PAPER
02

Maslow revis(it)ed

Bob Dick (2001) *Maslow revis(it)ed: Maslow's hierarchy of needs examined and reformulated*. A discussion paper originally written in the 1980s, revised 1990, 1993. This version 2001.

Contents

Underlying almost all human behaviour is an attempt to satisfy some human need. An understanding of needs, of motives, therefore precedes an understanding of behaviour.

In this document I take one of the better known theories of human needs, that of Abraham Maslow (1970). I first subject it to a logical analysis which leads to some revision. Some of the implications of this are then considered.

The first section briefly describes the theory in its usual form.

Maslow's hierarchy

Maslow postulates that under different conditions, different classes of needs rise to salience. The classes of needs are arranged hierarchically. The lowest unsatisfied level is the salient level: the level which commands our attention. But as soon as it becomes satisfied it ceases to be important.

In its most common formulation the hierarchy contains five levels of needs. From highest to lowest they are as in Figure 1: physiological, security, belonging, esteem, and self-actualisation.

So if the physiological needs are unsatisfied they are most important and attract most of a person's attention. But as they become satisfied they fade into the background. The next level, comprising the safety or security needs, comes to the fore.

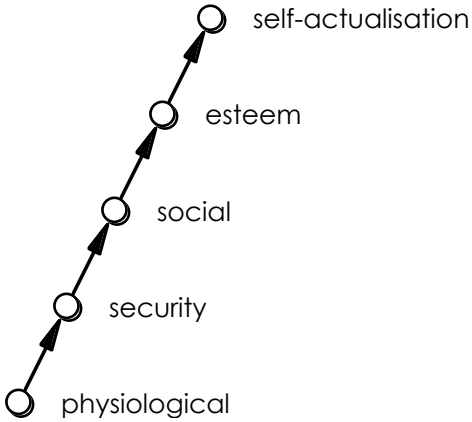

Fig. 1

Maslow's hierarchy. The lower needs are most salient until satisfied, at which point the next higher needs come into play

The physiological level is usually defined to cover such needs as those for food, clothing and shelter, and those associated with such bodily functions as sex, elimination and the like. A need for oxygen is an instructive example. It is a need which is most pressing when it is unsatisfied. We neglect it and take it for granted when it is not at risk.

One of the striking aspects of Maslow's theory is the contradiction apparent in its high and continuing popularity, and the almost complete absence of empirical support. Of several scores of studies which have been conducted a handful provide some measure of support. The remainder are either ambivalent or negative. Wahba and Bridwell (1976) summarise the research. They also acknowledge that the theory is "almost untestable" (p234).

I suspect that the popularity arises for three reasons, which tend to be associated to some extent.

One of the reasons may be the wide gap which exists between experimental and practical psychology. Therefore many of the people who use the theory may not be in the habit of reading the experimental literature. Indeed, many of them might well regard it as irrelevant to many aspects of the practical world.

A second possible reason is that the theory is intuitively satisfying. It accords with people's experience that physiological needs are pressing when not met, but otherwise almost completely disregarded.

A third reason may be found in the practical implications which can be drawn from the theory, and which again accord with experience. As people become more mature (in the work force, for example) they do often switch their attention from physiological to security needs, and then in turn to social and esteem needs.

In the face of such an overwhelming body of disconfirming evidence, however, one would by now have expected the theory to fade into misuse. It has not. Perhaps it has something to offer, and is worth a reexamination.

There are at least three grounds on which a reexamination might be carried out.

One is the adequacy of the research itself. In view of the extent of the research, and the high proportion of negative findings, this seems unlikely to be fruitful. I will deal with it here cursorily.

Another is the appropriateness of the research to the nature of the theory. In this respect I argue that it is the sort of theory which is not easily amenable to crucial test, as Wahba and Bridwell accept. This would usually be seen as a shortcoming. I here argue that, on the contrary, it is one of the qualities which gives the theory its power.

The third ground is that the theory itself can be refined. A series of modifications are later proposed.

The remainder of the paper works through a number of stages. The general nature of Maslow's hierarchy is first examined. A the same time the adequacy of current research methods to test it is assessed. Then follows a more detailed analysis of the theory. As a consequence of this examination I propose a series of

modifications to the categories of needs, their relationship, and the underlying rationale for the hierarchy. Finally, I review the agreement between the theory and other general theories which address similar issues.

The nature of Maslow's hierarchy

Before the research can be assessed or the theory reviewed it is necessary that I clarify the very nature of the theory. Briefly, I argue that it is essentially a taxonomy, with certain postulated relationships among the classes of the taxonomy. On these grounds I assert that normal experimental research may not provide an appropriate test.

