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THE SPECIFICATION AND ASSESSMENT OF HUMAN BEINGS

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ABSTRACT

A scheme of specification is proposed based upon three elements of Function, Being and Will. The human individual has innate undevelopable and also developable characters and he also acquires knowledge, skill and experience. All of these can be expressed by means of a 12-term Power Aptitude Matrix, a 7-term scale of innate Will-Power and an 8-term scheme of the Present Moment range and capacity. Methods of testing and applying the specification are outlined.

1. THE BASIC FACTORS

Success and satisfaction in life depend upon the correlation achieved between what a person is and can do, and what he does and the conditions in which he does it. The more complex the society, the greater is the need to allocate the right people to the right activities and place them in the right conditions at the right time. Man is a very complicated entity whose characteristics can never be evaluated in a single dimension, such as is given, for example, by an intelligence test, an examination result or a personal interview. Human situations also are multi-dimensional, making demands upon people that cannot be expressed in terms of health, knowledge, skill, experience, personality or any other single variable.

In the present paper, we shall consider a scheme for specifying the characteristics required in people and in human activities, based upon the distinction of Function, Being and Will,¹ the systematics and structures described in earlier issues of this journal,² and the theory of energies.³ Our experience is certainly not homogeneous. Being and knowing are substantially different. Instruments are not the same as decisions or acts of will: although a will without instruments of action seems to be a meaningless concept, and knowledge without a knower would be mechanism. Although will, being and function cannot be separated, it is also impossible to reduce any one of them to terms of either or both the others. This is somewhat analogous to saying that, in dynamics, one cannot separate length, time and mass, but one also cannot reduce any one to terms of the others.

We shall indicate, without attempting at this stage to define them, the natures of the three basic factors: function, being and will. The descriptions refer to human experience, though the factors themselves, are postulated as universal and discoverable in all possible situations.

Function. The knowable element in all experience. The behaviour of an entity, animate or inanimate is its functional activity. We recognize entities by their functions and, conversely, until we can recognize functions in recurrent activities, we cannot identify an entity. Function is not a matter of level. Thus, the legs of a man and the legs of a table have the same function: to support the weight of the entity to which they are attached. Thought is mental activity whether it is that of a genius or an idiot.

¹ Cf. J. G. Bennett, Dramatic Universe, Vol. 1, pp. 54-67.

² Cf. Systematics, Vol. 1, No. 1, p.5, also Dramatic Universe, Vol. II, Intro. ~;tion, and Vol. III, Chapter 37.

³ Energies are defined as all possible states of existence. They include vital -'= psychological as well as universal energies of consciousness and creativity. C7. G. Bennett, Energies, Aiaterial, Vital, Cosmic, Coombe Springs Press. 1964

Being. The power by which entities are what they are. Being is characterized by levels: but level alone does not constitute being. Thus a man is taken to be on a higher level than a sheep and a sheep than a stone: but though the level is an indication of being, it is not a measure. Being is existence and whatever exists has functions. Being knows and possesses the function of knowing: but being is not knowledge or

knowing. In general, being is not knowable, because it is not observable. We have given elsewhere⁴ the definition of being as "intensity of inner togetherness", but this definition has not proved very illuminating. The truth is that though Being is a necessary concept in any descriptive scheme its very nature makes it elude definition or even description. The point to be grasped is that being is a relative concept. Everything exists, but not everything has the same being. There are both levels of being also modes of being. Thus the levels of being of a cow and a sheep - approximately the same, but their modes of being are different. The difference lies in the kind of experience of which each species is capable. There are degrees of awareness; but there are also kinds or modes of awareness. These are not observable; but they are none the less real and important, especially in man who is the subject of our present study. The ability to see is functional, but the power to perceive what one is looking at takes very different forms from one man to another and depends upon being. "Breadth of vision" is hard to define, but not hard to recognize. It is a good indicator of the level or degree of being of the person concerned.⁵

Will. That which decides, chooses, and commits us to action. In man, it is associated with the focus of attention and interest. Will is ability to accept responsibility, to hold the situation together. Although thus described in human terms, will is taken to be universal and associated with every kind of entity whether individual or social. Thus, the term "national will" is assumed to have a meaning that cannot be expressed in terms of functional activity alone. The phrase "the will to live" is also presumed to mean something applied to any living being including a plant or a bacterium.

2. THREE KINDS OF TIME⁶

The three factors of function, being and will are loosely connected with the three kinds of time: successive or clock time, potential time or eternity and recurrent time or hyparxis. It can be said that function is associated with time, being with eternity and will with hyparxis.⁷ There are also three aspects of space corresponding to the three kinds of time.⁸

Function can be more or less effectively integrated as a spatiotemporal mechanism. This is the visible aspect of organization. It is recognized by the way it is put together and the way it works. It is the field of investigation of the natural scientist, but it is not the same as the scientific activity, which requires elements of both being and will.⁹ The organization of being is timeless. In the simplest case, this takes the form of a potential-energy field. We have defined eternity as the "storehouse of potentialities"¹⁰

and this means not only a quantitative conservation of passive potential, but an organizing pattern that accompanies every entity throughout its existence. The organizing pattern is calculable in crystallography, and has recently been recognized in biology as DNA which carries genetic information and RNA which appears to store acquired

⁶ These are briefly described in a note "What is Time?" Systematics, Vol. 1, p. 180. They are fully discussed in Dramatic Universe, Vols. I and II and IV.

⁷ Will is discussed in Chapters 27-31 of the Dramatic Universe, Vol. II. It is treated there as the principle of universal relatedness. The existence of many "wills" even in a single person is accounted for by the hypothesis of fragmentation. The one Cosmic Will present throughout all existence, is effectual only in association with being and function, and is therefore everywhere limited by the level and structure of the entities in which it operates.

