Brit. J. Psychiat. (1964), 110, 465–477

The Psychology of Policy Making and Social Change

The Thirty-Eighth Maudsley Lecture, delivered before the Royal Medico-Psychological Association, 15 November, 1963

By Sir GEOFFREY VICKERS

I am grateful to those who have included me in the honourable company of Maudsley Lecturers. When you invite a speaker from outside psychiatry, I think you hope to find one who will speak from his own central interest and experience in a way which will illuminate your own. After some inner debate, I decided that I would try to justify that expectation, even though my experience may seem remote from yours. I hope none the less that what I have to say may have some relevance to some of the sciences on which you rely, perhaps even to your profession.

I have spent my life in practising the law and helping to administer public and private affairs. I have thus had the chance to observe and even to take part in the making of policy; and since I retired from these activities sufficiently to reflect on them, I have tried to understand them —so far with very limited success. The more I think about the process, the stranger it seems. And yet it is obviously important, not only because we all suffer or benefit from the decisions of those who control our destinies but also because we all do it. The behaviour of boards of directors, cabinets and courts of law displays in a conveniently explicit form some of the commonest workings of the individual mind. I will begin by explaining what seem to me to be the central enigmas. Then I will ask you to follow some examples which will, I hope, make them clearer. Then I will speculate on the growing points of psychological knowledge, which may in time make these riddles less puzzling than they seem to me now.

Appreciation and Regulation

I can best begin by examining the concept of regulation. By regulation I understand keeping some relation in line with a standard. The relation may be quantitative, like the rate of recruitment of nurses to fill vacancies in a hospital or the rate of money intake to balance spending from a bank account. Or it may be qualitative, like the standard of service given by the hospital or the value for money achieved by the spending. There are many types of situation which involve regulation in this sense. They all have in common that what is to be regulated is a relationship extended in time; not something which can be attained once for all, but something, like a mariner's course, which must constantly be sought anew. There must therefore always be some governing relation by reference to which the actual course of affairs may be judged. I will call such governing relations "norms".

These norms may be no more than those expectations which we regard and accept as "normal" or they may set levels of aspiration far beyond the expected. It is a feature of modern societies that their "norms" diverge from their "normals" in a way which traditional societies would find dangerously disturbing—as perhaps it is.

I thus distinguish regulation in the sense of norm-holding both from goal-seeking and from rule-following. I believe that psychology has done a disservice to the study of higher mental function by making goal-seeking the paradigm of rational behaviour. I do not accept the view that all norm-holding can be reduced to the pursuit of an endless succession of goals. Rats, it is true, maintain their metabolic balance—a norm—by a series of excursions after food, each of which can be regarded as goal-seeking.

Some humans similarly maintain their solvency by periodic excursions after money. But this is not a sophisticated form of financial control, precisely because it shows a failure to appreciate relations in time; and an enhanced capacity to appreciate relations in time is clearly one of the distinguishing marks of our species. Anyone familiar with the papers presented to any governing body will realize how much trouble is taken to present the major variables as flows in the dimension of time.

It seems odd to me that while this is familiar to administrators and engineers psychologists should still present "goal-seeking" as the normal if not the only type of rational behaviour; for to explain a "doing" solely by reference to its intended results would seem to raise insoluble pseudo-conflicts between "ends and means", rules and purposes, while it leaves the ongoing activities of norm-holding with their inherent, ongoing satisfactions hanging in the air as a psychological anomaly called "action done for its own sake". Even to drive a car is *always* an exercise in the maintenance of a complex set of spatial and temporal relations, though it is often also resorted to as a means of getting from A to B. To practise a profession, to live a life, is even more obviously, as it seems to me, a norm-holding activity, in which goal-seeking plays an occasional and subordinate part. I sometimes wonder whether the absorption with goal-seeking reflects the limitations of research method or even the diseases of an acquisitive society, rather than the structure of the human mind.

As Professor Peters (1) has observed, we have no reason to suppose that any one formula will suffice to explain all human motivation; but on the contrary, we have every reason to believe that biological and social evolution have added new and disparate regulators to those we share with our fellow creatures and that we are often confused by their inconsistent promptings. I am concerned to follow the regulator which I have called control by norm.

This process has been modelled by communication engineers more effectively than by psychologists. The engineers have surrounded us with self-controlling devices, from the simple thermostat to the complexities of rocket control, all of which exemplify control by norm and all of which involve a circular process, falling into two main segments. In the first segment, the actual course of affairs is compared with the norm and the comparison generates a signal. In the second segment, the signal sets going processes which select and trigger some action. In due course the effect of this action, along with all the other changes that have happened in the meantime, is "fed back" to the first segment through later observation of the "actual course of affairs" and so plays its part in further regulative action. This greatly oversimplified picture describes a process which is illustrated no less by a human helmsman than by an automatic pilot, no less by a government controlling its international balance of payments than by an automatic regulator controlling a chemical plant.

