

## Chapter I

No individual can endure for long the strain of psychotherapeutic work, particularly work with children, unless they are supported interiorly by a quiet and unbreakable confidence in the strength of the dynamics that they are studying and using. In considering the fundamental dynamics not only of human beings, but of human society, it seems to me that there is a need to take by a far wider series of facts into account in deriving our principles than has so far been done.

For a long time I tried to accept the view that the affective processes and the Jungian individuation processes are really adequate as dynamics to account for human development, but found it quite impossible to do so.

I took therefore a different angle. I tried to find material which could account for two rather different concepts. First, how did the superego come into existence at all? What was it that led the most primitive caveman to develop a code of morals, or a code of social behaviour? Today we are continually finding ourselves confronted with a slide back into the most primitive phenomena and a forgetting of all the knowledge so painfully acquired. Again and again human beings fall into the same trap of thinking that after all force is obviously the most effective means.

Now, parallel with that tendency to slide back into being the caveman with the club comes the opposite phenomenon: the fact that these methods do not work: that force used in that way meets a peculiar counterforce: that some of those human beings subjected to every kind of violence will come out still unmalleable. So it seems to me that mankind is in the position of having constantly to maintain his meagre gains, with the concentrated use of all that is sensible in him. Then the older view about there being automatic progress is quite untenable if gain is so difficult to maintain and mankind tends to forget it so quickly. We have the evidence of the Mayan civilisation and all the other civilisations which have been destroyed and our own in the process of being destroyed.

Now we contemplate that problem from a different angle. What is it that decides that certain peoples are going to evolve and certain others are not going to evolve? Anthropologists tell us that there are tribes, groups of people living together in ways which are unaltered as far back as we have records. Therefore, we still have to account for the development of civilisation. What is it that happens? What is the urge that produces this development?

It is clear that the results of all the work on affective conditions and recognition of various affective phenomena can be acknowledged as true. On the other hand, the American

attitude about courage and enterprise and frontier is equally true. But when the frontier is conquered, man destroys what he has achieved, as in the Dustbowl and in Africa and Central Asia. So we are faced with a circular process which in the end will destroy what it has so painfully achieved. Therefore that explanation alone is not adequate.

So let us consider a third angle. Why should strange phenomena such as myths arise? Why should the very intelligent ancient Greeks have made their hierarchy of gods and goddesses? Why should this extraordinary conglomeration of thoughts hold such sway with human beings? The answer given by Professor Jung is very cogent and meets half the problem. As he points out, mankind always grows up in the same circumstances as a child with parents, with siblings, in a society. He grows up through stages which are universal and he comes into certain situations which are infinitely repeated. It is therefore reasonable to suggest that these typical situations produce in the mind certain traces of the solutions which mankind has found to them in the past. Again, I do not find that totally satisfying. We need something which is more powerful, which is more dynamic, which is more universal, which will take effect with stupid people, which will account for people within whom the affective processes are at a minimum, which will answer for the achievements of mankind and the complexity of gods, which will give some reason strong enough to explain the unyielding quality of the drive that sends men up Everest or to the Antarctic.

I want to suggest to you that there are two other forces in human beings, which are so universal and so all-permeating that they have been invisible to us. I believe them to be the main dynamics that drive the major portion of ordinary human beings (outside the affective sphere) in their ordinary life.

Now the first one is this – it is the drive to know: the drive to know is part of the physiological function of the cerebral structure in the intact human being, and what we mean by intelligence is the drive to understand. I mean that it appears to be unendurable to the human being to live with experience, either external or internal, which cannot be ranged into a pattern. The characteristic differentiation between the mentally defective and the intelligent brain arises just at that point.

The reason why there are mentally defective colonies is because it is not possible for a brain, below a certain integration of structure, to understand its environment and it has no urge to understand. From our material the intact mind seems to be driven by something which is quite irresistible: the drive to make some kind of a pattern or grouping which can be accepted as an explanation of the phenomena that are experienced.

There is now a wide awareness in the world, through the study of semantics, that speech alone does not convey meaning. Thought goes on in many different ways and many different types of instrument are needed in order that this thought may function. We have the work of Suzanne Langer who explored the need for a particular attitude to language

and communication. So it is possible to demonstrate ways in which thought operates which have nothing to do with words. Present interest in symbology and the symbolic methods of experiencing existence are bringing material to light cognate to this way of thought, which I believe is not really symbolic in the way that it is taken today, but something quite different.

It seems to me that myths and other forms of religion are part of the response of mankind to this same epistemological impulse. Mankind feels he must know, must understand and must group. The Greek's brilliant secondary system work left large areas of mind and of experience unfitted into the pattern. They could not be fitted into the pattern because they did not belong there. The same thing happens with ourselves and we can find a satisfying answer to certain things which cannot be known by our secondary system, by using the particular rituals of the group of people with whom we belong. That is the position from which I speak as a practising member of the Church of England. There is another force which seems to me to be equally strong and we are not talking about mild little things that happen in civilised circumstances. I am talking about what happens in riots for bread, where everybody tramples on everybody: what happens in prisoner-of-war camps, where people are locked up because there are cases of typhus inside, therefore all must die; I am talking about what happens when people are faced with ultimates. Now when people are faced with ultimates I think something else comes into play and that seems to me as powerful a force as the epistemological drive, and this is the need that every human being has to continue in the same state as he has been hitherto; the drive for homeostasis.

Now, homeostasis is a universal phenomenon that goes right through the universe as we know it: it is an extremely powerful law and is best studied in the physics of liquids; it is the law which decides the size of bubbles. This is one of the turning points of all structures, because each substance has, within the structure of its molecules, a certain tensile quality which is immensely strong and which makes the structure shrink until it has achieved the smallest possible area and then it becomes absolutely stable.

Now the homeostatic need is also an economy. It is an absolute need in human beings because, without it, you could get the type of personality who never achieves anything, either through an attempt to do too much or through the flight of ideas of the psychotic. So this need is basic to human beings and probably basic to animals too, because the homeostatic principle is also used in the way that crickets can continue to stand upright against gravity. It is the basis of the whole of form.

Mary Boule, daughter of the mathematician, got a hunch and became interested in the relation between shape and psychology. She began to show that flower shapes, the shape of the geranium petal, for instance, and the heart shaped petal, arose mathematically out of certain constellations of form. When she then recorded certain emotional drives in graphic form, what came out was a shape like a flower petal. So we

may find, not only that the actual natural shapes around us obey certain homoeostatic mathematical laws, but also that the structure of dance and music has some relation to the shape of cultures. So I believe this force is a universal force; it is a force which makes for the permanence of form; and each individual is under the need to hold the form which he has achieved, so his epistemological drive goes to a certain point and then comes in the question of culture.

