 = where failures occur to say things to avoid the interpretation of inability

NOTE: all the planning faults are also omissions from the PS point of view (because they are combinations of the foregoing):

PSF1 - including too many major points or themes AND no recognition of the danger of this - PS62, PS63

PSF2 - including no striking departure from monotony AND no recognition of the danger of monotony - PS72

PSF3 - including no attempt to discover existing knowledge or problem-solving ability AND no recognition of the danger of this omission - PS66, PS70

PSF4 - including no attempt to alter a presentation to take account of existing knowledge or problem-solving ability AND no recognition of the danger of this omission - PS67

21C.9 COHERENCE

The coherence is good for material located in one chapter but it is not always easy to relate material from different chapters.

21D. COMMENTARY

FR would probably be the most costly information to find. The most costly to implement would be applied behaviour analysis if it were thorough-going and if many pupils had to be dealt with at the same time. But the differences in cost are not such as to outweigh the differences in effects.

There are considerable differences in content between PS and the others, and this while every effort was being made to see similarity. The proportions of non-standard suggestions rejected by PS were 6 out of 15 from FR, 12 out of 18 from OP, and 38 out of 45 from PG. The proportions of PS factors omitted by the non-standard applications were 13 out of 18 by FR, 15 out of 18 by OP and 35 out of 42 by PG. Because all these proportions are more than one-third, all the differences are declared substantial.

From the PS point of view hardly any of the others' suggestions that it rejects would be positively harmful if put into effect. When non-standard inclusions are rejected by PS, it seems to be normally on the grounds that they are unweighty or in a form unsuitable for action by receivers.

Again from the PS point of view some of its

recommendations rejected by the others are potentially crucial, that is making the difference between success and failure in common scenarios. Non-standard omissions of PS recommendations seem to occur normally because PS is more eclectic.

The differences are overwhelmingly not contradictions, and this while even a hint of contradiction was being counted. There were very few counts of contradiction between PS and the others, 2 FR cases, 1 OP case and 1 PG case.

CHAPTER TWENTY-TWO

THE PRODUCTS OF THE NEW PRACTITIONERS' APPROACHES TO THE SALIENT PROBLEMS

This chapter seeks to compare the information produced by the psychological standard with the information novices would otherwise use. It also considers the likely impact on the novices of the information produced by the non-standard applications of chapter 21.

The information the novices use is extracted from their lesson plans in the case of lack of interest and from their conversations in the case of lack of discipline.

For each study there is a separate group of respondents from the population defined in chapter

15.

The approaches indicated in chapter 15 are used.

The sections cover (A) procedure for the plan/interest study, (B) results of that study, (C) procedure for the conversation/discipline study, (D) results of that study, and (E) commentary.

22A. THE PROCEDURE FOR THE PLAN/INTEREST STUDY

22A.1 OBTAINING RESPONDENTS

The trainees had been distributed among 20 tutorial groups according to the subjects the trainees were being trained to teach (not 20 different subjects - some subjects had more than one group). These groups met regularly, even during periods of placement in schools, and were the home bases of the trainees for social and administrative as well as educational purposes. These groups were treated as entities in the selection of respondents.

Generalists in primary schooling were selected for the lack of interest study but not for the lack of

discipline study because of the likely lower incidence of discipline problems in primary schools than in secondary.

The Primary groups numbered 37. None refused of those who were invited to take part. Four were in a sense non-respondents: they were absent from the class session at which the study took place. But they had not been told in advance of this activity and therefore were not avoiding it. If they were at all different from those present, the absentees might arguably be even less influenced by psychology than those present turned out to be.

There were 33 respondents, 32 women and 1 man, average age 24, graduates in a number of disciplines, science and non-science, from 17 different institutions.

22A.2 THE CIRCUMSTANCES IN WHICH THE RESPONSES WERE MADE

The study was done when the respondents were in the 11th week of their 27 week course, when they had had the equivalent of 3 weeks experience of practice teaching.

The place was a lecture room in the University running the course.

The reponses were made in the first part of an ordinary lecture, and the instructions were given by me, the scheduled lecturer.

The subject of the lesson to be planned was ANIMALS. This is suitably open and is quite a realistic subject for Primary school children — all trainees in this exercise were training for Primary School teaching.

The plans were written on blank pieces of A4 size paper given out for the purpose.

No time limit was given. Everyone waited until the last person was finished. This was ten minutes after the instructions were given.

22A.3 HOW THE RESPONDENTS WERE BRIEFED

I said I wanted to have some real lesson plans so that I could teach them how to apply psychology to their lesson planning. (I did use the plans obtained for this purpose in subsequent weeks with the participating class.)

I asked participants not to consult each other 'as that would diminish the variety in the plans written'. I asked them not to write their names on

the plans. I sat behind them as they were writing.

No instruction was given about length.

The lessons planned could be taught later if the trainees so wished.

22A.4 THE STIMULI AND THEIR DELIVERY

When they were ready and briefed, I gave the participants these instructions:

'I just want you to write your lesson plan for a half-an-hour lesson for any age group you like in Infant or Junior. The only thing is that it must be a lesson on something to do with animals. So a lesson on animals, half-an-hour, any age group. Just put down which age group it is and off you go'.

22A.5 THE DATA OBTAINED

The task was done with no talking. The plans produced appeared to me to be comparable in length and other characteristics with other written plans that trainees provided for real.

22A.6 RECORDING

The respondents had done their own recording by writing the plans.

22A.7 SEEKING CONCLUSIONS

The question is whether more than half of the respondents showed a fault. Using the symmetrical binomial cumulative distribution (McKinnon, 1961), statistical significance at $p = 0.035$ requires 'more than half' to be defined as 70% or above, and 'fewer than half' to be defined as 30% or below.

22B. THE RESULTS OF THE PLAN/INTEREST STUDY

(a) The novices versus PS

The novices and PS differed substantially with respect to three of the four planning faults.

Table 22.1 shows which faults were present in more than half, around half, and fewer than half of the plans.

(b) The non-standard versus the others

TABLE 22.1

PS 'FAULTS' AVOIDED BY NOVICES		
Percentage of plans avoiding each fault		
70% AND ABOVE	31%-69%	30% AND BELOW
	PSF4	PSF1 PSF2 PSF3

TABLE 22.2

WARNINGS AGAINST POPULAR FAULTS IN PG	
IN PG	NOT IN PG
	PSF1 PSF2 PSF3

Table 22.2 shows that the non-standard application to lack of interest (PG) seen in chapter 21 would have agreed with the novices except in showing the fourth fault that they did not show.