First, the theory as originally described functions as a taxonomy of needs. This is an important point. In this respect the theory shares more in the features of a logic than of the type of theory that is easily or crucially tested using the conventional methods of behavioural research.

Theories differ greatly in their generality. One can therefore conceive of a continuum stretching from specific to abstract. At the specific end of the continuum lie the concrete explanations of particular experimental data. The other end is best defined by such content-free models as algebras, logics, and the like. I will use the generic term *logics* to refer to them. These are not usually thought of as theories. However, I will shortly show that other models which are labelled as theories lie very close to them.

From fact to logic

The continuum I am proposing bears a close resemblance to one dimension of what West Churchman (1971) has proposed as a fact net, a network of ever more abstract theories built upon the base of specific observations.

The nature of the continuum may be realised to some extent from its extremes.

A the specific end of the continuum, actual observations and measurements are to be found. Included here, for example, one might expect to find the measures on some non-contentious dimensions of a particular object or situation. The measures constitute a theory (or, better, a model) of the object or situation.

It may be noted that the fit between the model and the object or situation or event can be expected to be close. The only limits to its accuracy are those arising from the inherent reliability of the measures used, and the accuracy with which the measures are applied by the measurer.

On the other hand, however, the generality of such a model is inherently poor. If the model does bear a close relationship to a whole class of objects or situations or events, this is a consequence of the measured example being well representative of the class from which the example is drawn. The goodness of fit is not inherent in the class of model.

In the physical world a close fit may nevertheless be attained. This arises, again, not because of the qualities of the class of model, but because the variation in some physical phenomena is so small that almost any example can act as an exemplar for the class.

Such a theory can yield very precise predictions. Since its field of application is often narrow, the dimensions it describes are likely to be those which are most relevant. An experimental test (for example a replication of the measurement from which it was derived) may have a high probability of disconfirming the model if it is incorrect. A disconfirmation is readily interpreted when the data are collected and analysed.

In short, such a model (henceforth: micromodel or microtheory) has the capacity to describe the relevant dimensions of a limited span of reality very accurately. Where the fit between model and reality is poor, this is likely to be readily apparent.

At the other end of the continuum the logics show the opposite characteristics. The content to which they apply is often not defined, and may continue to be extended. Therefore their generality is very broad. It is precisely the generality of systems of algebra, for example, from which much of their usefulness derives. Their fit to any one example, however, may be quite poor. Again, if the fit is good, this is not inherent in the model. Rather, it is a consequence of the class to which it is applied having low variability, or the example to which it is applied being particularly characteristic of its class.

The generality of such a model has its costs. Over the span of reality to which it might be applied, many dimensions may be relevant. Models deal with a reality which is almost infinitely dimensioned by selecting some dimensions. There is thus a greater likelihood that an important dimension of a particular class of events will be omitted.

A consequence of all this is that testing a logic is not a very meaningful activity. The most that an empirical test can do is to make a statement about the boundary of application of the logic. For instance, to my knowledge there are few real life applications of Riemannian geometry. But that says nothing about it as a geometry. In other words, logics are inherently untestable. Testing is inherently inappropriate.

Notice also that circular definitions are inherent in logics. A logic consists of a set of concepts defined in terms of each other.

In brief, logics are circularly defined sets of concepts which have high generality. When applied to some event they are likely to ignore some dimensions of that event. Their boundary of application is difficult to define. They are inherently untestable.

Although it is not conventional to regard logics as theories or models, there are other models which are closer to the logics than they are to micromodels, and to which the term theory is commonly applied.

General systems theory (Ludwig von Bertalanffy, 1973) is one. It is a set of concepts which can be applied (with better or worse fit) to any event which can be conceived as resource consuming and goal directed. Signal detection theory is another, applicable where an event can be conceptualised and measured as signal in noise. (See the description in Thomas Wickens 2001 introduction.) Information theory is a metric for dealing with events which can be characterised as informational in nature and of varying probability.

It will have been noticed that these theories share many characteristics with the logics. One can apply them to any event which can be conceived of in certain terms, that is, provided one chooses to select certain dimensions and ignore others. The network of concepts defining the theories are circular, with one concept defined in terms of other concepts within the set.

So far three points on the continuum have been defined. An infinity of such points might theoretically be identified. For present purposes, interest centres on a cluster of models which are grouped just below the near-logics like general systems theory; for it is there that Maslow's hierarchy is to be found.