The second pair of these examples introduces a complication. Controlling the balance of payments is for a government only part of its total task, a task which involves pursuing also a vast variety of other norms not wholly consistent with each other and greatly exceeding in their total demands the aggregate resources available. The whole task can be neither completely specified nor completely performed. No one would willingly design a robot chemical plant controller to cope with such a situation and it is not clear to me that anyone could.

Where the norm can be taken as given, much important work has been done both by psychologists and by system engineers in exploring the mechanisms of problem solving and learning; in discovering and imitating the mechanisms by which organisms solve problems, devise alternative means and choose between them and improve their performance by practice. All this has greatly illuminated the second segment of the regulative cycle.

I, on the other hand, am concerned with problems of choice arising in the first segment; with the setting of the norms to be followed and hence of the problems to be solved. The norms which men pursue, and hence the problems which they try to solve, are, I suggest, largely self-set by a partly conscious process which merits and is susceptible of more study than it has yet received; and it can conveniently

be studied in the overt processes of public life, where it is more than usually explicit.

It has been my experience that the debate which occupies hours, days, even months between the posing of some problem and its disposal serves not so much to produce a series of possible new solutions as to alter what those concerned regard as the relevant facts and the way in which these are classified and valued. I recall an occasion when an important governing body debated for a year what should be done in a situation which seemed to require some radical solution. They finally decided that there was nothing to be done. No action followed—yet nothing was ever the same again. The mental activity which reached this negative conclusion radically changed their view and their valuation of their situation. In particular, it changed their idea of what can be put up with, a most important threshold in the regulative cycle.

Men, institutions and societies learn what to want as well as how to get, what to be as well as what to do; and the two forms of adaptation are closely connected. Since our ideas of regulation were formed in relation to norms which are deemed to be given, they need to be reconsidered in relation to norms which change with the effort made to pursue them.

So I shall concentrate on the processes involved in the first segment, and I need a word to describe them. Since I cannot find one in the literature, I will call them collectively "appreciation". I will credit the appreciating agent with a set of readinesses to distinguish some aspects of its situation rather than others and to classify and value these in this way rather than that, and constantly to revise these readinesses; and I will describe these readinesses as an appreciative system. I call them a system, because they seem to be organized as a whole in ways to which I will return, being so interrelated that a change in one part of the system is likely to be affected by and dependent on changes in others. I will use the term "appreciative setting" to describe the governing relations (norms) to which such a system is for the time being set to respond; and I will describe these settings as an appreciative field when I am concerned with the way in which they interact with each other. These terms, I hope, will gather meaning as I proceed.

The Appreciative Process

Let me give some examples to make the point more precise.

The classic example of appreciation and regulation is, of course, the helmsman, whether human or automatic. He must read continuously from the compass card not only the current direction of the ship's head relative to its course, but also the direction and rate at which it is swinging and the rate at which that rate of swing is itself increasing or diminishing. These rates must be compared with his learned knowledge of what they ought to be to steady the ship on her course; and it is this comparison which does or does not generate a signal to the powered gear which controls the rudder. The sending of no signal is as much the result of this matching process as is the sending of a signal, and either may or may not occur when the ship is momentarily on course.

Thus even with so simple an appreciative mechanism as the automatic pilot, appreciation is a fairly complex, continuous process. It is not, however, obscure, because the course is given. The relevant facts may indeed be enlarged to almost any degree of refinement, but the process itself is specifiable, comprehensible and exact.

It thus contrasts with even the simplest parallel from daily life. The closest parallel which occurs to me is the function of keeping stocks of material in an industrial plant at some predetermined level. The buyer must watch the rate at which, say, steel is flowing out of store, and adjust his orders with due regard to the delays in delivery to be expected from his suppliers; and he must be alert to changes both in the rate of consumption and in the speed of delivery.

Thus the buyer, like the helmsman, must regulate rates of flow in accordance with learned norms. This, however, does not exhaust his job or define his success. He must get good value for money, yet keep good relations with his suppliers. He must be alert to new sources of supply, to variations in the reliability of his

suppliers and to varying nuances in the needs of those who will use what he buys, and in other even less specifiable ways he must be an acceptable member of a team. What constitutes good or bad performance in these dimensions is not a norm which can be defined, as stock levels can be defined; it could not be modelled, as the maintenance of stock levels could be modelled, with a tank and a few pipes. Yet it is a norm which is in constant use, for it is used by the manager to assess the buyer.

It is a changing norm. It may change with the growth of the business. Standards which are good enough in a small concern, where the occasional shortfall can be easily made good and relatively large surpluses do not matter much, may become unacceptable to the manager when the business has grown or has come to operate in a more competitive market. Equally, the manager may change his standards, unprompted by any change in the observed actual. He reads an article or goes to a conference or talks to a friend; and thereafter, looking at the buyer plying his accustomed task, he judges the familiar performance for the first time unacceptable, because he has revised his appraisal of the role. Or again, the buyer may himself re-define his role and invite the manager to reset his expectations.