⁸ These are directional or velocity-space, potential gradient or acceleration-space and angular momentum or spin-space.

⁹ For a discussion of the place of will in scientific description, see Bennett, Bortoft and Pledge, "Towards an Objectively Complete Language" Systematics, Vol. 3, No. 3, Dec., 1965.

¹⁰ Dramatic Universe, Vol. I, p. 157.

⁴ Dramatic Universe, Vol. 1, p. 59.

⁵ We shall make use of it as one of the principal factors of assessment in section 9 below.

information, i.e., memory.¹¹ We postulate an organizing pattern associated with the human being that is far more complex and potent than those of other biological species. The depth-term "apocritical interval" was introduced to designate the "depth" in the dimension of eternity to which a given entity or society is structured.¹²

Thus, we give the concept of Being a material basis and yet retain the property of being timeless; i.e., not subject to thermodynamic conditions of energy exchange. This property makes pattern "unobservable" and also indestructible. Since, however, being cannot be separated from function the timelessness of pattern is not absolute, but relative to a given situation. For example, the regeneration of planarians, which can produce new and complete organisms when they are cut in half, is evidence of a timeless pattern. But this pattern can be altered by chemical means and is therefore at least to some degree functional. We have not space for an extended consideration of the properties of being: but enough has been said to show that, if our views are substantially correct, both the level and the mode of being must be taken into account in any assessment of human nature.

Finally, we come to the connection between Will and the third dimension of time which we have called hyparxis to indicate that it is the measure of the strength of a given entity's hold upon existence.¹³ We are accustomed to regard will as a property that may or may not according to our philosophical beliefs-be attributed to selves, but not to inanimate objects or even to animals. The "unconscious will" of Schopenhauer and Hartmann is universal rather than particular. More over, the notion of fragmentation is foreign to these philosophers. On the other hand, to treat will as a universal property seems inconsistent with associating it with the power of an entity to choose and decide. The dilemma is resolved by the principle of fragmentation: the will operates according to its degree of integrity. A divided will is a weak will. The fragments of will present in material objects can do no more than hold them together.¹⁴ The more coherent will of the higher animals brings them close to the power of decision. Even in man himself, will is by no means a constant term. Fragmented and reunited and fragmented again, with the inconstancy of a kaleidoscope, man's will is the least stable of his attributes. At one moment, capable of making a strong decision, he is, at another, like an automaton with little more will than a digital computer. The instability of the human will is such that its very existence has been denied, and no satisfactory way of assessing it has been proposed even by those who admit its reality. This we shall attempt to do in the next section.

2. THE PRESENT MOMENT

In an earlier paper, the notion of the present moment as the field of all possible action was applied to the problem of objective description.¹⁵ In this paper we shall use it to show how the powers and qualities of a human being can be assessed. The definition of the present moment is made in terms of will: it is the multi-dimensional region within which a single will is operative. This definition evidently turns upon an agreed meaning for the expression "a single will". If, conversely, we were agreed as to what we mean by the present moment, we could define a single will as that which gives unity to the present moment.

The circularity of the definition can be mitigated by description. The present moment is not a point without magnitude for it contains experience and this implies diversity of content, which is impossible for a point. The present moment has duration and extension. It also usually has a certain depth of awareness. It can have, in addition, the conditions required for an act - that is a choice or a decision. We can express this by saying that the present moment has non-vanishing components in time, space, eternity and hyparxis.

The present moment is also a perpetual flux. Its content is an ever-changing combination of objects, experiences and actions.

¹¹ Cf. Discovery, Feb., 1966. A. L. Jacobsen, Chemical Transfer of Learning and Scientific American, and Jan., 1966, John Cairns, The Bacterial Chromosome.

¹² Dramatic Universe, Vol. 1, p. 160.

¹³ The expression "ableness-to-be" used in Dramatic Universe, Vol. 1, was criticized by a reviewer in Nature as ridiculous jargon, and yet it does convey the property of will by which an entity such as man is able to intervene in situations by an act of choice or decision. It is also connected with the notion of exchange-forces in physics.

¹⁴ This is exemplified in the Heitler-London model of the hydrogen molecule in which the element of will is represented by the sharing of an electron.

¹⁵ Bennett, Bortoft and Pledge loc. cit. Systematics, Vol. 3, No. 3, 1965.

It is also composite. This follows from the principle of the fragmentation of the will. Within the present moment of a stronger will, there can be subordinate present moments of weaker wills. In human experience, there can be a social present moment which may extend over a considerable period of time and include a large geographical region. Within the present moment of a society, its members will have their own subordinate present moments. It may happen that the social present moment is more weakly integrated than that of some of its nembers. This can be understood as indicating different modes of being-one less and the other more highly organized - and also a greater hyparchic span for the individual than for the society.

Thus, as we said before, the present moment for any given will is finite in respect of all the four determining conditions.¹⁶ We can represent this region by a circle, remembering that we have in reality a hyperspace in six dimensions. Within the region, changes are taking place under influences entering it from all directions. We can distinguish these as functional-influences, being-influences and will-influences. Each kind of influence can be conservative or open-ended. Conservative influences tend to maintain the status quo within the present moment and open-ended influences tend to bring about progressive or developmental changes. The three pairs of influences are linked-but not identified-with the determining conditions according to the following scheme.