Before exploring further the implications of this placement of Maslow's hierarchy, there are two other issues to be addressed. The continuum is in effect a model of models, or a theory of theories (that is, a metatheory). Before it can be used to cast light on the nature of Maslow's hierarchy, there are two other dimensions to be added. One is the interconnectedness of the sub-events making up an event. The other is the difference between a theory for empiricists and a theory for practitioners.

The theories of physical science often proceeded by identifying a dimension at a time, analysing it, and formulating a law which captured it. Because the different effects were sufficiently close to additive, analysing one dimension at a time still allowed understanding to accrue. One can predict the trajectory of a ballistic object by analysing separately for the effects of gravity and wind resistance, for

example, and then combining the effects. Through reductionism lies better understanding and prediction.

In the world of living organisms, individually or collectively, this is less often so. A more reasonable starting assumption is that everything affects everything else until proven otherwise. Under such conditions, reductionism may extend the capacity to predict the future of an event only at the cost of making the model unwieldy.

This issue becomes particularly important when the needs of practitioners are also taken into account. In may fields of practice it is not feasible to apply theories consciously to an event as it unfolds, for the speed of unfolding often exceeds the processing capacity of the conscious mind. It may be as futile as it would be for a tennis player to intellectualise about the conditions affecting the flight of the approaching ball.

Theories which are useful to practitioners have limited dimensionality so as to be within the span of apprehension. They are intuitively satisfying so that they can be automatised and thereby acted on without conscious analysis. For a practitioner, adopting a theory of greater generality (the opposite of reductionism) may render an event more rather than less understandable.

In summary so far, it can be said that Maslow's hierarchy lies towards the general end of a metatheoretical continuum stretching from precise micromodels of narrow focus to logics and macromodels of high generality but consequently with some fuzziness.

A conclusion to be drawn from this is that one would not expect such a theory to lend itself easily to empirical test. As practitioners are likely to favour other criteria than are empiricists, it is also understandable that a given model may suit one purpose while being quite inappropriate for the other.

With this as background, Maslow's hierarchy can be explored in greater detail.

Maslow's hierarchy as a taxonomy

Maslow's hierarchy is among other things a taxonomy or classification of human needs. A taxonomy per se is more a logical than an empirical device. It therefore makes more sense to talk about its logical consistency than it does to test it empirically.

An empirical test may address its boundary of application, a worthwhile exercise but a different one.

It may be mentioned in passing that some of the negative results of empirical research arise from attempts to test the hierarchy as a taxonomy. A common method of approach is to classify a number of situations as instances of a particular category, and then examine the factor structure of responses to see if it agrees with the categories.

It is problematical, however, if one should expect this to occur. There are reasons for expecting at least the possibility of quite different results. Firstly, it is questionable whether the categories of a taxonomy are factors, or poles of the various factors. Secondly, it is conceivable that the different instances of a category may be substitutable. For example, it may be that a person might satisfy a social need either through leading an active social life or through a small number of close relationships. If so, one might sometimes expect a negative correlation between instances of the same need category.

It is more appropriate to use conceptual means of testing the effectiveness of a taxonomy. A successful taxonomy is one which successfully encompasses the classes of events which it addresses. Its classes have minimal conceptual overlap.

In short, the more comprehensive the taxonomy, and the less the overlap of its categories, the better it is likely to be. Maslow's hierarchy can be analysed in

these terms. I do so by trying to identify the underlying dimensions of the taxonomy, and examining their conceptual cleanness.

The first dimension which is apparent is that the physiological class of needs refers to a person's physical wellbeing. Most of the other classes refer unambiguously to psychological aspects of wellbeing. Safety, however, lies uneasily in both categories. One might therefore mark safety as a class requiring further analysis. I will take this analysis up again later.

Three classes address the psychological domain of wellbeing. Of these, I will defer consideration of self actualisation until later. Social and esteem needs will now be considered.

The first point which becomes apparent is that esteem subsumes two components, as Maslow himself recognised. One is self derived esteem; the other is esteem derived from others. A priori one might expect this to be an important dimension. The distinction (between self-derived and other-derived) may therefore be worth observing in the taxonomy.

In some respects it can be argued that esteem of others relates more closely to social and belongingness needs than to self esteem. It may therefore be asked in what ways they differ, if at all.

Both include what might be called regard or acceptance by others. The esteem of others, however, has a performance implication. Esteem is earned. Belongingness is decided by other factors. The dimension may therefore be labelled unconditional versus conditional.