The norms embodied in a role are for the most part unspecifiable, like the skills analysed by Polanyi (2); yet an important industrial study by a psychiatrist (3) finds in the extent of these unspecifiable, discretionary duties the true differential between one job and another.

Thus the buyer's job is different from that of the helmsman. He must maintain several not wholly compatible relationships within limitations which are either inherent in the situation (such as the amount of his available time and energy) or imposed from without (like the stock limits set by the manager). His performance is in its way a work of art, *one* answer to a continuing challenge which no two men will answer in the same way. And the challenge itself, what is expected of him by himself and others, grows, shrinks and changes partly through extraneous forces and partly through his own activity.

These aspects of policy-making become more marked as we climb the hierarchy of an organization. The stock levels, which were a datum for the buyer, were for the manager who set them the fruit of an exercise of appreciative judgment. He wanted to lock up in idle stocks as little capital as he thought would guard against the risk of stopping the plant for lack of some essential material. These governing relations were in turn only two among many conflicting norms governing the use of the capital available to him, which in their turn were linked with other norms involving the rate of development of new products, relations with creditors and a host of other disparates.

It is often supposed that all such norms can be ordered in a hierarchy in which all but one are ultimately subordinate. This I believe to be untrue even of profit-making enterprises. Are businesses supposed to be as human as is consistent with efficiency or as efficient as is consistent with humanity? Neither simplification holds water. They are regulated by a complex of expectations, political, economic, legal, social and personal, none of which has a prescriptive right to precedence. These norms have, of course, what we might call a "pecking order", but the order is open to be re-disputed whenever occasion arises. Every feed, so to speak, results not only in the consumption of corn but also in the revision of the pecking order; and the second effort is often more important than the first.

The point is, perhaps, more clearly evident, if we consider policy-making in a local authority. The authority, like the business enterprise, must maintain its existence as a dynamic system by keeping men, money and materials flowing through its organization, as a cow must maintain its intake of grass, air and water. In this respect they are comparable dynamic systems. In addition, usually as another aspect of the same activities, it must provide a variety of services, each of which consists in maintaining through time a complex of relations quantitative and qualitative—for example, both school accommodation and the education which goes on there. Each of these services is judged more or less acceptable by the current and diverse standards of those concerned; and each is competing with all the others for further

realization within the overall limitations of the authority's resources and powers. The whole set-up is a dynamic system of precarious stability. Its balance may be disturbed in either of two ways; in practice it is constantly being disturbed in both ways. Total resources may shrink or grow relative to current demand, making overall restriction necessary or expansion possible somewhere; and policy must decide where the restriction shall fall or the growth occur. Alternatively, the norms by which these services are judged may change, increasing or reducing the claim of any one relative to the others and demanding a redistribution of energy and attention over the whole field; and policy must decide what redistribution shall be made.

In any case, any major change will reverberate through the whole system, affecting and affected by even such apparently remote variables as the personal ambitions of officers and the nostalgic memories of councillors. What some see as a housing issue, others will see as a problem of road development or sewage disposal or even as a matter of personal relations; and all these views are valid. There is no one answer to such protean problems. Whatever the solution, it will leave the appreciative setting changed and the appreciative field still unstable.

In observing such situations, I think we can usefully distinguish two strategies, which alternate with changes in the situation. When for whatever reason achievement is falling in relation to current norms, thresholds of acceptability have to be dropped; and a hierarchy of values develops, which appears more obvious as things get worse. The system in jeopardy sheds first the relations least essential to its survival. An organism in danger of death from cold restricts its surface blood vessels and risks peripheral frostbite to preserve its working temperature at more vital levels within; businesses facing bankruptcy and nations facing invasion experience a similar clarification of values. But an understanding of this *protective* strategy will not suffice to explain what will happen when achievement is expanding in relation to current norms. What new, more exacting norms will structure the new possibilities? *Expanding* strategy needs its own explanation. An executive who is outstanding at salving undertakings in danger of dissolution is not necessarily so successful in exploiting success; certainly his course in an expanding strategy is not predictable from his performance in a protective one. In the same way, I suppose, theories of ego development cannot be inferred from any study of ego defences.

Whether in conditions of protective or expansive strategy, the policy makers in any local authority must resolve conflicts which we tend to describe as pressures, suggestive of the pressures of a barometric map; but these pressures operate in a field which is structured by the way in which it is regarded; and this selection of what shall be noticed and how it shall be classified is often decisive of the way in which it will be valued. A local authority is unlikely even to notice issues to which it is not organized to attend; and since its departments are designed for action, its appreciative capacity may be grossly limited or distorted by its organization. The current debate about the best way to assign ministerial responsibility for higher education and research attests an awareness common to all the disputants of the importance of organization in deciding what issues shall be distinguished for regulation; and the distorting effect on appreciation of an organization which is purely action-oriented is the reason why so many organizations establish planning and intelligence divisions in independence from their action-oriented departments.