Symbol	Determining Condition	Influence	Action Within Present Moment
T+	Past Time	Functional Conservative	Causality Knowledge
T-	Future Time	Functional Open-ended	Purpose Expectation
E +	Passive Eternity	Being Conservative	Forms and Ideas
E-	Active Eternity	Being Open-ended	Organization Pattern
H+	Hyparchic Past	Will Conservative	Decisions Significance
H-	Hyparchic Future	Will Open-ended	Destiny and Freedom
S-I-	External Space	Separation of Entities	Motions and Interactions
S-	Internal Space	Connectedness	Independence of entities

It will be convenient, for the purpose of visualizing the array of influences acting on the present moment, to show them in a symbolical diagram projected into two dimensions, thus:

¹⁶ Cf. Dramatic Universe, Vol. 1, where it is shown that space and time are neither existing things nor are they independent of existence: but conditions that determine the modes of existence that are possible upon a given level. For this reason, time, space, eternity and hyparxis are called "determining conditions". On the level of material objects and their transformations, the determining conditions form a six-dimensional framework. On higher levels, they merge into one another and at a high level become unified in the principle of universal order.

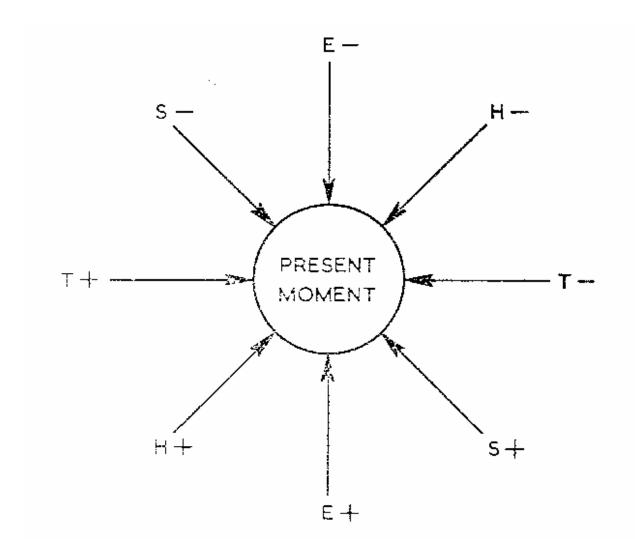


Fig. 1 The Influences Acting on the Present Moment

In the absence of will, the present moment collapses into a degenerate region in which no choice is possible. Nevertheless, experience may still be possible, if there is a component in the direction of eternity. This can be recognized subjectively as the dream state in which the will is impotent, but there is an awareness of the content of the present moment. It is also possible to have decision without awareness, if the eternity component fails below the threshold value required for subjective experience and yet a prior decision to act remains operative.

We have not space to discuss further the implications of the scheme which has been introduced chiefly to enable an account to be given of the element of will in the specification of a human being.

3. THE HUMAN FUNCTIONS

4.

The classification of human functions is made in terms of:

1. Physiological and psychological mechanisms.

11. The distinction between natural powers and acquired skills and knowledge.

111. Modes of operation within the present moment.

1. The functional triad. We can distinguish three groups of functions:

(a) Sensory-motor, including sense perception, memory, action on other objects by bodily movements, speech, etc.

- (b) Emotive, pleasure-pain, interest feeling motivations, judgments, character.
- (c) Intellectual, concept-formation, logical operations, mental imagery.

2. Every human being is born with a pattern of functional powers that are partly determined by the genetic constitution and unalterable, and partly susceptible of regulation, training and development.

There are also skills associated with all three groups of functions. These include memories, habits, adaptations and co-ordination of different functions.

3. Within the present moment, functions fall into nine groups:

- i Response to causal influences from the past
- ii Response to expectation of future events
- iii Motions out of region
- iv Constructions within region
- v Formal constraints
- vi Organizing operations directed by pattern vii Actions from decision
- viii Free or predestined actions
- ix Transformations wholly within the present moment.

For our purposes, the modes of functional activity are irrelevant as they are not so much personal characteristics as common to all people. We can also disregard acquired skills as they vary with time and can be assessed by tests corresponding to their known uses. We are therefore left with the innate natural powers under the three heads of sensory-motor, emotive, and intellectual. These operate quite differently upon different levels of being: but their mechanisms remain substantially unchanged. The same parts of the nervous system, the same muscles and system of levers are used for walking whether the action is conscious or unconscious. The same is more or less true of all the functions.

This consideration enables us to simplify the specification by treating the three groups of functions as homogeneous, but operating upon different levels. We shall return to this in section 11.

5. ENERGIES

Being is directly experienced as awareness of existing. This awareness is in the present moment and it is also in the mind. But the mind is not aware of the whole content of the present moment. There are unconscious processes quite inaccessible to the mind: such as the chemical reactions in the blood and tissues. There are also sub-conscious processes only just outside the threshold of awareness.

Various classifications of levels of mental activity have been proposed. The one we shall adopt is derived from the theory of universal energies, which postulates twelve main kinds or levels of energy.¹⁷ These range from the energy of random motion or heat up to a hypothetical supreme or transcendental energy by which the existing universe is brought into being and sustained. The twelve energies with the conventional symbols and their chief characteristics are given in the following table :

¹⁷ The theory was outlined in Chapter 32 of the Dramatic Universe, Vol. 11, and further developed in Energies: Material, Vital, Cosmic, Coombe Springs Press, 1964.

Name	Character	Symbol
Transcendental	The Prime Source of all Existence	E 1
Unitive	Universal Love	E 2
Creative	Free Creativity out of space-time	E 3
Conscious	Awareness of Individuality	E 4
Sensitive	Awareness of other	E 5
Automatic	Awareness of immediacy	E 6
Vital	Energy of living organisms	E 7
Constructive	Organizing power	E 8
Plastic	Maintenance of identity in change	E 9
Cohesive	Stability of material systems	E 10
Directed	Kinetic and Potential field energies	E 11
Dispersed	Random motion or heat	E 12

These are divided into three groups of four. The lower tetrad comprises the kinds of energy found in material, i.e. non-living, systems. The middle tetrad consists of the energies associated with life. The upper tetrad is that of the universal energies which do not require material objects or living organisms for their operation; but can be associated with individuals and societies.