Every human being is born in a culture and a culture has a shape. In each culture certain types of behaviour are easy to learn and others either difficult or impossible, the same type being easy to learn in another culture. Therefore, the individual accepts the epistemological beliefs current in his culture and does not have to work them out for himself. He finds it easy to shape certain parts of himself according to a structure and finds certain other parts in that culture unmanageable. An example of such a factor is the difference in attitude to emotion in the Germanic as compared to the Anglo-Saxon structure of society. In England you get an emphasis on external behaviour, and no average English person would look for some correspondence between the individual's feelings and his external behaviour and if one is unfortunate enough to have an unsuitable feeling at a given moment, it is one's social duty not to give that feeling expression. In a Germanic culture, the fact of feeling in a particular way would bring the right to behave the way you were feeling. Therefore, if the individual does have an interior homeostasis which is like the pattern of his group he becomes satisfied, vigorous and alert. If, on the other hand, he cannot accept the behaviour which is considered correct by his group and because of his particular personal need for integration of his homeostatic principle, he becomes what we call a disturbed or neurotic personality.

As I see it, there are three principles at work in human beings which interact with each other all the time: they are of equal strength and you neglect any of them at your peril. First is the need to know, the second one is the essential need to have a homeostatic principle. This leads you to use your spare time in fantasy, rather than in coping with reality, if you find that you can admit no more reality at present. Your spare time goes into unreal thoughts because if you admit any more reality into your interior principle your sense of comfort will be upset. Society becomes aware only of those facts about its own behaviour which it can admit into its homeostatic principle. Anything that it can not admit it has to exclude, probably by force. If you hammer into a body politic awareness of forms of reality which do not fit within what can be tolerated, then you will explode them. Either you arouse a savagery which is primitive and pitiless, which destroys the interfering group, or you explode the homeostatic quality of the existing group.

This seems to have happened with the experience of the early suffragettes. Our British police, noted all over the world for the tolerance and fair-mindedness, behaved in a criminal, obscene and brutal way towards the women in Wales who introduced the first suffragette procedures. But although this was known to large groups of politically minded

women, the records of the body politic exclude any reference to it: it is not mentioned in anthropology, sociology or in the history of the suffrage movement. Because, at that time, such militant tactics were entirely unwise and very dangerous, not so much to the cause of women, but rather to the body politic. Something here is as fundamental as anything human can be. Murder and violent crime, alcoholism and drug addiction, can all be seen as the uncontrollable response of an individual who has been forced to accept the reality which destroys his homeostatic principle.

Now the third principle is the affective life, and the whole of its projection in the development of the life of the family.

If you want to perfect your diagnosis you should have these three questions in your head all the time. Is this an epistemological situation? Is this homeostatic? Is it affective? Which is the dominant factor in this particular situation? By using these three questions you can bring about changes in human beings which are unreachable by any other single line of attack.

## **Chapter II**

A difference between our work and the psychoanalytic is the psychoanalyst's exclusive concentration on the interior wishes and the interior interpersonal relationships. Nothing seems to be considered by them which is not held within that nexus. Whereas I hope to show you that a very great deal is going on in the baby which has nothing whatever to do with his emotional interpersonal relationship. So we can start from there.

We have to start by defining in our own way, the terms we are going to use. For the present I propose to use the quite inadequate term 'understand' for the process which goes on in every living creature by which his experiences are arranged into a pattern which conveys meaning to him. Primitive physiological sensations such as warmth, cold, smells and so on become organised into what one might term primitive concepts, so that to some extent behaviour becomes dependable and predictable.

Now, in the infant, four things are going on at once, which one needs to keep constantly present in one's mind when dealing with children. One, things which are happening to the baby from the outside world: I mean real things, like the baby being picked up and put down, being clothed and unclothed, bathed and dried. It is put down in a comfortable or an uncomfortable position, has crumbs in its bed, has a wrinkle in its pillow under its cheek and so on (I am excluding for the moment the question of feeding, because that is so complex, and interpreted in a very complicated way by the psychoanalysts). What comes to it from the outside world happens all the time and these things imping on the baby's sensibility as experience of life.

The second thing is the happenings within the body of the child. The child feels sensations of all kinds coming and going all the time. Let us say the child feels hot inside, it runs a temperature or it is cold or has wind, or excretes, and feels that this act of excretion is interesting or pleasurable. All kinds of interior bodily sensations go on which in later life we have learned to exclude from our consciousness. These will only return as symptoms if hypochondriasis. But all these sensations are still continually present in the young child. The world is being continually born and killed miraculously by the opening and shutting of the eyes. There is simply an alternation between a magic 'thereness' and an equally magic 'not thereness' which comes and goes without any rule or reason. The child realises much later that this happens inside its eye. And so a continuous series of impressions from the child's 'withinness' is going on all the time.

Now we come to third point. This is the urges, emotions and instinctual sensations, emphasised by the psychoanalysts, which are neither physical nor do they come from the outside. When people are with new-born children they can see these things happening: rages appear, pleasure appears, the look of desolation appears: all kind of very vivid and important feeling-things go on in the baby.

Finally we come to the strange and debatable ground of thought. There seems to be an inherent necessity in the brain to circumscribe the range of perceptual experience. To show this we were able in the early days to undertake experiments. We used to choose three kinds of programme to be viewed in the cinema, such as a review of a local event, a thriller of some sort and some advertisements: so there were three different types of perception at work. There was the perception of known activities where the gaps could be filled in by guesses: there was the perception of an unfamiliar story, and there was the direct visual perception of advertisements. A group of students would sit in different parts of the cinema, watch these, come straight home and records descriptions of them. They would repeat the whole process three times. Now, we found this principle operative: that the number of facts observed and correctly interpreted by each individual remained roughly the same each time, and the type of fact that was not observed also remained the same. It was this that led to the early discovery of the curious persistence of a set pattern, in the observation and use of material. That is to say, the greatest effort on the part of an individual cannot extend the areas of perceptive understanding, by more than a very small proportion of the amount perceived spontaneously. This discovery was given validity by its use in relation to the Mosaics.

It seems that something of that sort takes place from birth onwards. There seems to be a certain area for every individual within which he is comfortable, and when the area grows too large discomfort sets in, so I wish to make the hypothesis that, from the beginning, there is a principle at work in human beings which drives them to organise their experience into patterns, and that these patterns are individual to each person. I have called the organisation of those patterns the Protosystem. The Protosystem contains

certain basic principles and modes of structuring which one can learn and follow through, but it is also completely individual, so that when you learn the basic principles and know exactly how they work, then you should look for the thread of individual personality and weave it as if it were the warp and woof of that child's experience. There is something in us which seems to be at work all the time to limit the number of fresh impressions coming in, to organise and arrange their impact both within and without; a process of organising experience in order to make it graspable.

The second thing which is going on all the time is an interaction between the Protosystem and the emotional life.