The normative effect of simple discrimination could be illustrated from the policy-making debates of any kind of governing body, but it is most clearly seen in the development of the common law, a process by no means so remote from policy making as might at first appear. So I will adjourn for a moment to the law courts, where a judge is hearing a case in which damages are claimed on the ground of the defendant's negligence. It is for the judge to say whether the defendant was negligent within the meaning of the law. What then is negligence? The law's only answer is to point to all those recorded instances in which negligence has been found to be present or absent.

From these the judge must collect a gestalt, to which he must assimilate or from which he must distinguish the case before him. That act of his will alter the gestalt, however slightly, for the future, and this prospective effect is present to the mind of the judge *before* he gives his judgment and may well affect the judgment which he gives. For he knows that his decision is not only decisive for the case before him but also affects future decisions. His act of appreciation not only determines regulative action in the particular case but also changes, by its own activity, the appreciative system which it expresses.

Hence both the possibility and the importance of the dissenting judgment. In 1920 the Supreme Court of the United States heard an appeal by some men who had been convicted of sedition for publishing pro-Bolshevik pamphlets (4). Seven members of the Court upheld their conviction. The eighth began his dissenting judgment thus:

"Sentences of twenty years imprisonment have been imposed for the publishing of two leaflets that I believe the defendants had as much right to publish as the Government has to publish the Constitution of the United States, now vainly invoked by them."

It may seem strange that in a country where the simplest layman is supposed to know the law, the highest judges should be allowed publicly to disagree about it. It is strange, but no more strange than the fact which it so usefully recognizes, namely the power and not merely the power but the inescapable responsibility of men to choose what meaning the facts of life shall bear. To the other judges the publication was an act of sedition; as such the law required that it should be suppressed and punished. To Justice Oliver Wendell Holmes it was an expression of opinion; as such it was absolutely protected under the constitution.

Which was it "really"? As well ask that question of the ambiguous figures with which psychologists illustrate their text-books; or better, those they use for your projective tests. It could be seen in either way, but not in both at once. Holmes was more prone to see threats to the free speech of men; the others more prone to see threats to the stability of society. They were at issue not on what to do but on how to see; and unlike most of us, they knew it. These are the divisions which have always rent and will always most deeply rend mankind. They are disputes about the architecture of our common appreciative system.

The dispute was not confined to the court room. An unanimous judgment would have comfortably confirmed the current setting of the country's appreciative system. Holmes' judgment made no difference to the appellants; but it released a strident mis-match signal in a field in which Americans, like other people, are sensitive to expressions of doubt and disunity. It thus contributed to the setting of the country's appreciative system, a process which, like the regulative segment of the same circle, can never be accomplished once for all. In 1920 the future Senator McCarthy was already a young man.

I wish I had time to extend these examples to show, in particular, the rigid upper limit to the rate at which the appreciative system can assimilate change. But these must suffice. I would summarize their lessons as follows. The policy-making process is a response to the conflicting and superabundant demands generated by appreciating a situation. It has two distinct results—the one an overt, regulative response; the other, a change in the setting of the appreciative system; that is, in the choice of what shall be noticed and how it shall be classified and valued. The second is often the more important and results from the mere exercise of appreciation, whether regulative action follows or not. When regulative action does follow, its claim to "rightness" can be neither calculated before the event nor demonstrated afterwards. It can only be allowed or denied by a judgment similar to that which produced it. This judgment seems to involve some recognition and appraisal of form—which is why I have referred to it as in some sense a work of art.

Some Psychological Implications

I want now to survey briefly the growing points in our understanding which may make this process less obscure and perhaps less inefficient than it seems now.

That the norms which control us, socially and individually, are created, developed and changed by the very act of recognizing them, odd as it sounds, is not psychologically news. The child *learns* to see, building up from repeated experiences the schemata by which future experiences will be classified. The medical student, learning to read a pulmonary radiograph, must go on looking until experience builds up in him the schema which alone can give the confusion meaning. In this process perceptual schemata seem to be only one example of all conceptualization. G. H. Lewes (5) expressed the general principle as long ago as 1879 when he wrote—"The new object presented to sense, the new idea presented to thought must be *soluble* in old experience, must be *re*cognized as like them; otherwise it will be unperceived, uncomprehended."