6. MIND ENERGIES AND BRAIN ENERGIES

We can apply the theory of energies to the problem of mind and brain or psycho-physical interaction.

For our purpose, two properties of the system of energies are important. The mind of man is the seat of his awareness. This is not a fixed quantity, but varies from automatism to consciousness according to any combination of the three energies E 6, E 5 and E 4. The absence of the sensitive energy E 5 is sleep or anaesthesia. The absence of automatic energy is coma when only the vital functions persist. Sensitivity and automatism without consciousness is the state of polarized attention in which only one object of awareness is present. The fully awakened mind is activated by the three energies. The presence of consciousness is the mark of the human person as distinct from the man-animal or man-machine.

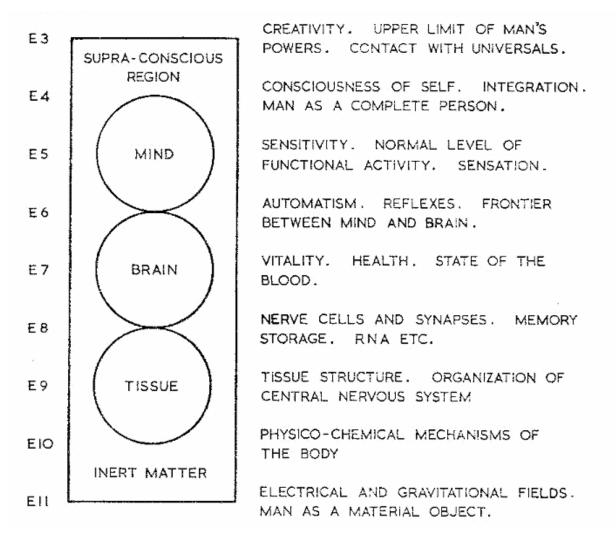


Fig. 2 Nine Energy Levels in Human Beings

If we could detect and record the changes of energy in the mind, as we are beginning to do for the brain, W e should have a means of assessing some of the most important abilities of a human being. There is certainly a connection between the mental energy pattern and the brain energy distribution. It is likely that the two are coterminous that the brain works with automatic, vital and constructive energies. The latter seem to be observable directly in the RNA molecule responsible for memory. We should expect learning to operate at the threshold of mind and brain: in the automatic energy.

We can regard the system, brain tissue : brain energies : mind energies, as analogous to a mechanical device, machine : energy supply controls. We can represent it diagrammatically, as above.

All energies are assumed to be capable of acquiring a structure. Even heat flows from hot to cold, and as we ascend the scale, the possibilities of structure increase not only in complexity, but in their stability in the conditions of eternity and hyparxis. At the level of mind, the energies are not confined to the physical organism, or even to the present moment of the automatic mental processes, but can reach outside to embrace a greater present. Full consciousness can embrace the entire period of a man's life. It can also, in the appreciation of history, penetrate into the past. Sensitivity can form mental images that connect the mind with experiences outside the present moment. We can verify such statements from our own experience: but they cannot be assessed objectively.

7. BEING AS AN ENERGY-STRUCTURE

Man, like everything else that exists, is a combination of energies. The human energy structure is very complex. It is partly observable as the space-time organism and partly unobservable in its organization and depth which penetrate into the regions of eternity and hyparxis. The observable structure merges continuously into the unobservable, somewhat as the observable crust of the earth merges into the unobservable regions of its interior.

According to our investigations into the structure of energies¹⁸ in man, it seems that, above the le eel of brain, the sensitive and conscious energies in the ordinary man are very weakly organized. He has little permanent structure of being, even in his mind, so that he depends a most entirely upon the influx from without of enemies to maintain his functional activity. This influx of energies comes from food, air and sense impressions, which are metabolized by the organism, not only on the bio-chemical levels of the constructive and vital energies, but also on those of automatism and sensitivity.¹⁹

Since the metabolic apparatus is differently developed in different people, some people are better supplied - or can make better use of energies of one kind than another. The pattern of energy distribution is, then, at least one of the ways in w which we can picture being as structure. The difficulty in applying this notion to the specification of a human being is that it tends to be confused with that of the organization of function. Functions are coordinated more or less effectively and they are more or less developed in different people; but there is no strong correlation between the development of the functions and the structuring of being. A man may have good natural powers for performing a particular function and be well-trained and highly skilful in what he does and yet be lacking in both self-critic ism and self-confidence which, when authentic, require free conscious energy (E4). Again, good judgment requires knowledge, experience and emotional stability. There are functional activities, but they cannot be exercised unless there is a sufficient concentration of conscious energy to "throw light" upon the situation as a totality. Yet again, creative thought needs a well-developed intellectual function; but it cannot operate without creative energy (E 3). The greatest thinkers have recognized that their moments of true creativity depended upon a factor that was not functional and that entered their consciousness without their knowing how or when it would occur. On a more ordinary level, we can readily verify that "looking at" and "seeing" are not always the same. Our eyes may look at an object, but until sensitive energy (E 5) flows we do not see it.

We have said that in the "ordinary man", the higher energies have very little organization. The instability of our mental states needs no emphasis. Consciousness is so weak in most people that its significance is disregarded. and the limited awareness given by concentrations of sensitive energy (E 5), is usually mistaken for consciousness. Creativity is an undoubted reality; but no one knows how it works in some people often and in others very rarely or not at all.