A therapist sees a fantastic World. For example, one which I will call my Migraine World, made by a child of ten, an intelligent, active, well-balanced, cheerful and happy girl, with a good relationship to school and to home and everything apparently in order. However, she has migraine and during one of her migrainous attacks, which we observed in the playroom, she makes a World which represents material that has never happened to her at all; about lions and tigers and wild battles between lions, the drumming of the hoofs of bison, and so on. The psychoanalysts view would be that this is the picture of the fulfilment of a wish. This element certainly does exist and I do not want to minimise its importance; but emphasis on this element can distort the picture, if it is not balanced by the opposite. Now, this opposite element concerns the type of emotions which is aroused by the presence of a terrifying mental impression. If, for example, a mother's face, with two large eyes, intended to be tender and loving, is seen through the half-open eyes of the small, sleepy baby, as a tremendous, frightening lion-witch, then that mental impression generates fear; so that the fear becomes the consequence of the mental impression not the mental impression the consequence of the fear. I am here quoting an actual case. It is important for you to understand that the continuing effort of the total self to limit and surround and make the experience comfortable, is as often wrong as it is right; and out of its wrongness inappropriate emotions will arise. The crucial point is this: if the false pictures and the false emotions were regarded as wish fulfilment, then there would be a very strange type of wish behind them. Then, behind that there must be the need to make a philosophy of human nature which will account for the existence of these fantastic wishes. If, however, it is admitted that there is this need to construct a reasonable picture of the universe then a great many of these become not wishes, not involvement with a basic philosophy, but the operation of a thought process which I have called the Protosystem, which is represented by such material as that in the Worlds and the Mosaics.

The essential nature of the Protosystem is that it cannot be represented in words, unless perhaps poetic words.

The experience which the child has emotionally about this process which is non-verbal, has to be explained by the child to himself. So there is an elaborate cortical and verbal

process which the child uses to explain these experiences to itself. The Protosystem is an extremely accurate, well-defined, integrated structure, which demands all your accuracy of thinking. Once you know it you can communicate easily with your child. He just uses the World materials and Mosaics in the same way that he would use words to talk.

I suggest that we call the laws of ordinary thinking, the verbal process, the Deuterosystem. Thus we have two quite different systems as tools to think with. We have the Protosystem which is essentially non-verbal and we have the Deuterosystem which deals with reality through verbalising.

We come now to the relation between the Protosystem and the body. The Protosystem is a process, a vivid highly energised, important process and it has got to happen somewhere. Where it happens in the absolutely healthy, well adjusted and satisfactory individual I don't know. We cannot observe this process directly only indirectly, through the emotional life. In an emotionally disturbed child, we can observe this in two ways. We may observe it, for instance, as a fear; but in many cases it is too far removed for it to come up even as a feeling and in that case, the disturbance presents itself in the body. Now recently we have had a most valuable chance of watching this actually happening – seeing how the autonomic nervous system is directly under the control of the Protosystem, so that the child becomes pale, cold and limp; blunders about and seems not to have full control of her limbs, whilst we know quite well that nothing is wrong physically – that this is a picture of the Protosystem at work.

Now, we have these four processes going on; we cannot observe the two thought processes directly, what I would call the Proto and Deutro systems; we can only observe the bodily and emotional expressions from which to deduce the other two processes.

If you add to these four processes, the second main drive, this absolute life's necessity to limit your total experience, then you've got an immensely complicated network. Moreover, all four processes are happening all the time and happening independently. For example, if a very nice cool breeze blows on a child's hot skin at the moment when he is sucking his thumb, the feeling on the skin becomes part of the thumb-suckingness and the emotions that come with this. If at the same moment the trees are waving outside and he's come to the point where he can perceive movement, his cortical activity is going on at the same time meditating about the trees. So that all these processes are flowing all round all the time. I find it difficult to imagine how all this can act as a single entity in so simple a schema as Freud has suggested, as Ego, Superego and Id.

What I would like to put before you, instead, is that there exists in everyone a primary centre, which starts acting probably around the fifth month of intra-uterine life, about the time when the ventricles in the brain are closed. From the moment of its coming into operation (and I'm quite prepared for somebody to discover later on that it has an actual location) its work is to co-ordinate all these processes and it is not until the fourth year



of life it becomes recognisable as an acting entity. Now, it is this primary centre which registers what is happening and to begin with, it seems to have no continuity because the first experiences of children are fragments of no particular order. The first Worlds made by certain children illustrate this well. The sort of Worlds where you have as it were a platter, a tray on which things are thrown and you have thirty different things happening, each one quite distinct. The child will tell you all the different things that were happening, but it would not occur to him that there had to be a connection, that there should be a connection between them.

As I see it, the small child's problem, and to the small child the reason why the lack of security and the lack of the presence of the mother produces the ills now recorded by Dr. Bowlby and Dr. Spitz and so on, is that the primary centre which co-ordinates and makes sense out of these is as yet so weak and so undeveloped. If there is no protective surface of envelope around the child the whole time, holding it together and keeping a physical continuity of smell and sight and sound, then this wild unorganisation of the child's total experiences will destroy the child. The child is incapable of doing anything at all about it, therefore it sinks into a subcortical level, to the level beyond and below any voluntary movement. This seems to me to be borne out very closely by Dr. Bowlby's pictures. The child takes up the womb position, puts its head down, curls itself into the smallest possible compass and remains absolutely motionless; that is to say that it is quite impossible for that child under those circumstances to find any point to hold on to in this terrific, multitudinous, multidimensional streaming consciousness of the simultaneous happenings of these four processes.

What appears to be the result of a single causal chain developing forwards is not, for if you were at the other end of the chain there would have been a number of other paths which the Libido could have taken; therefore this appearance of its being a continuous development always going the same way, is an illusion. We are always dealing with a multidimensional development, not a single development at any time. It is never a single part of the personality in a child which is ill, the other parts being healthy; it is a question of what the total personality does in its development, therefore at no time and in no place do we have a single cause.

Now, if we do not accept the causal chain, what do we accept? What is our position? Well, I have a hunch that there is a clue somewhere in the bodily changes that take place in patients during their psychological sufferings, their treatment, and through their later recovery. Now Cannon has shown that the occurrence of strong emotions which are either repressed or very tightly controlled brings about the release adrenalin into the tissues. Therefore, it is possible that the anxiety which people suffer is not a direct psychological phenomenon but a physical phenomenon, coming about through actual multiple endocrine changes. Therefore I believe that a bridge can be built between a purely psychogenic attitude and the purely physiogenic attitude in psychiatry.

Now from our point of view we have actually five elements in every situation and I've tried to express this view by the way we handle our cases – the belief we have in multiple aetiology, that these five elements interact all the time, at the same time. These five elements are; first, the body; and here the body that should be considered is the child's actual and individual body, its history and its present state. The second is the cognitive development, the actual level of development which is of more practical value than simply having an I.Q. The third is the family background of the child, with its emotional relationships. The fourth is the psychological or psychiatric study, the study of the child's Protosystem and what he is doing with it in his present situation. The fifth element is the element that should be represented in the summary, that is to say, the actual mental work which we as therapists do with the child using our particular specialised knowledge.

### **Chapter III**

Today I want to spend some time on definitions because it is important that we should agree on the use of certain terms for the discussion of this particular kind of work. I want to make it quite clear that I regard myself more as an investigative scientist than as a philosopher or as a psychotherapist. The psychotherapy comes into being as a consequence of the investigation. Now, in order to be able to investigate anything one must have the right tools, which must be clear cut and have a definite use: their purpose must be to help us to seek out different parts of the entity we are examining and to study them in combination with each other.