Thus we have known for a long time that the world we live in is a mental artifact. Our knowledge of this artifactual world has grown since 1879 vastly but patchily. One of the least developed areas, as it seems to me, is our knowledge of the skills involved in making the artifact and of the ways in which these skills may best be developed. We can recognize, for example, in the research worker and others, the capacity to handle more numerous and refined schemata; to group observations and communications more ingeniously into complex patterns, displaying new relationships, and so to build up systems of schemata more complex, more self-consistent and more fruitful of further development. The importance of these skills is obvious. Even our most recent legislation on mental health, with its vigorous attempt to assimilate mental to physical illness, designed to displace some crude and ineptly valued schemata from the past, may itself seem crude to a later generation more ready and able to evolve for mental illness a schema, perhaps several schemata, of its own.

Again, if I am right, mental processes which produce *the correct answer* by applying specifiable procedures to given facts differ from those which produce *a good answer* by applying less specifiable processes of judgment to facts of which the relevance is itself a matter for judgment. The former, however complex, can be proved right or wrong; the latter, however simple, can only be approved as good or condemned as bad by a judgment of the same kind as that which produced them. I have stressed the ubiquity and importance of the second at all levels of executive responsibility; but both are needed, and we need to know more of the educative processes which develop them. Theoretically, this raises important issues about the value as educational disciplines of different fields of study in the arts and sciences. Practically, it is of great concern to, for example, all concerned with the education of engineers, surely destined to be both technologists and managers; and it has, I think, a corresponding relevance to medical education. I am sometimes surprised that university departments of psychology devote on the whole so small a share of their attention to the appreciative activities going on in the captive populations of which they are part.

We have learned, thanks to your profession, far more about the disorders of mental process which may distort the appreciative system; so much indeed, that a layman might suppose that freedom from disorder would produce uniformity of mental architecture. This would seem not to be so. Differences in the appreciative system are not necessarily evidence of disordered process. Studies of race prejudice, for example, have indeed shown psychopathological features from which children seem to be free; but children are also free from brotherly love, still more from the concept of the brotherhood of man. Studies of the origin of these more acceptable norms are less common in the literature; but it is clear that variety in the appreciative system is more than variety in pathology.

It is no more pathological to fear a threat to one's appreciative system than to fear bankruptcy or eviction. The biblical scholars of Tübingen who, a century ago, questioned the authorship of some of St. Paul's epistles were reviled by some of their professional colleagues with a bitterness which seems in retrospect more violent than the search for truth required; but the most hostile theologians of the day attacked them no more violently than many scientists at much the same time were reviling those who

were trying to find room in the mansion of science for the facts of hypnosis. Need we criticize the "two cultures" for being equally human? Need we describe as pathological the reluctance of either culture to embark on massive reorganization of its appreciative system, or even its stark inability to admit the new until room could be found for it without disrupting the whole?

Yet the redesigning of the whole to admit the new is equally a mental skill, not wholly unconscious, an object as well as a by-product of the policy maker's art; a skill of especial importance at a time when an appreciative system is unstable and under rapid change, as ours is today; most of all when many policy makers and others appear blissfully unaware that any appreciative system has an upper limit to its possible rate of change, which cannot be passed without disaster. This skill involves understanding the appreciative system as a system.

The appreciative system deserves to be taken seriously as a system; neither a pale reflection nor a pathological distortion of the "real world out there", but a semi-autonomous system in its own right. To do so is timely, since the system is being manipulated as never before; it is also timely because the understanding of systems is an active growing point in our understanding of the process of which we are part.

Ecologists have made laymen familiar with the idea of dynamic systems, in which change is due not to this cause or that but to the imbalance of forces in a field over a period. The idea gained ready access to lay minds, alarmed at the unintended repercussions of man's dealings with the land, from the first appearance of dustbowls to the latest extravagance of pest control. This ecological world is also the world of public health and largely even of clinical medicine. Is this epidemic due to a virus, to overcrowding, to bad sanitation or to failure in the supply of a vaccine? Did I catch my cold or succumb to it through fatigue or exposure? There is no answer to such questions. A combination of circumstances left the individual or the society vulnerable to an event which it would otherwise have withstood. For purposes of prevention and cure we may regard as the cause whatever variable we can most easily control, but it has no other claim to be distinguished as *the* cause.

The study of dynamic systems is changing our ideas of the way things happen. We tend to attribute happenings to some imbalance, whether in the population densities of the planet or the pressures of the barometric map or the endocrine system of a schizophrenic. We expect that change in any direction will breed its own limitations or reversals, so as to stabilize on some regular course, failing which it will spin off into chaos in oscillations of increasing amplitude or accelerating linear change. Continuity depends on regulation; stability, not change, requires explanation. Where once we sought causes to account for change, we now seek regulators to account for enduring form.