NOTE

Table 22.1 shows that fault 3 was less prevalent than the others - in other words novices and PS were closer (though not very close) to agreement on this than they were on the other points. It may seem odd that novices are trying to connect with pupils' existing thinking more than they are trying to find out what the pupils' existing thinking is; but it could happen that novices would adopt certain practices as rules without quite understanding the purpose. Certainly the novices' chances of success must be lowered by their ignorance of what they are trying to connect with. Therefore the information they would get from PS might well improve their practice.

22C. PROCEDURE FOR THE CONVERSATION/INDISCIPLINE
STUDY

22C-1 OBTAINING RESPONDENTS

For the discipline study secondary subject teaching specialisms were placed in one of four sets: (a) a set of subjects seen by many school students as peripheral (non-examinable extras) and often associated with indiscipline, (b) a set of subjects involving (in typical schools) much oral work - and hence offering many opportunities for indiscipline, (c) a set of subjects involving field work and hence peculiar discipline problems, (d) all the rest. Within each of the four sets, tutorial groups were ranked in order so that the first was the one whose tutor would be (in my judgement) most in favour of the exercise, and so on. Groups were visited one from each subject set in rank order until 30 respondents were obtained.

Seven placement groups were visited.

19% of trainees invited to participate declined to do so. The respondents obtained included 9 being trained to teach English (a member of the normal set), 6 religious studies (from the peripheral set), 5 German (from the oral work set), 11 Geography (from the field work set), and 3 Latin (from the normal set).

The number obtained was 34, 21 women and 13 men. One was aged 33, one 31; and the ages of the rest were

fairly evenly distributed from 21 to 25. Between them respondents had been undergraduates in 16 different institutions.

22C.2 PILOTS

There were pilot runs and practice sessions with students from other courses in the same University.

22C.3 THE CIRCUMSTANCES OF THE DATA COLLECTION

The work was done between weeks 15 and 19 of the 30 week course. These were weeks of placement in schools for teaching practice. Each participant had already had 3 weeks in a first school, 8 weeks on campus, 4 weeks vacation and 3 weeks in a second school before week 15.

Participants therefore were at the same stage as those in the study reported in chapter 13.

Supervisors had agreed to and were aware of the study.

Each interviewer talked with half of the respondents.

The physical setting was a quiet study in the University. Only one speaker and one listener were present. They sat in easy chairs. Respondents were

engaged in conversation.

The listener was one of two people who had followed the same programme of study in the previous year.

Each respondent was treated separately.

Although the speakers knew that their recorded words would be listened to by a lecturer later, I believe the arrangements described here would encourage speakers to regard themselves as having a conversation between equals, with someone who would understand their point of view, with someone whom there would be no point in trying to deceive or make face with, but not with a close friend. (Speakers might not have been explicit enough with a close friend, there being much understood implicitly between them).

All participants were unpaid and giving up their own free time.

22C.4 HOW THE RESPONDENTS WERE BRIEFED

This has a bearing on establishing the conditions of cooperation referred to above.

Before the interview the respondents were fully informed about the project. In the interview the

purpose of the exercise was again explained and agreement to the use of the recorder obtained.

The purpose was said to be 'to help us find out what is on trainees' minds when they are on placement'. It was said that I would use this information not only for my own research purposes but also in developing my teaching. These students had already had a demonstration from me of how I had altered my teaching in accordance with what the previous year's students had told me; and a number had commented favourably on this exercise. Therefore I hoped they believed I would do what I said and that it would be useful. (In fact the data were used in teaching in later years and in the latter part of the course the respondents were following.) As trainee teachers, respondents did have a professional interest in Education. I hoped their attitude would be that while talking to a colleague they were at the same time making a useful contribution to Education.

22C.5 THE STIMULI USED

The questions asked of respondents were as follows:

(a) Last year we asked all the PGCE students what problem had bothered them most in their teaching; and the problem that came out on top was Discipline. Have you had to think about Discipline at all?

(b) (to be asked if no instance is offered in response to question (a) What for instance have you had to deal with?

(c) Why does that kind of thing happen?

(d) I suppose not everyone does that. So how does it happen that you get it from some pupils and not from others?

(e) The same pupils might be better on some occasions and worse on some other occasions. Is that likely?

(f) (to be asked if a pupil disposition is mentioned) Where does that come from?

(g) We've been talking about Discipline. That was the first problem mentioned by last year's students.

It was hoped to attract responses of about the same level of generality as the antecedents identified in chapter 10.

It was intended to exert as little influence as possible over responses. Wording like 'why does that kind of thing happen?' (question c) was thought to be less suggestive of particular lines of answer than alternatives like 'why do they do that kind of thing?' (which has the flavour of reasons) and 'what makes them do that kind of thing?' (which has the

flavour of causes).

The question 'is that likely?' (question e) might have been answered literally with only 'yes' or 'no'; but in fact in the pilots and in the main study it set people off talking about the subject again.

Asking a question about circumstances and a question about personal dispositions was intended to give participants every chance to reveal anything in these categories that might be salient in their minds.

That the circumstance question was asked first is not likely to influence the number of circumstances mentioned compared to the number of dispositions because when a new question is asked any association between salience and order of mentioning (Kaplan & Fishbein, 1969) must be broken.

The wording was wording (i) that did not lead to hesitation or misunderstanding in trials and (ii) that the former students who were asking the questions chose as feeling natural for them to say.

Why not ask for reasons for the past behaviour of trainees? Because such reports may not be valid.

22C-6 THE DELIVERY OF THE STIMULI

Participants were allowed to go on talking until they came to a major pause. The interviewer gave no sign of impatience or wishing to take a turn until a pause was reached. But then no sign was given of wishing the speaker to go on beyond the pause. The interviewer would refrain from giving signs of wishing to take a turn when the speaker paused for breath or confirmation, but would say something as soon as the speaker gave a major pause. A major pause is defined as one when the speaker offers the other conversant a turn at speaking when the conversant has not indicated a wish to take a turn.

For simplicity degree of salience was regarded as a dichotomous variable, and the major pause was used to help focus on the salient. Some researchers have used a time limit to separate the salient from the unsalient; but this seems too rigid. Kaplan & Fishbein (1969) suggest that where points are made freely by respondents, earlier points are more salient than later points. This is better but a little vague. The position adopted here is that the salient is a subset of what a speaker says before giving way to another conversant who has not signalled a wish to come in. If the other conversant does not take up an offer of a turn and the speaker

then continues, the continuation is not salient.

In an interview of this kind, speakers are likely to be especially willing to comply with the signs from the listener. But an interviewer with ordinary communication skills will be able to avoid making speakers feel interrupted and equally avoid making speakers feel that they had not said as much as was expected.