Now, everyone who works with human beings has the same difficulty; that there are no words (since we have given up the universal use of Latin) which can be used exclusively for the particular piece of investigation in hand. We have only words which are also used in other ways; they are used in popular speech and also by other classes of investigators so that, apart from the single term protosystem, there is no proprietary right on words used in our work. So, I think we must choose the most appropriate terms in current use and make sure that we understand exactly how we are going to use these tools.

When you watch a human mind in action you find a number of different processes going on which are quite distinct from each other. We must isolate each one and be quite sure what we are talking about. My own experience of the minds of children is that they are exactly opposite to the general view. If your tools for looking at them are sufficiently refined and definite you will see that instead of being confused and muddled, they are extraordinarily defined and precise.

I want first of all to make a distinction between the two actions of thinking and imaging. I use the term imaging instead of imagination because I want to get something clearly defined. To take the process of imaging first: it is quite clear that the essential quality or mode of the human being is the formation of images. The images are expressed as part

of the outward -going movement within the body of the experience of the individual, and can be expressed through any one of the five senses.

My colleagues of the Gestalt school tell me that there has been a progressive development in the evolutionary process of the capacity to image, and to complete a Gestalt. This process called the completion of Gestalt comprises what we all do, partly through experience, partly through learning. It enables us, for example, to complete a picture of a train in our mind when we hear it going down a valley out of sight, or the picture of the inside of an aeroplane which we have never been in. It is quite clear from experiments with certain animals such as the beaver, that there is rudimentary ability in animals to image the inside of something seen on the outside; and it seems probable that this capacity has been taken by the humans as a common inheritance. How far this capacity can be interfered with by illness or psychological difficulties I do not know but, for the moment, I want to consider only the normal, successful, healthy child.

It appears to me that a child born in this century has come into the world with certain physiological abilities which are common to the whole species. We will examine later how those physiological qualities can be affected, when we discuss the interference with perception that is brought about by neurosis. Peculiar images which have no basis in objective fact are presented to the mind by the mind. Once again I want to get the definitions right and exclude anything about ordinary perception, with which we are not concerned.

I want to use 'imagination' as the word which applies to all forms of imaging not concerned with straight forward relationship between the individual and objects but involves an action on the part of the individual. If I say I am going to write a story or paint picture, I am going to make a play or attempt to reconstruct Nero's actions in the arena, I am using my power of imaging in order to produce a piece of imagination, and I would like to keep that term for my purposes without any reference to other uses of it. It is the activity of the mind that creates for itself, as a direct process, images of any kind.

Now here we arrive at the first difficulty, because there are a number of things that go on in the mind which look like that and are not that, and for our purposes it is very important that we should be able to distinguish one from the other. For instance, the characteristic of daydreaming is that it occurs without conscious effort or direction; the clutch of the mind comes out as it were and some other process within the mind presents a stream of images to the consciousness. These two things should be carefully differentiated; and I suggest that we use the term fantasy to designate those happenings in the mind which are not willed. For the moment I will not use the term 'conscious' or 'unconscious' because I myself do not know where the barrier comes between them. My first great battle with my colleagues was when I tried to give a serious and honest answer to the query "What do you mean by the term unconscious?" and I had to reply; "I know what, in my type of work, is conscious, but I do not know clearly what is unconscious".

Now Freud brought a profoundly important and vast field of experience to our knowledge when he pointed out that the reacting of the individual to desire was to form an image of the satisfaction of desire. He took it as being the fulfilment of an unconscious wish which had become repressed. Now, I would like to take that very much further than Freud did and make it instead a universal phenomenon. It seems to me that the records of man in polar exploration, on rafts in the sea, and so on, make it clear that the response of the individual to the experience of need or unsatisfied wish, at any time or place, is to make images of fulfilment. Therefore these images arise out of tension. They rarely have a conscious element, so I would like to use the word fantasy for the images which arise in relation to wish fulfilment wherever an unsatisfied wish appears.

We have therefore two types of imagery. That which arises in the individual in relation to the functioning of either his physiological abilities or in relation to something which is difficult to describe and can be felt as action. On the other hand we have fantasy arising as a compensatory activity, to make the stress of unsatisfied wishes bearable and produces a kind of mirror reflection of imaged satisfaction of a need or desire.

## **Chapter IV**

Now, I want to pass to the activity of thought. As I understand them, modern logicians and philosophers hold that thought can not exist without a medium in which it can be carried on: that is to say, that thought cannot exist without words in which to think. But, in the sense in which I want to use it, thought is the activity of arranging experience and images in such a way that they can be expressed in words. Note the crucial difference between thought considered in the first way, and thought considered in the other way which I want to put forward. Thought of the first type is always bound, as it were, within the time process; thoughts have to follow each other, to be linked with each other, even if they are multidimensional mathematical thought. My mathematical friends tell me that you cannot think a number of things all at once, you have to think in sequence and to make a structure which can be expressed in language. I suggest, therefore, that this sequential type of thought be regarded as a system and be called the secondary or Deuterosystem; a system of cognitive living where thought about experience goes on in time and space. Now most people would consider this to be the whole of thought, so we begin here to touch on the question of conscious and unconscious. It seems to me that as long as the non-cognitive is equated with the unconscious we will get confusion about the non-cognitive being supposed to deal entirely with affect. I cannot accept that cognitive thought covers the whole field of thought.

Now, taking Professor Collingwood's scale of forms, which is described in his essay on philosophical method, one would expect to find that there was a pre-grown process, an earlier member of that particular type of activity which could be described as thought,

but was not thought in it's logical for. Because you cannot examine the productions of children made with the type of material that we provide for them, without becoming aware of the existence in them of a form of thought, that is, an entirely non-affective process. A process that has practically nothing to do with interpersonal relations or affective states, but is concerned with the need to understand; which I suggest as my first principle. Now, it is still assumed, even by observers like Piaget, that if you have no words you can not think.

To recap – we have our four terms: imaging, fantasy, thought as a secondary cognitive process and primary thought. Imaging is the physiological process by which images whether visual, aural or tactile, etc., are received by the body. Imaging is important, for example, in relation to the Mosaics. It is essential that the pieces should be correctly imaged in order to be able to make even the simplest compact design. Fantasy, you will remember, is used for processes of mind which are free-wheeling, happening in the mind, with no direction, when the mind runs on its own. We used imagination for processes of creation where a deliberate process goes on which is willed by the individual, and the secondary cognitive process being what the rest of the world take as thought. In spite of a great deal of work done on the problem of the possibility of imageless thought, most workers accept that thought can not take place except in the presence of language, and that language is what you think with. However if by the term 'language' words and grammatical speaking are meant, we can not accept it. If on the other hand the term language is expanded and that in agreement with Susanne Langer, language semantics and communication is seen as a much wider term the verbal language, and that communication can take place through organised non-verbal symbols, then we are in a position to accept this statement. We then come to the next belief held by other schools of psychology and psychotherapy: that what goes on in the child's mind which is non-verbal is fantasy. Now, that is important because if that is fantasy then you get back to the problem of where does the fantasy come from? What is it that makes the fantasy happen?