These regulators grow more complex with the emergence of new ways of mediating change. In a system as simple as the weather, change is mediated largely by pressure gradients. We can describe the behaviour of a meteorological system in terms of the earth's motion, the sun's heat, the existing imbalance of pressure and so on; and though we cannot control it or, save within narrow limits, predict it, we can understand it in terms of familiar mechanical laws. It is much less satisfactory to reduce all the varieties of human behaviour to some kind of tension reduction.

For even an ecologist, studying population densities and distribution in a rain forest or on the Arctic tundra needs a more complex model. He, too, is concerned with flows of energy, whether mechanically, as in the effect of rain-swollen rivers, or chemically through organic metabolism; but the organisms in his field also learn to respond to signals, and he may need to distinguish information flow from energy flow as a mediator of change.

The public health administrator deals with a system in which information plays a far more important part. Traffic accidents to men, as to hedgehogs, happen when information flow fails to keep up with energy flow; but policies to reduce road accidents only begin when these have been identified as a problem in the society's appreciative system, where they must

compete for attention with all the other identified problems. To account for this he must credit his population—and incidentally himself—with power to generate and respond to symbols and to build therefrom a shared, symbolic system. This system serves not only to enable selective interaction, individual and collective, with the physical milieu, but also to mediate human communication and to organize individual experience; and it is this threefold function which gives it its partial autonomy. For the input of observation, dominant among simpler creatures, plays among men an ever smaller part relative to the input of human communication and self-generated speculation, and all these have their own feedback systems which do not always speak with the same voice. I have no time to develop this point here, but I note it as one example of what I believe to be a general tendency to underestimate the extent to which we live in and are confined to a communicated and communicable world.

That the appreciative system is semi-autonomous, is one of several possible worlds which may be developed as its dwelling place by an individual, a group, a sub-culture, a society, that it is not determined but merely conditioned by the world of objects and events which forms its physical milieu, and that it develops partly according to its own laws and its own time scale—all this will not surprise cultural anthropologists, sociologists or those psychologists whose chosen fields of study include behaviour in which this semi-autonomy is implied. It is possible, however, to choose fields of psychological study which exclude this troublesome variable, and there are two strong reasons for doing so. One is the wish to preserve the conditions of rigorous research method; the other is to avoid crediting the mind with a degree of autonomy which is still suspect. This second reluctance should by now have been lessened by the impact of yet another kind of system, the product of communication engineers. For these, with their theories and their hardware, have introduced and made respectable—are they not physicists?—a degree of dualism which psychology may be glad to borrow.

The regulative sub-systems of the communication engineer, such as the automatic pilot or the space rocket's control system, are physical systems no less than the systems which they control. Each is a part of the system which it controls; it probably draws such energy as it needs from the system's energy source. Yet how firmly it stands between the system and the real world out there! The ship's rudder responds not to any signal from without, but to the still, small voice of the pilot, which may be an artifact of any degree of complexity, derived by rules perhaps evolved by itself, from facts produced by its own processes and possibly stored for years. These controlling sub-systems illustrate vividly, at least up to a point, the semi-autonomous development of an appreciative system. The engineer devising the control system of a space rocket faces problems distinct from those of his colleague who is designing the rocket itself, and needs and uses a language equally remote from the language of metallurgy and fuel combustion. In the same way, I understand, a biochemist studying an enzyme system as a mediator of growth uses language equally remote from that of a colleague in the same discipline who is studying the same enzyme system as a link in the process of energy transmission.

It thus becomes possible to talk about the mind as a regulative sub-system with a separateness of concept and language which would have savoured of vitalism a few years ago. Indeed, in some seats of learning the word has already gone round the campus—"There *is* a ghost in the machine. It's a mechanical ghost; we've made one." This sounds too good to be true and I think it is; for if it were wholly true, two enigmas which have bedevilled psychology from the beginning, the "mind-body problem" and the "problem of consciousness", would dissolve without trace in the dualism of "energy-information". Parts of them have indeed so dissolved, but I think a residue will remain, which will be found to be inherent in the even more fundamental dualism of "agent-observer". As such, it may be far easier to state, but I expect it will remain logically incapable of solution so long as science speaks in the third person only whilst scientists sometimes use the first and second person also.

Be that as it may, system engineers and

system theorists have vastly amplified our understanding of regulative behaviour. How far they will amplify our understanding of appreciative behaviour is not clear to me. There are two impediments. The first is practical. System engineers are usually employed to design *servants*; and no one would want to build into a servant discretion to vary the task set, as distinct from discretion to find the best way to do it. Dialogue is not encouraged between the engine room and the bridge about the competence of the helmsman or the wisdom of the course. This, however, is just what is encouraged in the making of policy. People argue incessantly about what most merits attention and how it should be regarded; and in doing so they reset each other's appreciative systems and their own.