These observations can be explained on the hypothesis that the higher energies can coalesce according to a pattern to form coherent structures that are not only alive but conscious: only this rarely develops beyond a very rudimentary "self". Our physical organism on the other hand is a well-knit structure and it is maintained by its power to assimilate other structures in the form of food and metabolize them to serve its own needs. The mind is a structure that, though within the body, is not a part of it. In ordinary people, it is very weakly organized and cannot maintain itself for long without the support of the brain. Good evidence can be adduced for believing that the mental energies can coalesce to form a "second body", that can exist independently of the first. This is probably the same as the psyche or soul and its presence in man endows him with a stability that, for a time, can outlive the physical organism. The second body forms spontaneously with experience, but if there is no strong central motive to focus the conscious energy it is little more than a structure of sensitivized [sic] automatisms such as is formed in dreams. A more coherent second body forms in "integrated" personalities and can under some circumstances acquire

¹⁸ Mainly based on the work of psychological study groups of the Institute at Coombe Springs between 1946 and 1965, and referred to in the author's A Spiritual Psychology, Hodder & Stoughton, 1964.

¹⁹ Cf. Energies, loc. cit. pp. 39-52.

consciousness and even independent creativity.²⁰ It can, in theory at least, reach a stage at which the sensitive energy is eliminated and only a structure of the three cosmic energies E 4, E 3 and E 2 remains. This suggestion is, of course, not susceptible of direct verification; but it does account for the extraordinary powers reported of some saints who seem to be free from the limitations of space, time and even number. We have included these remarks only for the purpose of indicating the scope of the theory of energies.

8. THE SPECIFICATION OF WILL CHARACTERISTICS

We can make a start with the difficult problem of assessing the will-power of man by defining it as the ability to hold together a relationship.²¹ Now, we can regard the Present Moment as a nexus of relationships held together by the Will, for which that moment is present. It should then be possible to assess the will-power of a human being by observing the extent of the region of experience that he can hold together as a field for his own decision, action and responsibility.

There is little doubt that such a property does exist and we can recognize differences between people.²² One difficulty in discussing the problems of will arises from the difference in essential nature between will and function. No functional description is of the slightest use as applied to will situations. This is either disregarded by psychologists or else made the justification for ignoring will altogether! Any attempted model of the will and its operations is bound to be fictitious.²³ In this case, a - fictitious model is bound to be wholly misleading by suggesting a mechanism or at least a structure that is totally alien to the operations of the will. Failure to appreciate the otherness of will has bedevilled many an attempt to reconcile the conviction that man does have power of choice and decision and therefore, an authentic responsibility, with the behaviouristic framework of orthodox psychology and anthropology.

The key to understanding will is to realize that it does not exist: that is to say, it is not a material construction subject to the determining conditions of space, time, eternity and hyparxis. Nor is it an activity or a function of anything that exists and hence susceptible to observation and description. It would be tempting to conclude as so many have done, that will is nothing at ail-a word wrongly applied to a functional activity--but this, as is also well known, leaves no place for human responsibility in any meaningful form. Will without freedom is nothing anyhow. But here we come against the converse objection that, in fact, man very seldom acts freely and even when he does so, cannot recognize the nature of his act.

We are not concerned with the metaphysical problem; but with the practical one of assessing a human characteristic that cannot be denied. In these days of large organizations, it is more evident than ever before that two men of equal mental capacity, similar training and experience, and not detectably different in their ability to deal with people, may nevertheless differ- enormously in their ability to accept and exercise responsibility. A man with exceptional creative power in almost any field may be seen to be woefully lacking in the power of decision. If we seek an explanation in terms of being, we find men of great stability, well coordinated in mental and affective powers, of high mental character -and yet unable to take command of a situation or hold together an organization. Examples could be multiplied: but it is scarcely necessary as everyone is aware of the kind of distinctions we have been describing.

²⁰ The term "integrated personality" is used in the sense introduced by C. G. Jung. The transition from mind to psyche and from psyche to soul is discussed in The Dramatic Universe, Vol. III, Ch. 39 and Ch. 41.
²¹ In Vol, II of The Dramatic Universe, Will was defined as the principle of relatedness. Since a relationship requires three terms

²¹ In Vol, II of The Dramatic Universe, Will was defined as the principle of relatedness. Since a relationship requires three terms which are mutually relevant, we associated will with the triad. This is useful for studying the types of relatedness that are possible, that is, as a power that makes things happen. In the present paper, an attempt is made to improve the treatment. ²² Two valuable studies by Dr. Elliott Jacques make this point clear, though in a different terminology. Cf. Glacier Project Papers,

²² Two valuable studies by Dr. Elliott Jacques make this point clear, though in a different terminology. Cf. Glacier Project Papers, Heinemann, 1965. "Speculations concerning level of capacity" and "A General Structure of Executive Strata". Jaques uses the term "time-span" for our present moment and "executive-stratum" for level of responsibility.

²³ Reference should be made to a valuable paper by Professor Henry Winthrop: "**Are Holistic Constructs in Psychology Fictions?**", *The Journal of General Psychology*, 1965, 72; pp. 1-30. Cf. His criticism of Colby's "Psychic Apparatus" as applied to the coordinating factor in human behaviour. Colby, K. M., *Energy and Structure in Psychoanalysis*, New York, 1955.

We propose a new measure of will as the extent of the present moment throughout which a given being can act freely. This is certainly connected with Jaques notion of "time-span", though not identical²⁴ because the present moment contains elements with which the will is in effective contact, but not aware of. We can conveniently divide the content of the present moment into three categories

1. *Actual Observables.* That which is accessible to the mind of the will (i.e., person) whose present moment we wish to assess. This includes direct percepts, deductions from percepts, the general environment not perceived but known to be present.

11. *Potential Observables*. These are beyond the level of the mind in question. They are unobservable, because the being of the person is insufficiently developed. They could become observable if his being were to acquire a higher level of awareness and coherence. Their importance lies in the potential for development and transformation.