Listeners were allowed to open and close with any conversation necessary to establish rapport and express gratitude, and so on. Listeners could also ask for clarification. For example if any information depended on gesture, for example 'then the boy did this' (the speaker demonstrating some gesture), the listener might put in a phrase of acknowledgement, for example 'thumbed his nose?' for the benefit of the sound recorder. If this could not be done without interrupting the flow of the speaker, the listener could make notes after the speaker had left. Such notes turned out to be not necessary.

22C.7 RESPONDENTS' REACTIONS

As it turned out, the participants gave every sign of concentrating on what they were talking about rather than how they were talking about it. They talked freely, and they appeared to be cooperating.

22C.8 RECORDING

Everything said was taped on a sound recorder, and later transcribed verbatim. Nothing was written during the interviews.

22C.9 ANALYSIS

The number of respondents mentioning each PS and other factor was calculated to see which were 'popular' (mentioned by more than 50% of respondents and 'unpopular' (mentioned by fewer than 50% of respondents). Using the symmetrical binomial cumulative distribution (McKinnon, 1961), for a departure from 50% (two-tailed test) to be statistically significant at $p = 0.058$, the figure needs to be 68% or above or 32% or below.

I propose to say that there is a substantial difference between the psychological standard and the novices if more than one-third of the PS factors are unpopular with the novices or if more than one-third of the factors popular with the novices are not PS factors.

22D. THE RESULTS OF THE CONVERSATION/INDISCIPLINE
STUDY

(a) Novices' factors

The factors mentioned by novices, not in the psychological standard, and categorized according to chapter 19 were as shown in Table 22.3.

The number of mentions that something was NOT a factor was negligible.

(b) The novices versus PS

The novices and PS accounts are substantially different.

Table 22.4 shows what were the most popular factors with novices. Not only more than a third (required for the difference to be declared substantial) but all of the factors popular with novices were unpopular with PS.

And more (13) than a third (7) of the PS factors were unpopular with the novices as shown in Table 22.5.

(c) The PS distinctives versus the non-standards

Very few of the PS factors unpopular with novices (in

TABLE 22.3

THE FACTORS MENTIONED BY ANY
NOVICE (AN)

ANO1 lessons taught earlier by other teachers
ANO2 lesson theme
ANO3 other teachers' behaviour
ANO4 passage of time
ANO5 pupils' academic abilities
ANO6 pupils' ages
ANO7 pupils' attempting to attract attention to themselves (and similar)
ANO8 pupils' homes
ANO9 pupils' personality characteristics
ANO10 school atmosphere
ANO11 sex of pupils
ANO12 teachers' behaviour not covered in the ideal categories
ANO13 time of the day, week or year
ANO14 weather

TABLE 22.4

THE POPULAR FACTORS WITH
NOVICES

ANO2
ANO5
ANO7
ANO8
ANO9
ANO10
ANO12

TABLE 22.5

THE POPULARITY OF THE PS FACTORS (percentage of novices for whom each PS factor was salient)

68% AND ABOVE	33%-67%	32% AND BELOW
	PS02	PS01
	PS06	PS03
	PS08	PS04
	PS09	PS05
	PS16	PS07
		PS10
		PS11
		PS12
		PS13
		PS14
		PS15
		PS17
		PS18

TABLE 22.6

FR AS A SOURCE OF PS FACTORS UNPOPULAR WITH NOVICES

IN FR	NOT IN FR
PS07	PS01
PS12	PS03
PS13	PS04
PS18	PS05
	PS10
	PS11
	PS14
	PS15
	PS17

TABLE 22.7

OP AS A SOURCE OF PS FACTORS UNPOPULAR WITH NOVICES

IN OP	NOT IN OP
PS07	PS01
	PS03
	PS04
	PS05
	PS10
	PS11
	PS12
	PS13
	PS14
	PS15
	PS17
	PS18

TABLE 22.8

THE POPULARITY OF THE AN FACTORS (percentage of novices for whom each AN factor was salient)

32% AND BELOW	33%-67%	68% AND ABOVE
AN03	AN01	AN02
AN04	AN06	AN05
AN11	AN13	AN07
	AN14	AN08
		AN09
		AN10
		AN12

TABLE 22.9

FR AS A SOURCE OF POPULAR AN FACTORS NOT IN PS

NOT IN FR	IN FR
AN02	AN10
AN05	
AN07	
AN08	
AN09	
AN12	

TABLE 22.10

OP AS A SOURCE OF POPULAR AN FACTORS NOT IN PS

NOT IN OP	IN OP
AN02	AN07
AN05	AN08
AN09	
AN10	
AN12	

that sense distinctive to PS) are to be found in the non-standard accounts of chapter 21. This is shown for FR in Table 22.6 and for OP in Table 22.7.

(d) The novices' distinctives versus the non-standards

There is little agreement between the non-standard accounts and the factors distinctive to the novices.

Table 22.8 shows the popularity with novices of each factor mentioned by any novice but not in PS.

Table 22.9 for FR and Table 22.10 for OP show how *few* of the factors popular with novices but not in PS also appear in the non-standard account.

22E. COMMENTARY

The novices and PS differ substantially, not contradicting each other but making different selections.

From the PS point of view some of the novices' omissions could be crucial, making the difference between success and failure in achieving good



discipline and interest in certain common scenarios.

Again from the PS point of view factors peculiar to the novices would not be expected to be damaging.

In other words the PS account has a lot to offer novices that they do not appear to have already.

The non-standard accounts do not support the novices in their nonPS factors in indiscipline. None of the non-standards could be seen as substitutes for PS in remedying the omissions (from the PS point of view) in the novices' accounts.

CHAPTER TWENTY-THREE

LACK OF DISCIPLINE ACCORDING TO EXPERTS IN PRACTICE AND TRAINING

This chapter analyses the action recommended by experts against lack of discipline, and compares those recommendations to the recommendations offered by the psychological standard (PS) account. (There are no comparable experts on lack of interest).

The approaches indicated in chapter 19 are followed.

The sections cover (A) the selected experts, (B) non-departures (C) departures (D) summary of comparisons, and (E) commentary.

Kyriacou (1991), Robertson (1989) and Wragg (1981) are the experts. The first two are textbooks directed to practitioners. The third contains advice drawn up in connection with a programme of research into teacher training (Wragg, 1984).

The authors are cited by a government committee of inquiry into discipline in schools in England and Wales (Department of Education & Science, 1989) as having been recommended to them after they had received evidence from a very wide range of interested parties.

There needs to be some preliminary selection in the case of Robertson.

He has 12 families of recommendations, and these families maybe divided into three groups, (1) those overtly concerned with discipline, (2) those concerned with discipline at best indirectly (from the viewpoint of the PS account), and (3) those concerned with discipline only very tenuously (again from the viewpoint of the PS account).