The other impediment is theoretical. Information is an incomplete concept; for it tells us nothing about the organization of the recipient, which alone makes a communication informative. This reflects the fact that information as a concept was developed by communication engineers concerned with problems of transmission, who could make assumptions about the state of readiness of the receivers. But clearly the limitation of human systems of communication depends not only or chiefly on difficulties of transmission but on the organization of sender and receiver; and this not merely as terminals in isolated acts of transmission but as linked members in a reciprocal net of dialogue.

Thus assumptions and hypotheses about what I call the appreciative system are necessary to communication theory, and I look forward to the day when psychology will supply them. At present the word "dialogue" is seldom, if ever, found in the index of a psychological textbook. The most ambitious attempt to fill the gap which is known to me is a series of papers by Professor MacKay (6) to which I am greatly indebted; but the main questions implied by my examples remain, I believe, unanswered.

I have no time, even were I competent, to review the contributions of system theorists and system engineers, on the one hand to the psychology of what I have called appreciation, on the other to the practice of policy making. There is much to their credit on both counts; there will surely be more. I will only insist on the nature of these contributions, their potential value and their potential danger.

Our ways of looking at things, what we notice and hence what we ignore, are greatly affected by the physical models we use. I have no doubt that the increasing use of electronic means of solving problems, including so-called policy problems, will affect both the way policy makers see their problems and the way psychologists see the behaviour of policy makers.

I have equally no doubt that none of our current conceptual models suffices to explain to ourselves the kind of appreciative and regulative behaviour which I have illustrated. This may be due simply to current inability to specify our problems with enough precision, inability which time may cure. We have abundant examples of science replacing art. It may also be due to the basic difficulty to which I have referred, of translating the language of the agent into that of the observer. Again it may be due to norm-setting tendencies of the human mind beyond those we have already charted. Almost certainly, in my view, it is due to all three causes. It is therefore of the greatest importance to keep the debate open, by insisting on the full complexity of the phenomena to be explained. For in this field, unlike the physical sciences, a theory accepted may limit or distort its subject matter. A mistaken view of planetary motion, held for centuries, made no difference to the planets, which continued in their ellipses, undisturbed by human preference for circular motion. But a mistaken view of human nature, once accepted, might easily provide its own bogus validation.

This is why I was at pains earlier to bring out the more enigmatic aspects of policy making, a process which I believe, reflects common features of our individual mental processes. For the attempt to understand this process, now going ahead with powerful new conceptual tools, cannot fail to be architecture as well as exploration.

Current Social Policy

I want in conclusion to refer briefly to one

aspect of social policy which well illustrates the development of our appreciative system and which seems to me to have some special relevance to your profession.

The 19th century left us a society in which the individual's responsibility for himself had been increased and his practical and psychological support from his fellows had been diminished to an extent seldom paralleled in history. This state of affairs was supported by a legacy of ideas derived from the same period; that fantastic time when technologies, populations and material wealth were expanding in a world still so abundantly endowed with undeveloped space and resources that the idea of self-limitation was temporarily lost. Revolting against both the factual and the ideological legacy, we have come to accept that the individual's capacity to cope with life depends on three factors all largely beyond his control, namely his genetic heritage and early training, the experiences meted out to him by his milieu, and the support which he gets from his fellows; and that we have a social duty and a social interest to do what we can to influence all three factors favourably—a duty, because society owes all its members the chance of a viable life; an interest, because the individual's breakdown or deviance is not only a loss but a threat to his society. The assumptions which I have compressed into the last sentence represent a vast complex of new norms, which set a problem for policy, the problem not only of satisfying them but of reconciling them with a host of incompatible others which are equally a legacy from the past. In consequence our appreciative system is structured by norms more abundant in total, more varied in scope and more contradictory in content than can often have been brought together in one time and place.

These new norms create or colour a great volume of policy in health, education and welfare, in housing and town planning and in much else besides; policy which should form a coherent whole, though the executive departments concerned are many. Its aim is to support the individual, internally and externally, and to reintegrate him into a physical and social environment more suited to his needs than that which we inherited or that which, impelled by other norms, we are busy making now. I believe that this development will be to our age what public health was a century ago, though in conception it is different and far more ambitious. For its aim is to humanize life or at least to combat the dehumanizing tendencies inherent in other aspects of our development; to provide what might be called a public humanizing service.

The programme lacks a theoretic base adequate to its ambitions. Part of the lacuna is represented by the unanswered questions which I have posed about the development of our appreciative systems. This ignorance will not and should not stop the programme from proceeding. If history is any guide, the further understanding which it needs will emerge first from a jumble of empirical insights and practices, developed in action and transmitted by informal apprenticeship. The practitioners concerned will develop increasingly formalized professional training; these will fight their way into universities as applied sciences; and only then will they powerfully stimulate the pure sciences on which they need to rely. There were many doctors before there was much medicine and much medicine before there was much physiology; and I expect it will be the same again.