111. *True Unobservables.* The most important of these is the hyparchic future or destiny. There must also be some necessary limit to man's power to know his own pattern, i.e., the eternal component of his present moment. Among true unobservables must be included the spontaneous exercise of freedom, which would not be spontaneous if it could be observed.

9. INNATE WILL-POWERS

It is an obvious datum of experience that men are not born equal in their power of will. There is almost certainly a ceiling beyond which a given person cannot develop. No training and no experience will enable him to take responsibility beyond his own limit. This all-important characteristic of human nature must be given full weight in any scheme of specification and assessment. It seems that this innate will-power can be assessed from the observable behaviour.

We can regard the actual observables as forming a "visible band" within the spectrum of relationships starting from the physical environment (E 12 - E 9) and reaching as far as the level of creative energies (E 3). For many purposes, the depth of the band (i.e., its apocritical interval) can be disregarded and its content then simplifies to that which the will to be assessed can grasp. This is the maximum content of the mind held within a single moment of attention and action. It can further be assumed that this "range of the mind" can be expressed by a single valued series of numbers, e.g., the number of distinct mental images that can be integrated into a single act of mental appreciation. We have investigated this question somewhat superficially, but enough to suggest that there are six degrees of mental grasp with the possibility of a seventh degree that is so rare that it cannot be taken into the scheme. There is also a zero degree of the idot who cannot grasp any idea at all. The six significant degrees range from the man who can grasp only what he can see, touch or hear, to the great administrative and organizing genius who can hold in his mental embrace the material situation, the human material with which he has to ;work, the objective to be gained, the choice of means or paths to follow, the types of difficulty that may arise and force a change of plan and, finally, a sense of the total historical situation within which he is operating. The hypothetical seventh degree man goes further and penetrates into the realm of destiny. He seems to know what cannot possibly be known.²⁵

²⁴ Loc. cit. pp. 102-113. Jaques emphasizes the greater independence of physical contact with the material situation (level of abstraction) as characterizing the man with the greater time-span. This is a most valuable observation since it confirms our view that direct contact with material objects (Jaques' perceptual-concrete), only applies within the restricted present moment of a weak will. The ability to "see what is not present" (abstract-modelling) that characterizes the higher levels of management implies an expansion of the present moment beyond the limits of sense perception. This is not, however, a matter only of seeing but also of the power to act. The higher manager decides where his subordinates need direction.

²⁵ Typified by Napoleon at the height of his powers. But it must be remembered that we are considering here only one of the three aspects of Will. Napoleon's grasp is unmistakable, but his level also would have to be assessed in order to rank him as a complete human being.

7 th Degree		The "Man of Destiny". Gives impression of infallibility. Sees what others are blind to, but can also grasp all perceptible factors.
6 th Degree		Can embrace all relevant factors perceived and unperceived. Is unperturbed by unexpectednesses. His grasp is total and includes the historical environment.
5 th Degree		Can combine grasp of the actual situation with assessment of potentialities favourable and unfavourable. Can hold to the central significance of a complex activity.
4 th Degree		Can conceive and hold to a plan with flexibility of execution. Can relate material situations and human situations, but loses contact with plan in face of unexpectedness.
Degree	3 rd	Can see relationships. Can judge and decide with the limits of a prescribed objective. Can grasp abstract ideas.
Degree	2 nd	Can grasp and compare ideas and situations. Can be given a direction and follow it. Usually unable to deal with both materials and people at the same time.
1 st Degree		Grasp limited to sense perceptions and habitual reactions. Can act only by habit or on instruction.

Fig. 3 Seven Degrees of Mental Grasp

The descriptions given in this table encroach on both functional and being characteristics. They must be read as ostensive definitions, pointing the finger towards types of men that we all know or know about. The differences are not in the efficiency of their functions nor their level of awareness, but in an almost indescribable power to act either more or less totally with the situation in which they find themselves. If one word is to be used, it should certainly be responsibility. The man of a given degree can be responsible for his own actions within his limits and also for the actions of a corresponding number of people of the lower degrees. This is the basis of the universally recognized hierarchical structure of organizations.

10. STAGES OF INTEGRATION

All that has been written in this section must be taken to apply to the innate and basically undevelopable powers of the will. They measure pre-eminently what a man is worth.

We have, so far, considered only the aspect of will that can be regarded as inherent in the very nature of a man. We must now turn our attention to the second assessable factor which can be called the level of awareness and is capable of development. Since awareness develops with experience and the integration of being, we can also regard the second aspect as an indication of the extent to which a particular will has developed its potentialities.

Here we must return to the notion of fragmentation. A man may have a strong grasp of the present moment, and yet not be an integrated personality. He may be unable to satisfy, let us say, the requirements of 4th Degree of responsibility, and yet those who know him may be confident that he is capable of doing so. All this refers to the unobservable element of will: in this case, the undeveloped potential and the partly hidden pattern of character and abilities. The fragmentation of the will comes from the absence of an integrated vehicle. The will attaches itself to whatever instrument is available. A man who has no stability of being cannot have an integrated will. Even if the will attached to his mind may have great power of embrace, it may have little power over his body or in his relationships, such as those of sex, which are centred outside the mind. This explains the contradiction of the man of immense power in dealing with great and complex situations including a diversity of subordinates, who nevertheless is unstable in his sexual relationships. We must, therefore, set up a second scale of assessment for evaluating the level of integration. We shall set down a table, without explanations, which would require a long digression into the findings of our psychological study groups.²⁶

It will be evident that comparatively few men develop beyond the third stage. When a man who has reached the fourth stage of integration has also a powerful mental grasp of the present moment, he can conduct the affairs of a large organization and carry very heavy responsibilities. Men of the 5th, 6th and 7th stages do not concern us here, because if such levels of integration are ever attained by human beings: they would not come up for assessment by ordinary people like ourselves. The interest of the table lies therefore in the first four levels and the transition regions between them which make a "reduced septenary" of practical interest because applicable to known situations.