Now, our particular discovery, which is simple and obvious, is that the physiological law of structure and function obtains just as one would expect if one knew no philosophy and no psychology. The simple, natural view that if you have an eye it sees, if you have a heart it beats; and the idea of an inert heart, that lay about in a body and only started beating at a certain point, is untenable. There is no way that a structure as vital and as active as the cortex could be in abeyance until a certain stage in the acquisition of knowledge has taken place, that is, until the child has acquired a certain mastery of verbal language. On the other hand, everybody agrees that eight is about the earliest age at which one can expect a child to be able to carry out the process which we call thinking; that is, to be able to construct a letter or a piece of logical argument that has a beginning, a middle and an end. So the problem that we are faced with is what happens in the mind of children before that age? The whole of Piaget's work and a good deal of Gesell's has been directed towards an attempt to discover what is happening in the mind at that stage. But what has

been studied is the relation of the child to the external and outer world. The whole of Piaget's work on causality and the child's view of the universe is concerned with the child's view of the sun, of the Lake of Geneva and of external things. Conclusions, based on that vast amount of experience of the child's causal thought about the outside world, show that thought processes taken from that angle mature slowly.

It is our particular contribution to psychotherapy to have invented a way by which thought processes about the interior world can be recorded. The instrument used by other workers for their investigations is language and even work done on schizophrenic thinking is done through language. Work has been done on the understanding of proverbs, on the ability to describe, on the ability to underline the significant words in sentences and even to abstract certain qualities from objects. We have found a way to do what no one else has tried; to see what is going on in the formation of the child's total interior relationship to life. Now, when I started to study this I found it impossible to make any of the words imaging, fantasy, imagination or thought, cover what happened when a child makes a World. It was not expressed by any of them. What was it which makes a child put down different objects in the same place on a tray time after time? What is it that makes a child place an object just-so in relation to other objects? I began to record the children's Worlds and to analyse them backwards and this analysis began to throw light upon what the child was actually doing. What I found can be connected with what Spearman said, which is that concepts are built up according to certain laws and these laws come about through what he has called the 'education of correlates'. He means that the mature mind notices the likenesses and the differences between different objects and groups them accordingly; although, if you try to explain it to a blind person it would be very difficult to get over the idea, for example, of roses. You would have to say that they were large glowers, they were small flowers, they were every kind of colour, they had every kind of number of petals, some of them had scent, some had no scent, some of them climbed and some of them did not climb, etc., but to any of us it is quite easy to say 'That is a rose'. Because we have automatically deduced from all the roses that we have seen certain essential characteristics which for us make up the concept "rose". As Spearman pointed out, adult life and thinking is wholly based upon the education of correlates, so that we use every day twenty, thirty or more correlates of that kind which we have never studied, have never been taught, and never considered.

Now, the question is, what makes us do it? And that is where my point comes in, because Spearman thought that this was an innate quality of the human mind. But as I pointed out, the human mind needs to master, to group and to understand experience and therefore the education of correlates is the way the mind deals with experience. Everyone can deal with the word 'knife' whether it be large or small, round or pointed, thick or thin, sharp or blunt, decorated or undecorated and so on. I asked Professor Spearman why this is so and he said; "Because it's a thing that cuts". I answered "But how is a child going to identify before it has cut anything?" Then I pointed out that a knife is cold to touch, it is

slightly sour to the taste, it is faintly bluish to the look, it feels smooth; these qualities, so far as I know, have never come into a description of a “knife”. But those are the qualities which a small child playing on the floor would naturally identify with a knife.

So Professor Spearman and I did some experiments which worked out well. We found that if you put a blunt knife on the floor, together with various other long things like pencils and so on, and you show it to a child of two and a half, and you call it a different name like ‘tommy’ the child will pick up the ‘tommys’, whatever their shapes are, if they are cold and faintly sour and feel smooth. So the grouping that a child would give to ‘knife’ is quite different from the one that an older person would give. So Spearman agreed with me that his central point in the education of correlates was in fact their use factor: the use factor of any single object is seen as the core of the qualities around which the correlates are produced. Now, awareness of the use factor can not be originally present in the children. We were left therefore with a very difficult problem, and Spearman died before we could solve it. If we take two hypotheses, one that the child thinks, two that we know there is not a use factor, then what is the kernel factor around which thought educes correlates?

After studying example after example I came to a conclusion which I present to you for critical testing as a hypothesis. Now, if you think of a small child being carried about in space without any measuring tool, with all its senses alert, with a tremendous stream of impressions from outside and inside going through it all the time, if you apply my first principle that the presence of intelligence means an attempt to group in order to grasp, what is the grouping going to be done round? It seems to me that the evidence suggests that grouping is done round similar sensory experiences. So that if you take experience like feeling cold or feeling hot, feeling comfortable, feeling muffled up, feeling uncomfortable, you will find that for the child the substances or the occasions which produce these sensorial experiences become not associated but identified. Sensorial experience which we are dealing with at the moment, whether it is interior or exterior, is grouped not by the experience itself, because that is too elusive, but to by that which produces the experience. We do this grouping by sensorial experience when we talk about warm clothes, when we mean, they make us feel warm in certain circumstances. If you say that so and so is a good holiday place, what you mean is a place that produces a holiday feeling. The idea of warmth, cold, comfort, discomfort and so on are abstractions from a number of experiences grouped together. The child notices very clearly what the agents are that seem to produce the condition and those various agents become the same thing to him much in the way that general terms arise in the language.

It is interesting that the more primitive the language the fewer the general terms. In English you have a very rubbed down language which is full of generalisations of great subtlety; we have for every day use one word “Go”. You go by aeroplane, you say “Has so and so gone to Paris yet?”. “How did he go?” He flew. But in Polish there is a different word for each of these. Then we can use the word “with” in about fifty different ways. ‘I

saw Mrs. Jones in the garden with her hat on'. 'Does apple sauce go with pork?' And so on. Now, in a primitive language there is a different word for each kind of 'withness' where the more developed language would have general terms.

There is very illuminating for the study of children, because children, like primitive people, make specific identifications for specific aspects of things. As one child said to me; "This is a twiddly doll". So a twiddly doll is a particular kind of doll and all others would be some other kind of doll. So when our children put things together to describe, to group and to identify an experience for themselves, they are not concerned with the process of abstraction. They are only concerned with the process of grouping sufficiently to be able to go on thinking in their heads. Now, when you come to children learning words, it works the other way round. To the child every man is Daddy until he becomes Daddy and Uncle and then he becomes Daddy and Uncle and Mr. Jones. Similarly at first, all four-legged things are bow-wows, etc. Now why? Because those are concepts which are put to the child by the people of the outside world; and as you will discover, the child pays little attention to the outer world. We meet this every day in the playroom.

To a child, a horse or a dog may have four legs, but "four legs" is not a thing that matters to him; the thing that matters about it is that it's a thing which goes along somehow like that, the number of legs doesn't affect the one thing a child sees, which is its going-alongness. So that when the child is picking up from the adult world an "X", a word that that the adult world wishes him to have, he will accept a single term for a very large class of objects on which he hasn't yet got to the point of doing the detailed work.