Self esteem also involves acceptance, but by oneself. It therefore appears that the psychological dimensions of the social and esteem categories might be alternatively described in terms of two dimensions. One depends on whether the acceptance is conditional or unconditional. The other depends on whether

the source is oneself or others. Crossing these two dimensions gives four potential classes as identified in Figure 2.

conditional self-acceptance	**unconditional self-acceptance**
conditional acceptance by others	**unconditional acceptance by others**

Fig. 2

Four dimensions of acceptance

Under this scheme, two of Maslow's original five classes are not accounted for. One of the new categories is an addition. If unconditional self acceptance can be identified with self actualisation, however, only safety has found no provision in the revision so far.

I will later argue that the equation of self actualisation with unconditional self acceptance can be made. Accepting this for the moment on trust, there are thus five categories in the revised taxonomy. All concern the immediate wellbeing of an individual. Safety may be regarded as a future component of these present categories. Although I will not deal with this issue in detail for the moment, I will equate safety with the future component of all categories (except perhaps self actualisation, which may not have a future component).

So far the taxonomic aspects of Maslow's hierarchy have been dealt with, though with some issues requiring closer examination later. The reformulation removes some conceptual overlap from the items. Self esteem and the esteem of others are now categorised separately. Safety, formerly partly physical and partly psychological, is now split up as a future component of each of the other categories.

The way in which the categories have now been described makes it more likely that they are inclusive, with one exception to be remedied shortly. The inclusiveness of the reformulation may be demonstrated in the course of identifying the missing dimension, which I will now address.

The taxonomy is now a classification of sources of individual wellbeing. Wellbeing is either physical or psychological. (There may also be a spiritual component, distinct from psychological. I will leave this as an open question for the moment, and will not address it further in this paper.)

If wellbeing is psychological it may be further subdivided. It may originate either within the individual or outside. If outside ... and here is the missing dimension. It may derive from people, or from objects and events. For the moment I will content myself by relabelling the "self vs. others" dimension as internal vs. external.

To each of the categories so far identified, a further division into people and things may therefore be added. It applies clearly to the others dimension of psychological wellbeing. It is not yet clear if it applied to the self dimension. If it does, the taxonomy is more complete, with almost fully crossed dimensions in the psychological domain.

Each "others" category therefore has two subcategories, depending on whether the wellbeing is derived through people or through objects or places. To extend it to the category of conditional self acceptance requires only that the performance is directed towards people or towards things. Its extension to unconditional self acceptance is more problematical.

A few issues are not yet delineated sufficiently clearly for confidence. This applies most particularly to the identification of self actualisation with unconditional self acceptance, and of security with the future component of those needs which can have a future component.

I will later show that the dimensions of this revised taxonomy are important in other theories dealing with behavioural and social phenomena, and that this suggests that the taxonomy has application to real life events.

The validation of a macro-theory

One of the features of such macrotheories as Maslow's hierarchy derives from their generality. If a macrotheory is capable of being applied to a wide range of phenomena, then it is likely that the boundaries of application of macrotheories will overlap.

It can therefore be expected that other macrotheories which address similar phenomena can be matched to the macrotheory under consideration. Some translation might be required to make the matching apparent.

Maslow's hierarchy is, in its usual form, a theory of human motivation. As motivation can claim to underly most human behaviour, it can therefore be presumed that there are other theories with overlapping boundaries of application. This overlap will first be pursued by examining each of the two key dimensions of the modified hierarchy in turn. Other theories which seem related will then be considered.

The internal/external dimension

As proposed, this vertical dimension categorises a person's psychological well-being as being either self derived, or being derived second hand through other people or things.

A similarity which immediately comes to mind is between this dimension and the concept of locus of control as formulated by Rotter. Locus of control is also a continuum which identifies at its poles two views about the perceived source of reinforcement in an individual environment. It may be expected that people who see themselves as in control of their environment, and therefore able to modify it, also see themselves as able to determine their own psychological well-being.

A similar major dimension is found in some sociological theories, particularly in the work of Zijderveld. He points out that each person is simultaneously an individual and a social being, with needs relevant to each. The agreement with the vertical dimension of the modified hierarchy is again good, though on this occasion the "things and events" component is missing from Zijderveld's formulation.

There are other theories which also relate to the vertical dimension, but which I propose to consider later. They cast some light on the overall nature of the model, and will be examined in the appropriate section.

The conditional vs unconditional dimension

The dimension which I have here labelled conditional vs unconditional also presents a number of examples of agreement. Several approaches to counselling have stressed the importance of unconditional as opposed to conditional acceptance of others. Carl Rogers comes particularly to mind in this context.

The distinction also corresponds approximately to the distinction between competitive and cooperative behaviour. Competitive behaviour equates with the conditional end of the continuum. It is when a person judges herself conditionally, or when she expects to be so judged by others, that competitive behaviour is most likely to be seen as meeting a person's needs. Collaborative behaviour, conversely, is most likely when no conditional judgments are being made.