FAMILIES OVERTLY CONCERNING LACK OF DISCIPLINE:

methods of expressing confidence in one's authority
conditions making reprimands and punishments more likely to suppress unwanted behaviour

conditions making confrontations and disputes with pupils more likely to be resolved successfully

forceful dominant behaviours which express personal power

methods of making it less likely that one will contribute to unwanted behaviour

methods of mitigating the coercive connotations of reprimands so as to appeal to the pupils to cooperate

conditions making reprimands or instructions which interrupt pupils' activities carry more impact

FAMILIES CONCERNING LACK OF DISCIPLINE AT BEST INDIRECTLY

conditions making teaching more likely to be successful,

methods of better sustaining pupils' attention when teaching,

conditions making questioning more likely to increase motivation and conceptual development

FAMILIES CONCERNED VERY TENUOUSLY WITH DISCIPLINE

methods of improving the momentum and smoothness of the lesson

conditions making questioning possibly give rise to management problems

I shall concentrate on the first group of families only. That means 53 isolable recommendations.

23B. NON-DEPARTURES FROM PS

23B.1 NON-DEPARTURES: TOUCHING UPON THE SAME AS PS

USE MONOTONY AGAINST STIMULATION TO AGGRESSIVENESS (PS01)

- use pupils' territory, personal space and property in a relaxed non-threatening manner (Robertson, 1989)
- do not use dominant threatening behaviour, not moving into the pupils personal space, not bodily facing the pupil, not staring at the pupil with a menacing expression, not towering over the pupil, not using a threatening tone of voice, not raising one's voice (Robertson, 1989)

- do not not personalize reprimands (Robertson, 1989)
- maintain a calm atmosphere (Robertson, 1989)
- avoid frustration, threat of embarrassment, explicit intimidation, and if confrontation occurs stay calm, defuse the situation (Kyriacou, 1991)
- avoid confrontations (Wragg, 1981)

FORESTALL DISTRACTION WHEN ENOUGH IS THREATENED TO MAKE PUPILS UNABLE TO CONCENTRATE ON INSTRUCTIONS (PS04)

- pupils should be silent or attentive before reprimands or instructions are given which interrupt (Wragg, 1981)

ADD INTEREST TO RULE-FOLLOWING WHEN RULE-BREAKING IS VERY INTERESTING (PS07)

- making it more rewarding for pupils to do the work set than to avoid it (Robertson, 1989)
- allow an alternate way for the pupil to achieve the problematic goal (Robertson, 1989)
- boredom (Kyriacou, 1991)
- prolonged mental effort (Kyriacou, 1991)
- inability to do the work (Kyriacou, 1991)
- convey knowlegableness, interest in sugbject, ability to set up the learning activity skilfully (Kyriacou, 1991)
- start the lesson with a bang and sustain interest and curiosity (Wragg, 1981)
- have additional material prepared to cope with bright and slow pupils' needs (Wragg, 1981)
- make written work appropriate (Wragg, 1981)
- vary your teaching teahniques (Wragg, 1981)

MOVE TO ANOTHER SCHOOL AGAINST BEING PRESENT WHERE ONE IS CONFIRMED IN PUPILS' EYES AS RAGGABLE (PS09)

- a cooperative relationship should exist (Wragg, 1981)

MOVE TO ANOTHER SCHOOL AGAINST BEING PRESENT WHERE ONE IS CONFIRMED IN PUPILS' EYES AS ONE WHOM PUPILS CAN GAIN KUDOS WITH THEIR PEERS BY DEFYING (PS10)

- pupils' being sociable (Kyriacou, 1991)

PROCURE CLARITY WHEN RULES HAVE MORE AMBIGUITY THAN THE PUPILS CAN RESOLVE (PS11)

- establish clear conventions, routines, expectations (Kyriacou, 1991)
- give clear instructions (Wragg, 1981)
- clarify your standards (Wragg, 1981)
- instructions should be as clear as possible (Robertson, 1989)
- insructions should be phrased as clear directives (Robertson, 1989)

PROCURE BREVITY WHEN THERE ARE MORE RULES THAN THE PUPILS CAN ATTEND TO (PS12)

- instructions should be as brief as possible (Robertson, 1989)

CONVEY RESPECT AGAINST STIMULATION TO RECIPROCAL ANTIPATHY (PS13)

- show respect towards the pupil (Robertson, 1989)
- the pupils' feelings should be acknowledged (Robertson, 1989)
- re-establish normal relationships as soon as possible after a dispute (Robertson, 1989)
- low academic self-esteem (Kyriacou, 1991)
- poor attitudes (Kyriacou, 1991)
- climate of mutual respect, rapport, positive expectations (Kyriacou, 1991)
- encourage good behaviour without undermining the climate, avoid hostile remarks and vindictiveness in punishment, criticise the behaviour not the pupil, (Kyriacou, 1991)

PLAN REDUCTION OF CONFUSION AGAINST ASSESSMENT OF ONE'S EFFECTIVENESS AS A DETECTOR (PS15)

- control the pupils' entry to the classroom (Wragg, 1981)
- arrive at the classroom before the pupils (Wragg, 1981)
- prepare furniture and apparatus before the pupils arrive (Wragg, 1981)
- know how to use apparatus and be familiar with experiments before you use them in class (Wragg, 1981)
- anticipate discipline problems (Wragg, 1981)

USE CALMNESS AGAINST ASSESSMENT OF ONE'S RIDICULOUSNESS IN RESPONDING TO RULE-BREAKING (PS16)

- avoid an emotional outburst after unwanted behaviour (Robertson, 1989)

USE APPEARANCE VIS-S-VIS OTHER TEACHERS AGAINST ASSESSMENT OF ONE'S RAGGABILITY AND DEFIABILITY (PS17)

- choosing not to return smiles (Robertson, 1989)
- resisting interruptions (Robertson, 1989)
- in some formal schools using direct imperatives (Robertson, 1989)
- do not ingratiate oneself (Robertson, 1989)
- not using a pleading tone of voice (Robertson, 1989)
- see 23C.4 on Wragg (1981)

CONVEY NON-GREENNESS AGAINST ASSESSMENT OF ONE'S RAGGABILITY DEFIABILITY AND DETECTIVE ABILITY (PS18)

- using pupils' territory, personal space and property (Robertson, 1989) - standing prominently in the room (Robertson, 1989)
- avoiding tension in body posture, facial expression and voice (Robertson, 1989)
- maintain eye contact with pupils in a relaxed way (Robertson, 1989)
- limit bodily movements when speaking (Robertson, 1989)