The same thing happens with anyone who does not know and is not interested in the details of something the world is trying to tell him, e.g. I cannot remember details which I am told about regiments. I never could because I am not interested in them. That is the position the child is in. The child is very interested in those perceptual qualities which appeal to it and will remember them. For those perceptual qualities in which it is not interested it will accept a single overall term and use that one for everything.

Again, the problem with the schizophrenic is not that he does not thing, but that he does not use the mechanisms of abstraction which the ordinary world uses and which are expressed in general terms. He uses instead the generalisation. For instance, he may take a complicated thing like a wristwatch. He chooses something in which many of its qualities are together so that it singly comes to stand for half a hundred types of experience, and that's exactly like the word 'rose'. It is not that he does not abstract, he abstracts in concrete terms. Moreover they are peculiar abstractions – like collecting all the things in the house that taste cold: putting the tin bath by your bedstead with your bottle and your spoon and saying it is a set. It is, it's a set that feels cold when you lick it. That's just as good technically speaking, as collecting all the knives; so that it's scientifically incorrect to say that he cannot abstract.



So all the time what we are doing with our work with children is putting in the hands of the children objects and modes of action by which the identifications and groupings which they've all made, which they all work with, can come to objective light.

## **Chapter V**

Now what I want to discuss today is the relation of language to our five types of functioning. In Western language a centuries old process has been going on for the corporate and group elimination of shade and detail from the words that are used in the ordinary vocabulary. You have a highly sophisticated, very elaborate process, in which the personal and subtle sensorial experience of the object has been smoothed and rubbed down, until you have something almost as polished as a technical description. What I want to emphasise is the child's dilemma. IN the child there is a varied, shifting, intricate, powerful, dynamic process going on, of reception of external experience and putting out of internal experience. It is surround by people who are presented to it as models and who give the child rewards for approximation to their mode of behaviour.

If the child can accept and learn the adult use of the speech sounds quickly, it can make contact with the adult world. So a small child is constantly under the pressure of having to reject, to simplify and to detach itself from its own experience. This process of denial of his inner experience aroused the most profound melancholia in one boy, because nothing of what he was feeling and experiencing inwardly could be communicated. He comes from sensible, extroverted, direct, practical parents who say to him; "Don't be silly", if he tries to say anything which is a little more complex than usual. So the child responds. He is very intelligent and does very well at school. Father says he is getting more sensible every day. But when he comes to our playroom he produces a World full of a tremendous mass of tangled presentations which have been boiling inside him and which he has been trying to negate, to repress, to detach himself from and to obliterate from everyday life. This is one of the major sources of repression: an attempt by one part of oneself to repress, to deny and to push out of consciousness another part of oneself. Now repression, as I see it, is a very complex process, with many elements; and you must really watch for it and recognise it and feel, with the children, that it can mean the sacrifice of their individual personality.

Civilisation gets children both ways: if they remain identified with their richer inner worlds, then they are seen as fantastic or naughty or dream or lacking in concentration. If, on the other hand, they reject their inner selves and accept this external personalisation, then they are seen as shallow, unoriginal and uninteresting. This situation was demonstrated very well to us by a boy whose parents have been told that he is probably an incurable mental defective. Then he comes to us and he makes drawings and Worlds and Mosaics that are blazing with energy; great big houses, houses

on fire, worlds on fire, things going continually backwards and forwards, all totally unfittable into anything that is presented to him by life. Now it may be that this represents only his sensory and personal side and when we have got all that expressed, the purely intellectual side may still be defective. That I cannot tell. But it is quite clear that his command of the usual modes of expression is totally inadequate for expressing the part of his experience which is at present dominating his whole interior field.

Now we come to the poetic use of language. If children are lucky they are put into touch fairly early with this kind of language which is evocative. Languages vary very much indeed and in English there is relatively little onomatopoeia: you have the rustle of leaves and a few words like that which are helpful. Polish is a very vivid language where the word for a storm sounds like a storm – it gives you what you really feel and therefore blends, and makes a bridge for a child. And in some primitive languages there are a number of words which convey their meaning as much by their sound as by their content. Now a poet is able to make use of evocative words, grouped together, so that they call up a real genuine interior experience for a child. One of the delightful things about certain schools is their use of poetry which produces an enormous effect on the children. This is one of the ways in which you can make a bridge for your children.

Then we come to the symbolic use of language. The Freudians believe it to be possible to make a bridge between language and the interior world by the therapist using the words for certain objects which suggests certain other objects. Take for instance a simple phallic thing; the child draws a tree and the therapist can say “That is a tree and it is a penis, you see”, thereby joining the child’s interior experience and the exterior world. So some of the words and actions of children do convey a bridge between their interior experience and the adult they are talking to. But a number of children reject this altogether and produce a language of their own; some children reject the whole attempt as a real thing altogether and have an imaginary companion with whom they have a real relationship. Language therefore, even when used in its best sense, in the imaginative translation from things that they know and experience to things that they can see externally, like Beatrix Potter’s Tales or the Aesop Fables, still leave your child very lonely; and the first quality one notices about the neurotic child is, I think, his loneliness. He is alone in a world where he is lost, and one of the most dramatic expressions of this was in a World made by a boy who had been very difficult to make contact. I had asked him to make a ‘feeling sort of picture’. He made a World in which he puts a little figure (himself) in the middle of the sand, then vague roads, none of them reaching the figure, and trees and animals right away from it. If you think of yourself as the figure down there, the objects would seem to be many many miles away from the figure.

A world made by another difficult boy: he carefully made a range of mountains in the tray with a quite high one in the middle. He cut a little shelf in it with steep sides all around and put a seated figure, which represented himself, on the shelf. It is being isolated in

your interior self with no way of making contact with the external world that is unbearable. And it is this which gives rise to the urge to repress the inner world and to strive to live in accordance with the demands and bounds of the external world.

A phenomenon, which our civilisation cannot tackle and will not think enough about, is the constant proportion of young people in this country who commit suicide every year. Fortunately, it is nothing like the proportions that happen in other countries, where there are different reasons for it.

In Berlin there was a clinic to which an appalling number of children came with thoughts of suicide. They were all quite different types from the British. They were depressed and obviously tormented by emotions they could not manage; whereas the characteristic young British suicide is the one who has done well at school and whose parents think that he is entirely satisfactory. From my point of view, these are the children who have sacrificed everything in their inner worlds to adjust to external life and have found the loneliness which ensues to be intolerable.

Now we are beginning to see the difference between the total interior world and the total exterior world. It is important to understand that difference because language is the means of separating the two. I think people get very confused by concept; because it is perfectly true that imagination and fantasy, and imaging and thought can express themselves in language. So if you are looking at the child from the point of view of the family or the school, unless you are very careful and realise this barrier, you merely confuse them. They understand the difference between thought and imagination and fantasy very well. Thought such as in mathematics and geography; imagination such as essay writing, poetry and history; fantasy such as making up fairy tales and so on. It is true that these can be expressed in words. Then you come to this other world which it is our particular job to understand, where totally impossible to express in words. You can only make longitudinal descriptions of different facets which then have to be combined into a whole.