A third point of similarity, though not as apparent at first glance, is that between Type A behaviour and conditional acceptance, and Type B behaviour and unconditional acceptance. It is probably apparent that the self actualised person as described by Maslow is more likely to behave in a Type B manner than in a Type A manner. Type A behaviour has been described by Rosenman and Friedman as containing two orientations towards work or others, competitiveness and time urgency. Competitiveness has already been discussed. Time urgency is an

example of the same conditional orientation taken towards things and events rather than to people.

The hierarchy explored further

To arrive at a better understanding of the nature of Maslow's hierarchy, two theories and a personality instrument will be examined. The theories are those of Clayton Alderfer, and Jean Piaget and the neopiagetians. The instrument is the Personal Orientation Inventory, or POI, of Everett Shostrom (1963).

The POI was devised as a measure of self actualisation. Based closely in many respects on Maslow's description of self actualised people, it has two main subscales and a number of subsidiary subscales.

The two main subscales compare very closely to those proposed above. One dimension, which Shostrom labels inner directedness, compares to the internal/external dimension. The other, which Shostrom calls time competence, corresponds to the conditional/unconditional dimension. It is of interest that the basic reformulation of Maslow's hierarchy was arrived at before I was aware of the nature of the main subscales of Shostrom's measure of self actualisation.

Clayton Alderfer proposed an alternative to Maslow's hierarchy. He also claimed empirical support for his ERG theory, as he called it, in contrast to the lack of support for Maslow's formulation.

The empirical support should perhaps be viewed with caution for the reasons offered earlier about crucial tests of general theories. The test is applied to the hierarchical nature of the classification, and not to the taxonomy per se. The objections are therefore not quite as pointed. There is still a fundamental difficulty in ensuring that a particular test is a test of the general theory, and not merely a test of some extrapolation from it.

In addition, the measures used by Alderfer suffer from the key problem of much of the empirical investigations of Maslow's theory. Pay is almost always included as an indicator of the physiological level of the hierarchy. Yet it seems clear to me that pay is as much a measure of a need for recognition (Maslow's esteem level) as of a need for physical wellbeing. That such an important and pervasive indicator should be misclassified may be enough to cast some doubt on the whole exercise.

Alderfer postulates a three level hierarchy. The levels he terms existence, relatedness, and growth (the ERG of the abbreviation). Existence corresponds directly to the category of physical wellbeing which I propose. Relatedness is clearly acceptance by others. Growth equates most easily with unconditional self acceptance. In most respects the correspondence is quite good. Conditional self acceptance has no counterpart in Alderfer's formulation; conditional and unconditional acceptance by others fall within the same category.

To the extent that Alderfer's own research can be viewed as supporting his theory, it is to be regarded as support for the hierarchical nature of the classes of needs. In any event, it is within the experience of each of us that the existence level, at least, is important when not satisfied and unimportant when satisfied.

On these grounds, the hierarchical nature of the classes may be tentatively accepted. The form proposed here is then as shown in Figure 3.

The other set of theories which may have something important to say about the nature of Maslow's hierarchy are those of Jean Piaget and the neopiagetians. The most relevant part of this work is on moral development during childhood (Piaget, 1965).

Piaget's own work concentrated chiefly on the years between 3 and 12. His work has been extended by others, most particularly Norman Bull, to suggest four stages of moral development. One might characterise them roughly as depicted in Figure 4.