- deliver speech in a measured tone (Robertson, 1989)
- lightly hold the pupil's upper arm or shoulder (Robertson, 1989)
- consistently apply reprimands and punishments (Robertson, 1989)
- back up threats (Robertson, 1989)
- consistency in establishing rules and expectations regarding pupils' behaviour (Kyriacou, 1991)
- use tone of voice, posture, facial expression, eye contact to appear relaxed, self-assured, confident (Kyriacou, 1991)
- deal with misbehaviour effectively and fairly (Kyriacou, 1991)
- when using punishment make it as soon as possible, truly aversive, related to school policy and due process (Kyriacou, 1991)
- scan, circulate, notice to pre-empt misbehaviour (Kyriacou, 1991)
- avoid empty threats (Kyriacou, 1991)
- start by being firm, possibly relax later (Wragg, 1981)
- know and use the pupils' names (Wragg, 1981)
- be mobile, walk around the class (Wragg, 1981)
- learn voice control (Wragg, 1981)
- look at the class when speaking and learn how to scan (Wragg, 1981)
- act quickly against discipline problems (Wragg, 1981)
- be firm and consistent in giving punishments (Wragg, 1981)
- insist on your standards (Wragg, 1981)- get silence before you start talking to the class (Wragg, 1981)

23B.2 NON-DEPARTURES COVERED BY ROBERTSON'S OTHER FAMILIES

ADD INTEREST TO RULE-FOLLOWING WHEN IT IS VERY UNINTERESTING (PS08)

- conditions making teaching more likely to be successful (Robertson, 1989)

23B.3 NON-DEPARTURES - OMITTING THE SAME AS PS

- use punishment sparingly (Kyriacou, 1991)

23C. DEPARTURES

23C.1 POSSIBLE BLOCKERS

USE MONOTONY AGAINST STIMULATION TO RECKLESSNESS (PS02)

- relieve tension with humour (Robertson, 1989)
- ensuring that the pupils respond to the teacher in some way (Robertson, 1989)

USE APPEARANCE VIS-S-VIS OTHER TEACHERS AGAINST
ASSESSMENT OF ONE'S RAGGABILITY AND DEFIABILITY
(PS17)

- a compromise should be offered in confrontations and disputes (Robertson, 1989)
- confrontations and disputes should be carried on privately (Robertson, 1989)
- address reprimands anonymously to the whole group (Robertson, 1989)
- deliver reprimands quietly to the individual, using 'please', a relaxed tone of voice and a quiet manner, phrasing reprimands as questions (Robertson, 1989)
- state rationale when reprimanding (Kyriacou, 1991)

CONVEY NON-GREENNESS AGAINST ASSESSMENT OF ONE'S
RAGGABILITY DEFIABILITY AND DETECTIVE ABILITY (PS18)

- not answering or giving eye contact to those who call out (Robertson, 1989)
- not following unwanted behaviour with rewarding attention (Robertson, 1989)
- reprimands which interrupt only when really necessary (Robertson, 1989)

23C.2 INACTIVE FACTORS

None

23C.3 UNAVAILABLE FACTORS

- dealing effectively with interruptions (Robertson, 1989) (what does it mean?)
- reprimands and punishments should be sufficiently disagreeable to discourage future misbehaviour (Robertson, 1989) (almost circular)
- making it easierfor pupils to do the work set than to avoid it (Robertson, 1989)
- discouraging peer group attention to unwanted behaviour (Robertson, 1989) (how)
- use humour constructively (Wragg, 1981) - OK to defuse but used wrongly could bring problem PS2
- emotional difficulties (Kyriacou, 1991)
- lack of negative consequences (Kyriacou, 1991)
- employ strategies flexibly and skilfully to take account of which is most likely to be effective and appropriate to the situation (Kyriacou, 1991)
- be sensitive to your pastoral care role, alert to the needs of individual pupils (Kyriacou, 1991)

23C.4 UNWEIGHTY FACTORS

- interrupt the behaviour as early as possible (Robertson, 1989)
- deliver reprimands privately to individuals (Robertson, 1989)
- use private rather than public reprimands (Kyriacou, 1991)
- prepare lessons thoroughly and structure them firmly (Wragg, 1981)
- develop an effective question technique (Wragg, 1981)
- develop the art of timing your lesson to fit the available period (Wragg, 1981)
- show yourself as a helper or facilitator to the pupils (Wragg, 1981)
- don't patronize pupils, treat them as responsible beings (Wragg, 1981)
(acceptable in so far as it is in line with PS17)
- try reasoning or academic help before punishment (Kyriacou, 1991)
- use investigation and counselling (Kyriacou, 1991)
- complement the school general policy, adequately consulting colleagues (Kyriacou, 1991)

23C.5 FACTORS COSTLIER THAN NEED BE

None

23C.6 OMISSIONS FROM KYRIACOU FROM THE PS POINT OF VIEW

Use monotony against stimulation to recklessness (PS02)

Communicate better when instructions are beyond pupils' ken or ability to decipher or memorize (PS03)

Forestall distraction when enough is threatened to make pupils unable to concentrate on instructions (PS04)

Move to another school against being present where one is confirmed in pupils' eyes as an ineffective detector (PS05)

Move to another school against being present where one is confirmed in pupils' eyes as a ridiculous responder to rule-breaking (PS06)

Add interest to rule-following when it is very uninteresting (PS08)

Move to another school against being present where one is confirmed in pupils' eyes as raggable (PS09)

Procure brevity when there are more rules than the pupils can attend to (PS12)

Arrange easy tasks against assessment of one's effectiveness as a detector (PS14)

Plan reduction of confusion against assessment of one's effectiveness as a detector (PS15)

Use calmness against assessment of one's ridiculousness in responding to rule-breaking (PS16)

Use appearance vis-s-vis other teachers against assessment of one's raggability, defiability and ability to detect (PS17)

23C.7 OMISSIONS BY ROBERTSON FROM THE POINT OF VIEW OF PS

Use monotony against stimulation to recklessness (PS02)

Communicate better when instructions are beyond pupils' ken or ability to decipher or memorize (PS03)

Communicate better when instructions are beyond pupils' ken or ability to decipher or memorize (PS04)

Move to another school against being present where one is confirmed in pupils' eyes as an ineffective detector (PS05)

Move to another school against being present where one is confirmed in pupils' eyes as a ridiculous responder to rule-breaking (PS06)

Add interest to rule-following when it is very uninteresting (PS08)

Move to another school against being present where one is confirmed in pupils' eyes as one whom pupils can gain kudos with their peers by defying (PS10)

Arrange easy tasks against assessment of one's effectiveness as a detector (PS14)

Plan reduction of confusion against assessment of one's effectiveness as a detector (PS15)

23C.8 OMISSIONS BY WRAGG FROM THE POINT OF VIEW OF PS

Use monotony against stimulation to recklessness
(PS02)

Communicate better when instructions are beyond
pupils' ken or ability to decipher or memorize (PS03)

Move to another school against being present where
one is confirmed in pupils' eyes as an ineffective
detector (PS05)

Move to another school against being present where
one is confirmed in pupils' eyes as a ridiculous
responder to rule-breaking (PS06)

Move to another school against being present where
one is confirmed in pupils' eyes as one whom pupils
can gain kudos with their peers by defying (PS10)

Procure brevity when there are more rules than the
pupils can attend to (PS12)

Convey respect against stimulation to reciprocal
antipathy (PS13)

Arrange easy tasks against assessment of one's
effectiveness as a detector (PS14)

Use calmness against assessment of one's
ridiculousness in responding to rule-breaking (PS16)

23C.9 DEPARTURES FROM COHERENCE

RELATIONS NOT CLEAR

between quiet and nasty reprimands

POSSIBLE CONTRADICTIONS

between stating rationale and not patronizing

between not giving attention and not allowing peer
group to give attention

between school general policy and anything else

between reasoning and effective reprimands and not
responding

Some of these would appear only to those consulting
more than one expert, but others would appear even
with one expert. Contradictions are not so much in
the detail of the text as in what readers take from
the summaries.