7 th Stage	Man integrated on the level of conscious, creative and unitive energies. He is free from the conditions of space, time and number. His will is wholly integrated and yet can consciously divide itself so as to activate many other wills. His present moment embraces all human experience.
6 th Stage	Man integrated on level of conscious and creative energies In direct contact with present moment of humanity. In full sense a free creative Individual and yet integrated with Universal Individuality.
5 th Stage	Man integrated on level of conscious and sensitive energies. Man with "second body". Responsive to creative influences from Hyparchic Future. Fully integrated Individuality, but unable to transcend limitations of his own consciousness.
4 th Stage	Man with permanent aim. Will integrated but not permanently stabilized. Capable of conscious judgments because his awareness can occupy region between sensitivity and consciousness. Self-critical and yet self-confident. Capable of unswerving pursuit of single aim.
3 rd Stage	Man with strong "personalities" each with its own will. Liable to self-contradiction: capable of self- criticism, but avoids it. Able to entertain stable aim, but not to pursue it relentlessly. Awareness normally in upper half of sensitive region. Often theoretically minded.
2 nd Stage	Man polarized by likes and dislikes. Many "wills", but no central will. Able to entertain aim as desire; but not as act of will. Dependent upon others. Awareness lower half of sensitive region.
1 st Stage	Man with many contradictory wills. No capacity for self criticism. Aims restricted to immediate impulses. Largely automatic and conditioned. Attention rarely rises above automatic level.

Fig. 4 The Seven Levels of Integration

²⁶ The basic notions in the scheme are due to Gurdjieff who apparently adapted them from the seven-term scale of the Nakshibendi school of Sufism which in its turn derived from the remarkable school in Central Asia that dates back to the tenth century and was known as the Association of the Masters Hanedani:-Hajegan. [Editor's note: Reference is being made to *"Hacegan Hanedani"* by Hasan Lutfi Shushud, partially translated with additions in Systematics Vol. 6 No. 4. March 1969 (BB)]

Before we leave the subject of will, we must recall that there is the third aspect of the "true unobservable" factors. There is always and must necessarily be something unaccountable in the operations of the

will. If it were otherwise the will would not be free. Moreover, all experience confirms that the "unexpected" happens in human experience far more often than statistics would predict. This unexpected, spontaneous and incalculable element must always be allowed for in any assessment of a human being. Our scheme has at least the merit of showing why this should be so.

11. THE POWER-APTITUDE MATRIX

We shall give here a scheme for specifying the developable capacities of a human being. These are to be distinguished from the essential nature which comprises the physiological and psychological mechanism of the functions that can be trained but not changed and also the degree of will-power which appears to be an inherent property and which cannot be strengthened by training, but only set free from adventitious limitations. Such exceptions leave us almost solely with functional activities and levels of being that can be taught, trained, developed and integrated; in a word, educated.

In section 4, we found that the human functions can, for purposes of general assessment, be placed in three groups:

- (a) Intellectual abilities
- (b) Affective responses
- (c) Sensory-motor activities.

The levels of being that enter into the assessment of the suitability of a human person for a particular activity are those given by the

E3	Creative)
E4	Conscious)
E5	Sensitive	> Energies
E6	Automatic)

Fig. 5 The Energies Associated With Life

The higher energies are out of our reach and the lower energies concern the physiological physico-chemical and physical levels of a man's life. We can now form what we have termed the Power-Aptitude Matrix (P.A.M.), though a better term would be Functional Levels.

The content of the matrix as shown in Fig. 6 suggests the potentiality for development of each of the twelve poweraptitude groups or "boxes" of the matrix. The characteristics specified are indicative rather than exhaustive. We need not insist upon the prodigious diversity of human talents and the many ways in which they can be developed. The point is that we offer a method of grouping that enables human beings of the most varied powers and training to be given a first-order assessment that is not too difficult to apply in practice. It need hardly be added that a marked activity shown by a person in one of the twelve groups need not signify optimum development. There can be faulty, even pathological, activity in any region.

	C Intellectual	B Affective	A Sensory-motor
4 Creative	Scientific and organizational Creativity. Genius. Ability to combine several activities	Inspired leadership. High level spontaneity. Religious and mystical sense of destiny.	Artistic genius. Creative invention. Self-mastery. Great energy.
3 Conscious	Originality – critical judgment. Synthetic power. Able to combine theory and practice. Good teacher.	Emotional stability. Ability to take responsibility. Self- criticism and self-confidence	Imagination. Artistic sensitivity. Ability to grasp complex constructions. Self-control.

2 Sensitive	· ·	Ability to drive oneself. Social sense. Sensitivity to higher motivations. Loyalty.	
1 Automatic		Discipline acquired by training. Automatic affective reactions. Desires.	

Fig. 6 Positive Aspects of the Power-Aptitude Matrix

As a corrective to the optimistic picture given by Fig. 6 we may add one of the earliest forms in which the P.A. Matrix was presented in the cours e of our educational researches.

	C Intellectual	B Emotive	A Sensory- motor
4 Creative	Spontaneity Hypothesi Formation	Recognition of Higher Values	Total Working Insights
3 Conscious	Constructive thinking an judgment	^d Judgment and Impartiality	Coordinative Ability and Direction
2 Sensitive	Language and Symbolism	Intent and Persistence	Practical Skills
1 Automatic	Memory and Mental Operation	s Reinforcement and Discipline	Trained Behaviour Patterns

Fig. 7 The P.A. Matrix Applied to Education

12. THE COMPLETE SPECIFICATION

In the preceding sections, we have developed notions regarding the assessment of human characteristics that fall outside the usual procedures. These latter are as necessary as ever; but their limitations are well known and the results not always easy to interpret.