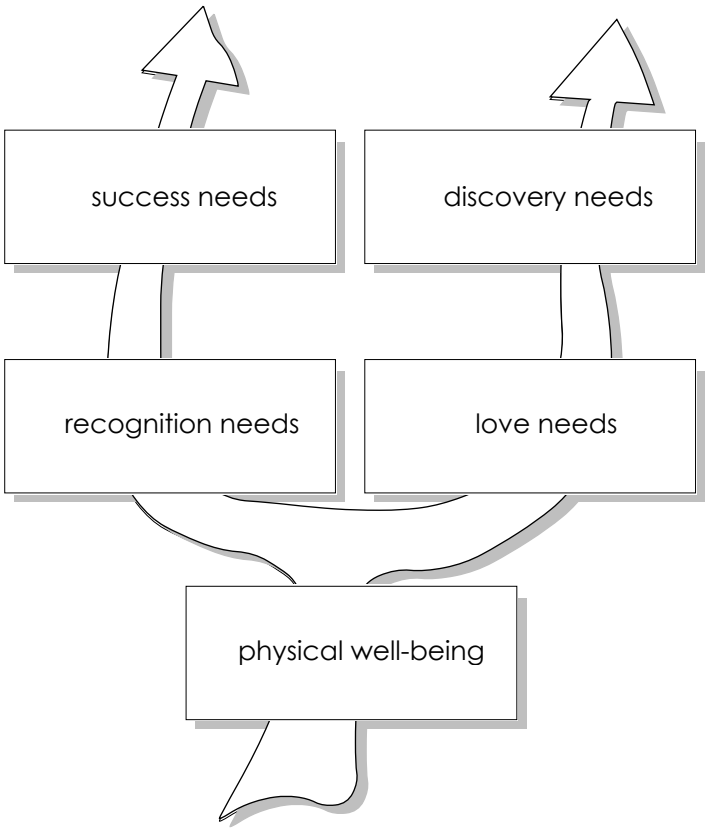

Fig. 3

A revised version of Maslow's hierarchy

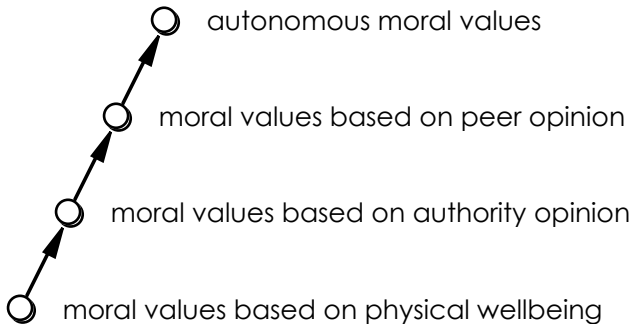

Fig. 4

A hierarchy of moral development derived from Piaget's work

If the two inner categories are combined, the resultant stage might be called that of moral values derived from others. This would give overall a three-stage sys-

tem of development. It is reasonable that the source of one's values say something important about the satisfiers of needs to which one gives the greatest attention.

On this basis I propose that the modified Maslow's hierarchy be regarded as hierarchy of stages of development rather than as a hierarchy of needs. The hierarchical behaviour of need categories, as described my Maslow and Alderfer, can then be viewed as a derivation of the stages of development.

This modification more easily allows for the observed fact that on many occasions, people have placed their life at risk for the sake of other people, or an abstract principle. The model usually functions as a hierarchy of needs because people revert to earlier forms of behaviour under threat. At the same time it must be said that the model of itself provides no basis on which to predict if a person will place a higher level need ahead of a lower level. This prediction must await other theories.

The people *vs* events dimension

It earlier appeared that it might be fruitful to add a people vs objects and events dimension. For three of the four psychological wellbeing categories it can be argued that this extends the model in ways which enable it to provide a better fit to human reality.

Conditional self acceptance may be described alternatively as a need for success. That success can be demonstrated either over things (where it might be termed need for achievement) or over people (where it might be termed need for power). This also makes explicit the two aspects of Type A behaviour, time urgency and competitiveness respectively.

Conditional acceptance by others also admits of being divided, although here the importance of the two subcategories may be more doubtful. Locally the others may be people, or objects or events. The overall category might alternatively be

labelled need for recognition. There is no commonly accepted term for recognition from other than a living being. It seems possible, to be speculative for a moment, that the rewards provided by hand held computer games to their users may fall in this category. Some games players can almost be described as addicts; it therefore appears that recognition from inanimate objects can be for some as powerfully rewarding as recognition from people is for others.

The category of unconditional acceptance by others includes a common and important example of an events or objects subcategory, that of territory. I think it can also be argued that, apart from the prestige aspects of ownership (which fit in the classification of conditional acceptance by others), people do draw some psychological comfort from the ownership (that is, identification with) inanimate objects.

I do not know whether the same division into subcategories is appropriate for unconditional self acceptance. Part of the difficulty I have is in defining just what need the category represents. Identity (other than through belongingness) and integrity (of the "to thine own self be true" variety) occur to me as possibilities. Since such a category is independent of the world it is doubtful if a distinction between people and things is useful.

For the present I would prefer to leave this as an open question. Perhaps there are different worlds, animate and inanimate, in which one may seek self actualisation. To put it differently, one might conceive of the category as a need to explore and identify one's place in the world in an uncompetitive and unjudging manner. The person seeking self-actualisation still interacts with the world—perhaps that world can be predominately animate, or predominately inanimate.

Some further elements of similarity

Two other general theories will be mentioned at this point as further comment on the ease with which the reformulation of Maslow's hierarchy can be related to

other theories which address similar realities. Both relate to the left hand or conditional branch of the hierarchy.