TABLE 23.1

FACTORS (MENTIONED BY ANY EXPERT, NOT BY PS)

AE01 -relieve tension with humour -use humour constructively

AE02 -ensuring that the pupils respond to the teacher in some way

AE03 -a compromise should be offered in confrontations and disputes

AE04 -confrontations and disputes should be carried on privately -deliver reprimands privately to individuals
-use private rather than public reprimands

AE05 -address reprimands anonymously to the whole group

AE06 -deliver reprimands ...quietly, using 'please', a relaxed tone of voice and a quiet manner, phrasing reprimands as questions

AE07 -state rationale when reprimanding

AE08 -not answering or giving eye contact to those who call out

AE09 -not following unwanted behaviour with rewarding attention

AE10 -reprimands which interrupt only when really necessary

AE11 -dealing effectively with interruptions

AE12 -reprimands and punishments should be sufficiently disagreeable to discourage future misbehaviour

AE13 -making it easier ...for pupils to do the work set than to avoid it

AE14 -discouraging peer group attention to unwanted behaviour

AE15 -emotional difficulties

AE16 -lack of negative consequences

AE17 -employ strategies flexibly and skilfully to take account of which is most likely to be effective and appropriate to the situation

AE18 -be sensitive to your pastoral care role, alert to the needs of individual pupils

- AE19 -interrupt the behaviour as early as possible
- AE20 -prepare lessons thoroughly and structure them firmly
- AE21 -develop an effective question technique
- AE22 -develop the art of timing your lesson to fit the available period
- AE23 -show yourself as a helper or facilitator to the pupils
- AE24 -don't patronize pupils, treat them a responsible beings
- AE25 -try reasoning or academic help before punishment
- AE26 -use investigation and counselling
- AE27 -complement the school general policy, adequately consulting colleague

TABLE 23.2

EXPERTS AGREEMENT ON AE FACTORS
 (numbers of experts mentioning each AE factor)

ALL THREE	TWO	ONE
	AE01	AE02
	AE04	AE03
		AE05
		AE06
		AE07
		AE08
		AE09
		AE10
		AE11
		AE12
		AE13
		AE14
		AE15
		AE16
		AE17
		AE18
		AE19
		AE20
		AE21
		AE22
		AE23
		AE24
		AE25
		AE26
		AE27

TABLE 23.3

THE POPULARITY OF THE PS FACTORS (number of
 experts mentioning each PS factor)

ALL	ONE OR TWO	NONE
PS07	PS01	PS02
PS11	PS04	PS03
PS18	PS09	PS05
	PS10	PS06
	PS12	PS08
	PS13	PS14
	PS15	
	PS16	
	PS17	

TABLE 23.4

EXPERTS VERSUS NOVICES DISTINCTIVES (number of experts mentioning each factor produced by any novice but not PS)

ALL	ONE OR TWO	NONE
		AN01
		AN02
		AN05
		AN06
		AN07
		AN08
		AN09
		AN10
		AN12
		AN13
		AN14

TABLE 23.5

FR VERSUS PS DISTINCTIVES
 (whether FR mentions factors that are from
 PS but not experts)

IN FR	NOT IN FR
PS08	PS01
PS12	PS02
PS13	PS03
	PS04
	PS05
	PS06
	PS09
	PS10
	PS14
	PS15
	PS16
	PS17

TABLE 22.6

OP VERSUS PS DISTINCTIVES
 (whether OP mentions factors that are in PS
 but not experts)

IN OP	NOT IN OP
PS08	PS01
	PS02
	PS03
	PS04
	PS05
	PS06
	PS09
	PS10
	PS12
	PS13
	PS14
	PS15
	PS16
	PS17

23D. SUMMARY OF COMPARISONS

(a) Agreement among the experts

Table 23.1 shows the factors mentioned by any expert and not in PS. Table 23.2 shows that the experts agree to a very small extent about these factors.

(b) Experts versus PS

As Table 23.3 shows, those consulting all three experts would miss some but not many of the PS factors. Those who consulted only one expert might miss quite a lot.

(c) Experts versus novices' distinctives

How many of the factors in novices minds but not in PS are agreed by the experts? Table 23.4 shows that the answer is none.

(d) PS distinctives versus non-standards

Table 23.5 shows for FR and Table 23.6 for OP that not many of the PS unmentioned by some experts appear in the non-standard accounts.

It was possible to find a practitioner with the expertise of experience who had similar information to that offered by the psychological standard application. This gives some credence to the psychological standard's inclusions.

Ideas harboured by the novices that they would not get from the psychological standard they would not get from the experts either. This gives some credence to the psychological standard's drawing attention away from some ideas.

Other experts - and the non-standard psychological applications - missed some of the inclusions in the psychological standard. This gives the standard some distinctiveness.

CHAPTER TWENTY-FOUR

REVIEW OF THE CASE STUDY

This chapter looks at (A) findings, (B) caveats, (C) peculiarities of the case, and (D) resolutions.

24A. FINDINGS

1. Among one group of graduate pre-service trainee schoolteachers, lack of discipline and lack of interest from pupils were problems thought about.
2. It proved possible to follow the standard process of chapter 8 and the list of psychological variables in chapter 12 in producing information about these problems.

3. Three non-standard applications, of a shower of field research, a one-paradigm psychology and a general psychology, differed little in cost but considerably in content from the psychological standard. The differences were not contradictions but the making of different selections. From the PS point of view some of the omissions in the non-standard accounts could be crucial to success in solving the practical problem.

4. The novices' lesson plans showed lack of attention to factors that by the psychological standard are important in combatting lack of interest in pupils. This could be crucial in some common scenarios.

5. The non-standard application would not have improved the lesson plans as adherence to the psychological standard would have done (from the PS point of view).