We shall, briefly, show the place of various current methods of assessment, and suggest new methods where necessary, under the various headings of:

- I The Power-Aptitude Matrix 12 terms.
- II The Levels of Responsible Action 7 terms.
- III The Structure of the Present Moment 8 terms.

1. The Power Aptitude Assessment

A 1. Sensory-Motor Automatic. This is pre-eminently the region of reflex conditioning. A large part of experimental psychology is devoted to this item. Speech abilities and deficiencies and handwriting tests are included here.

B 1. Affective Automatic. The region of response to discipline. Suggestion and reinforcement procedure. Application of disposition tests.

C 1. Intellectual Automatic. The region of factual knowledge. Mental operations requiring only the application of fixed formula. Thought without discrimination. Stereotyped use of "examination" procedures tends to over-emphasize the importance of this region.

A 2. The region of perception. Manual skills. Tested by ability to solve practical problems not involving critical insight into mechanisms. In this region man has a good understanding of animals and plants.

B 2. The region of emotional urges. Good and bad human relationships. Social sense or lack of it. The capacity for work. Also negative emotional reactions and weaknesses are found here.

C 2. The lowest level at which abstract thought is possible. Analytical skill, tested by problem solving where grasp of theory is required. Clarity of expression can be developed in this region. Tendency to believe in fixed meanings and two-valued logic.

A 3. The region of practical imagination. Ability to grasp the working of mechanisms. "Trouble-shooting." Artistic sensitivity. Self-control by bodily self-discipline. Tested by ability to solve constructional problems in an unfamiliar field. Independent aesthetic judgment.

B 3. The region of emotional strength. Good development here means emotional stability. Self-criticism and self-confidence well balanced. Ability to take responsibility. Good moral judgment. Where this region is badly organized, pathological conditions reaching paranoia are observed. Tested by observation.

C 3. The region of high intellectual powers. Originality. Synthetic ability. Ability to combine theory and practice. This region can be tested by use of open-ended questions requiring high degree of discrimination.

A 4. The region of constructive genius. The great inventors and most creative artists operate in this region. There can be a high degree of self-mastery sometimes amounting to asceticism. When this region is active the person is tireless and a very rapid worker.

B 4. The region of personal power. Inspired leadership and great influence over other people. Often religious and mystical insights. In this region there is a sense of destiny combined with spontaneity. When disorganized advanced morbid conditions including suicidal tendencies are observable.

C 4. The region of intellectual genius. Great powers of organization may be present (if will level is high enough). All forms of intellectual creativity require some activity in this region. In the absence of adequate development in the lower levels creativity manifests in imagination and play. This can be used to test its presence, since positive manifestations are always spontaneous and unpredictable.

2. Innate Will-Power Assessment

Of the two series of will-powers, we shall consider only that of section 9 which refers to the innate characteristics. The series of section 10 is bound up with the power-aptitude matrix and in the normal way, a man progresses up the scale throughout his active life. His place in the scale should certainly be ascertained from time to time in order to determine whether or not full use is made of his developed powers.

We wish to establish a rating for the limits of responsibility possible for a given human being. Though the range is enormous, there is good reason to believe that only a limited number of levels have to be considered. These prove to correspond to the series of multi-term systems. We shall use the symbol R for *responsibility* accompanied by a number.

R 1. Low ability to grasp distinctions. Strongly linked to sensation and habit. Can be responsible only within limits of a prescribed "universe of action". Typical of unskilled labour or man wholly dependent on routine. Can see only "what is at the end of his nose". Will not and cannot take responsibility beyond a fixed situation. *Monad Man.*

R 2. Can grasp distinctions. Can accept responsibility for simple acts of choice. Can control subordinates within limits of a prescribed "yes and no" situation. Unadaptable. Characteristically unable to establish genuine relationships of equality. *Dyad Man.*

R 3. This is the characteristic of men good in relationships. He can see beyond the work of his immediate subordinates. Can direct and not merely instruct. There are many types of R 3 men derived from the six basic triads.²⁷

R4. Can produce and maintain a well-ordered situation without personal involvements. Can distinguish between ends and means. ²⁸Man of action, but limited in his resourcefulness. Cannot exercise independent leadership but makes very good helper to true leader. *Tetrad Man.*

R 5. Man capable of independent objectives. Can work for himself or lead others. Because he can grasp and hold an objective without need for support of a mental image, he is far more flexible in execution than previous types. **Pentad Man.**

R 6. The Great Administrator or equivalent in other fields where need to grasp many independent groups of ideas is needed. Has historical sense. Enjoys creating an "event". There are very many different types on this level owing to the diversity of the hexad. *Hexad Man.*

R7. The Superman. Unlimited capacity to lead and govern. Can. take decisions beyond limits of his own lifetime. His grasp includes all that is within communication with his present moment. Is particularly characterized by awareness of Destiny. Goes for the impossible and may achieve it. *Heptad Man.*

3. Present Moment Assessment

We can do no more than indicate the use of this concept. It requires close personal study of the individual and can be made only with his co-operation. Each of the eight influences acting on the present moment must be discussed with him and his interest or lack of interest noted. A scheme of questions and practical tests is needed in order to bring results that are on a comparable basis. Little work has been done on this so far and it is included only because, in the long run, this is the most useful instrument for self-assessment and self-improvement.

²⁷ Dramatic Universe, Vol. 11, Ch. 28.

²⁸ Cf. the tetrad, Dramatic Universe, Vol. 111, Ch. 37.