It may be noted that the three needs which David McClelland has found to have the most explanatory power can be equated with subcategories of the conditional branch. The needs McClelland (1998) labels nAch (need for achievement) and nPow (need for power) are the two subcategories of the classification of conditional self acceptance. The need for affiliation (nAff) relates to the people dimension of the category of conditional acceptance of others (and perhaps also unconditional acceptance by others).

The two conditional categories together relate to the personality type identified as authoritarian by Theodor Adorno and his colleagues (Adorno, Frenkel-Brunswik, Levinson, and Sanford, 1950). The people component of conditional self acceptance supports a belief in one's duty to command (and take responsibility for) subordinates. The people component of conditional acceptance by others enables the operation of a belief that one has a duty to obey one's superiors.

I see Adorno's work as having wider generality than merely applying to this particular personality type. As I have said elsewhere, these are the beliefs which enable us to construct large social systems based on hierarchy and specialisation, and maintain control of them.

These same two conditional categories can be related to the two varieties of defensive communication which arise under conditions of competitiveness—fight and flight. The variety of communication which has variously been described as problem solving or consensual or collaborative or assertive is more likely to arise when people are operating in an unconditional environment, where they are not being judged on what they say.

Two unresolved issues

I return now to the two issues left unresolved earlier. One, you will recall, was the equation of self actualisation with unconditional self acceptance. The other was the status of the security level of Maslow's original formulation.

On reading Maslow's description of people he regarded as actualising I think it is apparent that they are people who do not depend on other people or on their own performance for a feeling of wellbeing. On these grounds I will regard the identity of self actualisation and unconditional self acceptance as being established. I think, by the way, that unconditional self acceptance is a more self explanatory label than self actualisation.

The correspondence of the two major dimensions of the reformulation with the two main subscales of the POI supports the identification of unconditional self acceptance with self actualisation. It will shortly be seen that the reformulation also casts some more light on the nature of unconditional self acceptance.

The needs so far represented by the categories of the revised hierarchy are immediate needs. This applies most immediately to the physical level, where one's present physical comfort or existence is at issue. The other categories can be similarly defined however. It can be the acceptance by others or the self acceptance of the present moment which is operative.

When immediate needs are met, however, there may still be a wish for the need satisfaction to continue into the future. It is this future dimension which then corresponds to Maslow's security level. That all categories (except unconditional self acceptance, which may be atemporal) contribute to this component makes apparent the reason for its grab bag quality in Maslow's original theory.

The overall model

This final section will now look briefly at the overall implications of the model. This can be done in a way that allows it to serve at the same time as a review of the model.

The first and most important point I want to make is the equation of psychological wellbeing with self esteem. By definition self esteem is one's opinion of oneself. Although I do not know on what grounds it can be argued that feelings of psychological wellbeing involve feeling good about oneself, this seems to me to be true. What is demonstrable is that the four (five including physical) categories of the reformulation are all sources of self esteem. Thus a person may have high self esteem (Figure 5) because ...

- she is physically fit, healthy and comfortable;
- she is accepted by others as she is; unconditional acceptance by others, or need for belongingness;
- she has naturally high self esteem; that is, unconditional self acceptance;
- she has demonstrated to herself through her success over people or things that she deserves to think well of herself; this is conditional self acceptance, or need for success;
- she is recognised by others as having performed well, and so deserves to think well of herself; this is conditional acceptance by others, or need for recognition.

It is now also apparent just what unconditional self acceptance (and by implication self actualisation) consists of. It is *robustness* of self esteem.

This, too, accords well with Shostrom's POI. The most fragile of the four psychological sources of self esteem is conditional acceptance by others, for it depends on both performance and the opinion of others. The most robust is unconditional self acceptance, which depends on neither. One can therefore picture a

diagonal superimposed on the modified Maslowian hierarchy, from lower left to upper right. This diagonal combines both major dimensions, and may be labelled *robustness of self esteem* (Figure 6).

This concept, I will argue in other documents, deserves recognition as a central concept in psychological theory and practice. For the moment I will observe only that it represents non-defensiveness, which may be regarded as a central measure of psychological health. It is the basis of many qualities which are highly valued, including integrity and courage.