6. The novices' conversations showed lack of attention to factors that by PS are important in combatting indiscipline, and attention to factors that by PS are not important in combatting indiscipline. By PS the omissions could be crucial in some common scenarios.

7. The non-standard applications would not have

changed the inattention to important factors as the psychological standard would have done, but neither would they have bolstered the attention to unimportant factors.

8. It is possible for an expert to get quite close to PS but the experts vary and in one case the expert is quite far from PS. Therefore PS from its own point of view has something to offer even the experts.

9. But on aggregate the experts disagreed less with PS than the novices did - suggesting that to an extent PS and experience are teaching the same things. (PS would do it much more quickly.) The non-standards are not as good as PS at outstripping the experts, or to put it another way the experts and the non-standard agree in some omissions.

24B. CAVEATS

What is revealed about the trainees is not their abilities: had they been reminded of the need to interest the children before writing their lesson plans, they might well have planned appropriately. What is revealed is what is prominent in their minds in conditions similar to those of real practice (where there is no-one to remind them) - and that is

the important thing to be revealed.

The thinking that is done in tranquillity about lack of discipline is not the only determinant of how the trainees behave in the heat of the moment facing pupils. It has been acknowledged throughout that knowledge is not the only influence upon action.

Different methods would have yielded more or fewer agents and antecedents from the trainees. It was argued that the methods used would exclude those thoughts and only those thoughts unlikely ever to influence action on any realistic occasion.

The results are reported as one case. The conclusion is no more than that what was found has happened once and therefore CAN happen.

Nothing can be learned about experienced ordinary teachers from the experts studied here - who were not ordinary teachers.

Most judgements are made in terms of the standard - inevitably and purposefully.

Meta-purposes were not considered: one might furnish information about lack of discipline with a view to purposes other than improving their practice directly - it might be to make them more willing to take

advice, for example.

Another problem not looked at was the one that might be raised by someone who thought that the best way to help new teachers is to get them to see their problems as not what they say they are. This possibility is not denied here - it is just another question with another receiver and other subjects to the ones asked here.

24C. PECULIARITIES OF THE CASE

(a) There were only three experts, though it is unlikely that most practitioners would consult more than three experts.

(b) The applications were not shown in their best light. Wheldall and Merrett (1984) for example make more detailed points in the body of their text that are not discernable to the reader of the summary who does not bear in mind the earlier work. But the present purpose was to consider the impact of just taking the summary.

(c) The problems salient for the novices here are commonly salient for trainee teachers in other countries and institutions (Cruickshank et al, 1974,

Elias et al, 1980, Reeves & Kazelskis, 1985, Veenman, 1984 and Vonk, 1983).

(d) The problems dealt with here do not have close parallels in professions other than schoolteaching.

(e) The novices here were not unusual among trainee schoolteachers in general in intellectual or experiential background.

(f) The experts, though few in number, probably did not give a biased view of expertise. A law of diminishing returns may be expected to affect increases in the number of different experts consulted.

(g) The applications are held to be representative of well known types. The general psychology application was very similar to most of the textbooks mentioned in chapter 1 as offering psychology to various professions.

24D. RESOLUTIONS

The standard process and use of the list of psychological variables in chapter 12 are feasible.

Using the psychological variables in chapter 12 and the standard process of application in chapter 8 can - has once - produced something better (by its own standards) than non-standard applications.

The psychological standard had something to offer the novice in this case - possibly crucial help with a problem that is potentially disabling for the teacher and harmful to the pupil.

The experts' accounts were closer to the psychological standard than either was to the novices' accounts.

These findings are in line with earlier predictions; it is not surprising that the one-paradigm approach covers a narrower range of variables, that showers of field research and applications of general psychology in the traditional non-standard way, being unsystematic, have gaps, that to achieve what it did, the psychology had to be a good eclectic psychology applied by the standard process of chapter 8.

CHAPTER TWENTY-FIVE

CONCLUSIONS

This chapter looks back on the topics and related themes identified in chapter 1 and seeks to draw conclusions. The sections are (A) the role of formal psychology in psychical practice, (B) implications concerning professional thinking, (C) implications concerning reflection and research, (D) implications concerning education, (E) implications concerning giving away psychology, (F) implications concerning eclectic psychotherapy, and (G) implications concerning further work.

25A. THE ROLE OF GENERIC PSYCHOLOGY IN PSYCHICAL PRACTICE

(a) The roles that knowledge should have in informing psychical practice fully are proposed to be as set out in chapters 9 and 14.

This conclusion depends on the choice of fundamental properties desired in a process of application (in chapter 3), and the analyses (in chapters 4-7) of these properties.

(b) None of these roles must necessarily be played by generic psychology. It may currently have something to offer over alternatives in particular cases. Even at its most useful it cannot supply every need. But at its best and in some roles it may compete, as articulated in earlier chapters. Among these contributions are the model of the provenance of psychical phenomena on which the proposed standard process is based - and many possibilities that might otherwise be ignored are raised by the detail of this model. In its roles, psychology is at its most cost-effective when it is generously eclectic and taking every step in the standard process.

These conclusions depend on the analysis which used a particular definition of psychology and the process as derived in the previous case. The statements above would remain true unless rather big changes were made in the definition of psychology or the

proposed standard process.

These conclusions also depend on the division of users into simple solvers, process followers, adaptors, and designers. What the adaptor might adapt was fairly arbitrarily chosen.

(c) The other kinds of knowledge that may or must contribute to psychical practice include common intelligence, knowledge of the commission, knowledge of the subject, knowledge of the receiver, knowledge of the particular conditions, knowledge of similar conditions and people, and knowledge of specialised techniques.

This conclusion depends on findings and an analysis that categorized the findings. Other ways of categorizing the same findings would have been possible. But given these categories, all had enough members to ensure their survival unless big changes were made in the standard process and hence in the knowledge required to deal with it.

(d) Psychology at its best and in its role can be better than non-psychology, for example bringing potentially crucial factors to the notice of new practitioners better than non-standard applications or expert practitioners.

This is not a very strong claim: 'can be better'
means no more than 'has been better once'.

25B. IMPLICATIONS CONCERNING PROFESSIONAL THINKING

Should generic psychology be involved in professional thinking?

(a) Using the language of Schon (1983, 1987) generic psychology COULD be a contributor (though never the sole contributor) to professional practice in swampy lowland areas, to the practitioner's tacit knowledge and to the repertoire the practitioner uses in reflection-in-action. Furthermore generic psychology could be better - more comprehensive or getting to the point more quickly - than competing contributors in some cases, and OUGHT to contribute in those cases.

(b) It would be too limiting to agree with Fenstermacher (1987) that generic psychology merely provides beliefs about what in general leads to what: it provides otehr things as well, and non-psychology can provide the general beliefs.