As we have been considering it, the psychoanalytic view is that the dynamic of repression is an instinctual one with its two forces, the upward surge of the Id which is met by the pressure downwards of the external world and the Superego, with this instinctual dynamic in the middle, thus causing the development of guilt in the Ego.

Now what seems to me to happen in human beings is this; there arises from the original explosion at the time of conception, a drive of neutral non-formulated energy, the intensity of which the body of the individual and its primary centre may be unable to accept or endure. Therefore the personality damps down all the way, this becoming another source of repression, turning this into guilt. For it is far easier to say "I am not allowed to experience this", than to say; "I myself cannot endure it", and the moment you can say society won't let you have it, you can run away from society, so the whole thing

has become manageable. So why and how should that arise? Now in 1919, during a long conversation with an American colleague I had said; "I am going to found a new psychology which is based entirely upon the human need for, and fear of, ecstasy". For here is where the whole cultural picture comes in. In the Middle Ages, in Europe, there were quite a lot of opportunities for the expression of ecstasy to have been accepted. Then it was the proper thing to have processions within the Catholic Church and occasions that gave rise to the ecstatic dance. For when your cultural picture allows of ecstasy, when ecstasy is allowed to exist as a basic and inalienable human need, then a lot of the things which we suffer now would not need to happen.

## **Chapter VI**

Today I want to outline for you the routine way which I suggest is a valuable way to think, when looking at a sick child. We start first with the question of E. (basic energy) and we come upon the interesting fact that the actual basic charge of energy which is set free by the mating of spermatozoa and ovum in the developing tissue seems to vary greatly in the quantity of energy between individuals. If you get an individual like Henry Ford or Mussolini or Leonardo – any individual whose achievement in life is the result of forcefulness I think we must come to the conclusion that these individuals come into the world with a high charge of E. On the other hand, there are certain people, particularly those labelled by psychiatrists as over the borderline of normality, like the inadequate psychopath whose main characteristic is a lack of drive in any circumstances. We would have to postulate an enormous splitting up of interior friction and tension on the one side and absence of friction and tension on the other side to account for the difference in force between the two individuals. It seems to me more useful to work on the opposite hypothesis, that just as physical bodily qualities come mostly through inheritance, so there is, from the beginning, a varying charge of E. in every individual.

Our next point concerns the body into which this charge comes (not the psyche). Now, bodies are well or badly equipped for the expression of high charges of E. when you have a well-knit, well-muscled body with sound physiology you will have the type of individual that was characteristic of the pioneer days of America, with a great deal of drive, expressing itself freely and naturally in physical output. So, it is possible to have a high charge of e. coming into a suitably built body, living in circumstances where demands are made upon it for exactly the qualities and actions that the body plus the E. charge most happily fulfil. Then you get a flowing of E. straight through the body and out into contact with reality. These people rarely have much introspective life and achieve and experience much satisfaction in the exercise of E. in the body. We have examples of these people in our present day civilisation and they function on straight-forward, simple and physical lines. I am sure the people who win championships or swim the Channel are probably people of that type. But far more often E. comes into a body which is not particularly well

adapted for the management of large charges of E. That lack of adaptation can go to all lengths until you arrive at the schizophrenic individual whose central quality is the total inability to endure any E. at all, or to manage it if it comes through, to shape it into any kind of form.

Now, Dr. Howard's work gives objective evidence of what I have suspected for a number of years, which is that the feeling of the charge of E. in the tissues of the body produces an unendurable tension in a large number of individuals. That I think is where neurosis begins. It seems to me that neurosis or the malformation of the personality begins in intrauterine life, and to begin in this disharmony between the charge of E. coming into that structure being made and the primary centre; that is, in the foetus's relation to the coming in of E. Evidence is quite extensive from a number of different schools that tension has been reported before birth and certainly in relation to the time of birth. So this question of the tolerance of E. is the first thing we have to keep in mind and try to assess.

Next, when E. comes into the body what does it do? Well, basically the function of E. is to energise the developing functions of the whole physiology in the body and to nourish and to propel forward the engine of growth. Now that may not be quite automatic – for there is evidence which suggests that periods of great stress can result in a stunting of body development, and I have personally seen cases in which release of stress has resulted in a sudden spurt of growth in a child who has been suffering from “infantilism” (which is a failure to grow). In the body tissues the E. vitalises and develops the endocrine system which puts out into the circulating blood whatever substance produces the subjective experience of emotion; for example, if adrenalin is poured into the tissue the subjective experience of rage appears in the individual.

The evidence of the relation between the endocrines and emotion is both voluminous and conflicting but it is fairly clear that the basic, simplest forms of subjective experience are mediated to the body through two structures: one is the endocrine chain and the other is the hypothalamus. These two seem to be the mediators, together with the involuntary or autonomic nervous system, between the outside world, the tissues of the body and this mysterious thing, the personality, inside receiving or registering centre. Therefore, there is a relation between the incoming E. and the structures in the body which mediate emotional experience. Here we come to the second crucial factor in the production of neurosis and one of the most mysterious.

Observations by Dr. Bowlby, Dr. Spitz and others make it quite clear that unbiased observation of a number of infants forces one to recognise states of very intense subjective experience occurring in infancy. One of the most interesting cases we have come across is of a baby who (his mother tells me) went into the opisthotonos position, which only takes place in adults in very severe states of hydrophobia and meningitis. It is when the body arches itself back and comes to rest on the top of the head and heels. The

whole rest of the body is rigid. This child remained in an opisthotonos position all day and only came out of this when sleeping or in a hot bath. This position is brought about by an extreme stimulation of certain voluntary nerves working on voluntary muscles. This child was thoroughly observed by competent physicians and no organic disease was found.

Now, it has been observed that certain individual take the opisthotonos position in states of extreme rage, psychotic rage and extreme fear, so we are forced to the conclusion that this little boy suffered these extreme subjective states for the greater part of the first year of his life. Dr. Howard has also shown how this is balanced by the restoration of the sensorial pattern by touch, smell, warmth, sensation, intimacy and intuitions of relationship with its mother. So we are on safe ground in believing that the need of the human being is for an alteration between the new and the familiar pattern. So that in a baby who is not pathologically unable to withstand tension the break of the pattern of experiences which the baby is asked to endure is balanced, all the time, by the restoration of stable feelings. If on the other hand, this does not occur, then we have a child who is left in the situation of being entirely alone in a vast area with nothing that is familiar, nothing to counterbalance this: like John who put himself, in the first World he made, alone in a desert with a tiger after him and no help anywhere; or the little boy who put himself up a mountain on a ledge with nothing but cold and ice and deadly channels and chasms all around. Now certain children can withstand that situation, those of an extraverted type: but large numbers of children cannot withstand it; therefore they respond in the same way as the adult responds in a similar situation, that is to say, it becomes impossible for the individual to accept any positive experience at all. The melancholic, suicidal or depressed people are able to experience the negative: they have not gone into a coma, they've not become completely manic, they have not become completely detached and confusional; they are still to some extent in contact with reality but they have become unable to experience positive happenings.