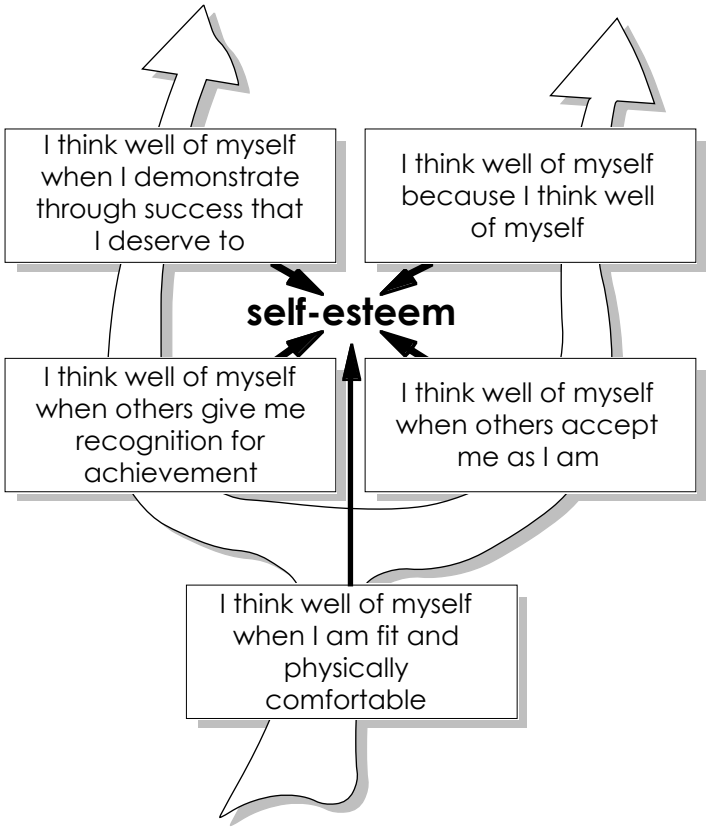

Fig. 5

Sources of self-esteem

The ease with which the reformulation's categories and dimensions were related to other important categories and dimensions in theory also supports the notion of the importance of robustness of self esteem as a concept.

It is reasonable to regard the most common source of stress in modern culture to arise from threats to self esteem. The model can be used to devise strategies for stress management and prevention.

I will also argue elsewhere that measures of social desirability may be conceived of as performance measures of robustness of self esteem. Only the unconditionally accepting person can afford to acknowledge certain truths about herself. In this regard it may be unfortunate that measures of social desirability are designed to be orthogonal to measures of neuroticism. One would expect that robust self esteem would correlate highly and negatively with neuroticism. This correlation, previously regarded as a contaminating influence in measures of social desirability, may now be explained.

In conclusion, as I have already said, it may be noted that the five main categories of the reformulated hierarchy are alternative sources of self esteem. On these grounds it can be seen that the model has practical implications for the enhancement of self esteem and the education of children and adults, and in other applications such as stress management. I may eventually explore these issues, too, in a subsequent paper.

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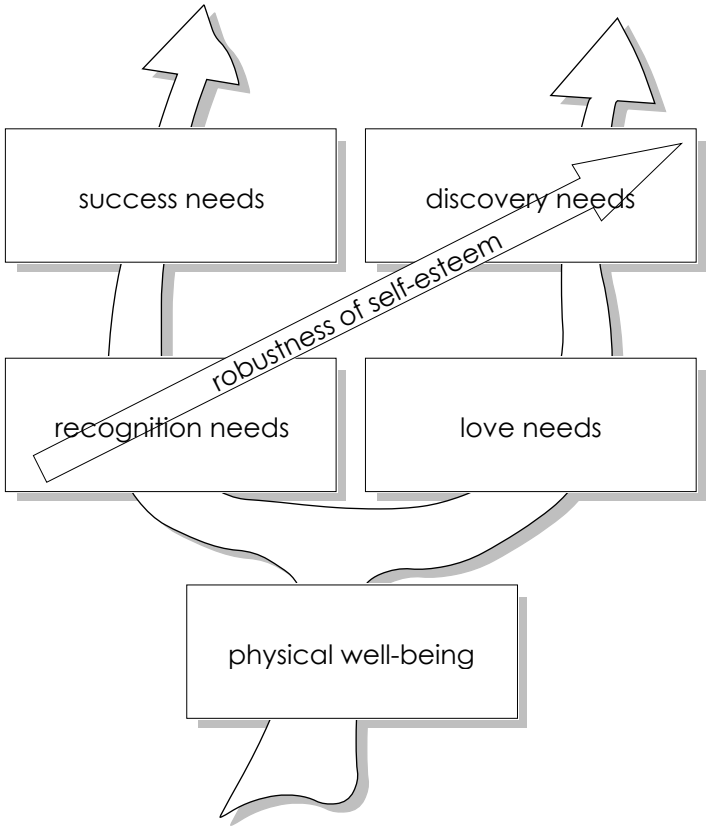

Fig. 6

The combined dimension from lower left to upper right may be regarded as robustness of self-esteem

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