(c) There is no support here for the view for example of Barrow (1990) that disciplines such as generic psychology are essential to the effectiveness of practice.

(d) The kind of contribution from psychology that McNamara and Pettit (1991) criticise is far from being the only possible one, and the method of

communicating it far from being the only method. Therefore while their criticisms of that example were weighty, they should not conclude that social science can be written off as an influence on professional practice.

(e) Tomlinson (1992) could not choose between three alternative explanations for psychology's poor showing in the field of education, psychology's having poor material, Schon's being right or a tendency to one-paradigm exclusivity. There is support here for Schon's being partly right - as noted above, one paradigm exclusivity is not helpful, and psychology did have material that was undeveloped in areas of major concern to practitioners and not oriented in the most useful way.

(f) There is support here for the positions that professional psychology can make a contribution through knowledge, not just through skills and attitudes, that practical knowledge of some kinds and generic psychology can be seen as belonging to the same family, and that methods used in everyday life, such as drawing conclusions from first and second hand evidence are no different in kind from the formal methods of psychology as a discipline.

(g) Generic psychology has some potential to contribute usefully to current knowledge, but its

usual efforts to do so could be improved upon, by adoption of the best practicable process proposed here.

25D. IMPLICATIONS CONCERNING RESEARCH AND REFLECTION

What questions should be researched into or reflected upon by practitioners to make psychical practice better directly through knowledge?

Because the question is about research BY PRACTITIONERS, it is about local research, research about local populations and local conditions. According to the work here the answer depends on whether the practitioner is a simple solver, process follower, adaptor of process or designer. The methods follow the particular questions in the ways indicated in earlier chapters. The questions with a psychical element include the following.

A simple solver might research into or reflect upon

-what happens in each attempt to take action

A process follower might research into or reflect upon the same as the receiver, and also

-what may be an acceptable problem

-who may be people whose psyches are the subject of the problem

-whether someone is a person whose psyche is the subject of a problem

-what may be an acceptable behaviour

-whether a particular behaviour with subject is part of an identified problem with subjects

-whether a behaviour is expectable

-whether a behaviour is presently available

-whether a particular less considered end is incompatible with a particular behaviour

-whether a particular belief is reasonable

-which E might be followed by salience of a particular belief

-whether an ability is required for the performance of a particular behaviour

-what is the strength of the possibility that

particular values of a set of possible antecedents
will occur in a particular case

-what would be a particular manifestation of a
generally expressed agent

-whether something is a particular manifestation of a
generally expressed agent

-whether agents are expectable of the receiver

-whether an agent is immediately available

-what receivers or potential receivers believe (for
communication) (though followers may not often be
communicating to receivers).

There is nothing local for an updater or a designer
to research into or reflect upon other than the
questions mentioned for the receiver and the
follower.

25C. IMPLICATIONS CONCERNING EDUCATION

What is implied about the role of education in
psychology for the improvement of psychical practice

directly through knowledge?

(a) It would not be helpful for people to be educated in the disciplines as such, as Barrow (1990) advocates.

(b) The codified practical experience advocated by for example Van Strien (1987) and McNamara (1991) could be useful; but in some cases knowledge from generic psychology at its best could be slightly better and quicker to be acquire.

(c) In cases where psychology is better, what should be given depends on whether the trainee is to be a simple solver, a follower of a procedure, an updater or a designer. This is not a decision to be made here - it depends on what is practicable apart from anything else. But to illustrate the possibilities - it might be decided to train some schoolteachers as updaters, and most professional psychologists as designers.

(d) The simple solver, whose practice is intended to be the solving of recognized problems using given applied information, will be educated by being given the information, and the means of assessing whether any specified conditions exist.

(e) This is not as simple as it sounds if the

information is derived as in the proposed standard (problem-oriented, and so on), and communicated according to the standard. And education in the means of assessing whether conditions exist may not be achieved in a minute of lecturing. One such assessment for example could be of whether a pupil is nearing a threshold for reacting aggressively. Education in this might demand time care and special methods. Certainly even in this the most simple case, the education in psychology is likely to look different from the way it looks now.

(f) The follower, who is intended to follow a given process of application to address a new problem may need education in certain procedures, such as the steps of the standard process, and the means of making any decisions that are left to the follower by the process. The main parts of this will be a list of testable variables, the combinations antecedent variables must be in, means of assessing the relevance and weight of antecedents, agents of change and how to particularize them.

(g) The updater, who is intended to update a given process, may need to be made familiar with one account of the provenance of sychical phenomena so that possible additions can be slotted in correctly.

(h) The designer needs to be able to produce an

account of the provenance of psychical phenomena.

(i) The communicator of psychical information is another practitioner and will need to be educated in psychology - whether as a simple solver, a follower, or whatever. This is the point of Gale's (1990) notion of psychologizing the teaching of psychology.

(j) The foregoing sections are confined to education in psychology. But the types of people mentioned will need education in other matters as well, including those identified in chapter 25A (c).

(k) Some of these are likely to be acquired in first hand experience and would seem to be good topics for the codified experience of other practitioners.

(l) The information derived from psychology on particular problems recommends action by the receiver, and in some cases education of the receiver. For example on lack of discipline there is a suggestion of the receiver's need to practice.

25E. IMPLICATIONS CONCERNING GIVING AWAY PSYCHOLOGY

It appears that some psychology might be worth giving away for some purposes and provided it is given in a

certain form. The giving away that writers for the general public have been doing at least seems closer to the proposed standard than the efforts of those who write textbooks for psychical practitioners.

25F. IMPLICATIONS CONCERNING ECLECTIC PSYCHOTHERAPY

The purposes in respect of this theme were limited at the outset, the main one being to signal that this and the other foregoing themes are related.

The way to study eclecticism is to have one system which can identify all distinctive, alternative and missing contributions and allow their impact to be assessed. A high degree of articulation must be possible within a common language.

Any common language for psychical practice is going to have to be developed from a model of the provenance of psychical phenomena.

The advantages of eclecticism of various kinds are likely to vary from problem to problem. In some cases the additional costs of being eclectic might not be justified by the effects.

25G. IMPLICATIONS CONCERNING FURTHER WORK

Future workers prepared to accept the same brief as here might revise the fundamental principles, correct the derivation of steps from the principles, and replace the simplifications. Given a more established standard, the questions asked here could be repeated, or extended to other problems and practitioners.

It should facilitate further systematic work that 'best' was defined in terms of fundamental desiderata, and that there was enough articulacy to link each step to one fundamental desideratum.

One of the most basic purposes of the work reported here was to make it possible to move away from the vague phrases in which the application of psychology to practice is often discussed, for example that psychology 'provides a framework for practice' or 'underpins practice'. I hope the vagueness of such phrases can now be left behind.

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