The process is already well advanced. Practitioners multiply. The humanizing services need a great variety of social workers. In politics and industry human relations develop their own professionals. Management consultants market new skills in organization. Planners, not least physical planners, make assumptions about the conditions best suited or least hostile to human life and sometimes ask social scientists to help in the task. Schools of social work, of business management, of public administration and of physical planning begin to root and grow in ever closer association with universities. New professions are emerging, based not on biological but on social sciences, on psychology, sociology, cultural anthropology and system theory applied to men and societies. I expect that some of them will soon equal medicine in their prestige and in their reliance on academic and professional training. When those days come, doctors, including psy-

chiatrists, will no doubt be found working in inter-disciplinary teams led by social scientists, no less than the reverse, the appropriate pattern being decided by the nature of the subject matter. Today such associations in either form are even more rare than they need be.

Where, in the course of these new humanizing policies, stands the profession of psychiatry? The question is primarily for you and it may be no bad thing that you answer it at present in so many different ways. But perhaps I might venture in closing to point the question.

To humanize is a wider aspiration than to heal; and some psychiatrists, alert if not allergic to the tendency of laymen to expect too much of them, stress the difference between mental illness, even the mild neuroses which take so much of your time today, and the wear and tear of daily life. You may declare, as Professor Rümke (7) once declared that "the understanding of the disturbances of the sick man hardly contributes to the understanding of the normal man". You may claim a special disability in dealing with normal men on the ground that you see so few of them. You may thus seek to barricade yourselves within the safe confines of a medical specialty.

May I suggest that you should not overcall this hand? You assure us, for example, that you aim to make mental hospitals into therapeutic —or at least non-pathogenic—communities; but those responsible for other organizations, industrial plants, schools, barracks are equally aware of some responsibility for the quality of the societies which they plan and administer. Is your experience irrelevant to these? Your success as therapists depends not only on hastening the recovery of your patients but on helping them, when well again, to re-establish themselves in the world from which they became displaced. Does not this require an understanding of the stresses of the world of the well? You must consider the effect of your patient's illness on his home and the strains which it, as well as he, can stand; and you will have to do still more, as domiciliary treatment increases. Does not this involve you in understanding the crises of the well? You sometimes advise parents who are not sick on the art of bringing up, and children who are not yet sick on the art of growing up. You are the best expert witnesses we have on criminal responsibility. You are potent influences in some juvenile courts. And what of your new responsibilities for and toward the psychopath? You teach those who are not psychiatrists what they need to know about mental illness and its preconditions. You are already educators, counsellors, planners and administrators in the field of preventive psychiatry, which is no frontier but a widening borderland. Moreover, you are today better qualified than others to do these things.

So I hope and expect that an increasing proportion of your (I hope) increasing numbers will be drawn into what I have called the public humanizing service. I hope so partly because your practical experience is necessarily so much wider than your professional claims; but at least equally because your presence will help to prevent the facile equation of wisdom and virtue with health. The fact that your patients read their experience awry does not mean that when well they will necessarily read it aright; for its rightness will be a matter for judgment. The sanest like the maddest of us cling like spiders to a self-spun web, obscurely moored in vacancy and fiercely shaken by the winds of change. Yet this frail web, through which many see only the void, is the one enduring artifact, the one authentic signature of humankind, and its weaving is our prime responsibility. It is the realization of this which makes our age an age of ideology and one which, I think, will turn men's attention increasingly towards the first, the norm-setting half of the regulative cycle, to study its endemic appreciative process, of which one half-conscious instrument is policy making and the total expression is social change.

References

1. Peters, R. S. (1958). *The Concept of Motivation.* London: Routledge & Kegan Paul.

2. Polanyi, M. (1958). *Personal Judgment.* London: Routledge & Kegan Paul.

3. Jacques, E. (1956). *The Measurement of Responsibility.* London: Tavistock Publications Ltd., pp. 61 *et seq.*

4. Quoted in BOWERS, C. D. (1949). *Yankee from Olympus*. London: Ernest Benn Ltd., p. 370.
5. LEWES, G. H. (1879). *Problems of Life and Mind*. London: Trubner. Quoted in Abercrombie, M. L. Johnson, *The Anatomy of Judgment*. London: Hutchinson, 1960.
6. MACKAY, D. M. (1964). "Communication and Meaning" and the previous papers referred to therein. Published in Livingston, Helen (ed.) *Cross-Cultural Understanding: Epistemology in Anthropology*. Harper and Row.
7. RÜMKE, H. C. (1954). "Solved and unsolved problems in mental health." Published in Line, W., and King, M. (eds.), *Mental Health in Public Affairs*. Toronto: University of Toronto Press, pp. 149, 150.

Sir Geoffrey Vickers, *V.C.*, *Little Mead*, *Goring-on-Thames*, *Reading*, *Berks*.

https://doi.org/10.1192/bjp.110.467.465 Published online by Cambridge University Press