Now the second thing that happens is that the tension of E. in the individual is so great that primitive mechanisms are resorted to and the body endeavours to reduce its size. Postures are taken up with the head down on the knees and the arms and legs wrapped round the body of the child, so that it is almost in the uterine position, with all the vulnerable front protected and the whole of the area of the body reduced to the smallest possible range. These children become cold, their temperature falls, their metabolism slows down and they do everything they can through the autonomic response to reduce E. to a manageable level. The third thing that happens is that they become unable to take anything in, the feeling is of an assault upon them by the outside world.

Before the publication of Dr. Mead's book I think one of the unrealised assumptions that we all made was that the behaviour of the body as we know it in the West, is the way the body normally behaves. We considered that physiological groupings of muscular behaviour which are different from what we are accustomed to think of as normal are due

either to some kind of abnormal state or to some kind of abnormal skill. In the West we are familiar with catatonic states, trance states, tics, dissociated muscle actions and so on, and also with abnormal emotional states during attacks of individual or mob hysteria; but we took for granted that all these are interferences with what is regarded as an absolute norm. Now in Dr. Mead's studies of Bali children something different emerges. The Bali Islanders are considered by other observers to be examples of peculiarly happy, well-adjusted people, apart from the strange factor of trance states. It seems therefore we should accord to the Balinese body the same degree of normalcy as to the European body. Now Dr. Mead pointed out that certain of the muscular groupings which Europeans take as physiological and absolute, for example, the grasp reflex, do not apply to the Balinese babies. Her photographs show that in a very small baby the little finger operates independently and, similarly, the movement of one hand gets left out of the general movement. In Bali that is called putting the limb into trance. But it is not possible to expect a child of under two years to be able to put anything into trance. Therefore we are faced with a new phenomenon: that in certain cases and in certain peoples the neuromuscular co-ordination on the physiological level is different from that to which we are accustomed.

This seems to me to mean that there is a centre which acts at a far deeper level than we have at present any conception of. That is to say, there is something which decides how the E. is going to be distributed among the total neural muscular mechanism. Dr. Mead shows that this is cultural, mediated to the child through the body contact of the mother. That means that each of us responds the same because we are members of a given culture. We behave as we do because we share the common quality of being Europeans. This is important, because my own feeling is that our helplessness in the face of a number of conditions, particularly some schizophrenic and hysterical conditions arises from the relative shallowness of the foundation of our attitude. We are taking hold of the problems at too superficial a level.

It seems to me that the development of the study of psychotherapy from a social angle for persons who wish to be helped because they are socially inadequate, has resulted in a focus of the work upon only one aspect of the total human being, that is, upon the emotional aspect.

Now it is a common experience in science that if the field which is being studied is too narrow, the conclusions which are reached will contain a large element of uncertainty; because manifestations from the part of the field which is not in focus continually interfere with the part of the field which is being studied. For centuries it was impossible to plot the paths through the sky of even the most accessible stars, the planets, owing to the lack of understanding of gravity, so all the other stars continually interfered with the path that was being studied. In the same way the psychoanalytic absorption of attention in the instinctual forces, the emotional and mental forces, result in a need to turn

everything from that part of the personality, into the other parts of the body: so that if you get a gastric ulcer or any psychosomatic condition it is looked upon as the mirroring in the body of a process which is really taking place in the psyche. Now I want to enlarge our angle of vision to take in the whole question of the automatic responses of the body, because I want to make a broad basis for all investigations so that we shall look upon our children first of all as neurophysiological organisms, existing in a given culture and take the neurophysiological behaviour as an example of what occurs generally in the culture with which we are most familiar. If we do that, we shall be able to lay down a scheme which will be equally appropriate whatever part of the globe it is being used in, which would for instance apply equally to Bali, to one of the most dance conscious tribal organisations in Africa or to the Arabic culture. Therefore I would like our students to achieve an acute awareness, so that when anything unusual happens it will catch their attention because they are looking out for it. Anomalies of neurophysiological reaction in our own culture are beginning to emerge. I think it is a question of opening our eyes and looking at a new field; of small pieces of awareness beginning to accumulate which may throw light upon a number of factors, such as the catatonic states and the reasons why insulin coma and ECT bring about the effects they do. You would find it useful to read Ouspensky's memoirs about Gurdjieff and there is also a connection with Hathayoga and the Eastern disciplines which reach vary states of consciousness through manipulation of the body. So I think we shall find that a lot of evidence begins to trickle in about this curious fact, which has never been noticed before, of there being a distributing centre of E, between E and the body.

Now the next point is the unevenness in the charge of E in relation to individuals. We should train ourselves to ask when studying children: How highly charged is this individual? For it is quite clear there are enormous differences in the essential charge of E, from those almost incredible people like Ford or Nuffield whose E seem to have carried them through the work of several people, to the very gentle type of personality for whom the ordinary activities of an ordinary day seem genuinely to be too much. So there we have a treat individual variation and this variation is probably a quality of genes. There seems a certain amount of evidence that this goes in families. So we need to become sensitive to the size of the problem; that is to say, with each individual child whom we see, we need to assess how much E there is for him to cope with? We need to appreciate the difference between a child who has a tremendous charge of E and sharpened faculties and the child whose main difficulty is that he's too loosely knit, there just, there just isn't anything to work on.

The next point I want to take up is what actually happens at the point of entry, as it were, in regard to the primary centre and its experiences. Here we come to the most baffling and difficult of all the problems of personality.



Long ago Darwin started on the problem by writing about the bodily changes in emotional states. That works both ways. You have also emotional states occurring as the complement of bodily changes and you will remember William James' attempted to make order out of that situation. All we can say at this stage is that these two seem to act concomitantly and to make the matter more complicated, a third element has to be added to that interaction. For example, in a small child the act of running is a pleasurable act. It is the act of expressing a happy discharge of E through the skeletal muscles. This has a minimal emotional concomitant, but the moment that running impinges however slightly upon an organisation of running: running to a goal, running in a game, running to an adult, running away from a playfellow, running order to look at something, the moment any suspicion of goal comes into that running something happens in the body by which the endocrine system receives a stimulus. Let us take two examples – suppose a child is running and a bus comes round the corner and he experiences fright and runs away from the bus, or a child is playing with a ball and another child comes up and seizes his ball and he runs at him to take the ball back – now if it were possible to make an investigation at that moment, at the moment that fear or anger is experienced, the adrenal glands, being the glands of flight and fight, are activated and the adrenal level in the blood will be altered – an emotion is added to the running. Supposing the child has had a morning of mixed activity and then goes to rest and he begins to ruminate. Just here the third element comes in. For when a child is playing, when the movement of play and feeling is so harmonious, it is a state of being rather something which. Can be reflected upon. Reflection comes when the easy passing of stimulus into action is interrupted or frustrated, and the feeling tone will have been awoken and, here is our third element, with it will bring a picture. A 'picture' comes in to the primary centre of a 'something' having happened. Now we have to reckon with the fact that this word 'picture' should be in inverted commas, because it isn't a picture in any ordinary sense. It is rather a total 'something' which can be reproduced if the right elements are given. I have worked this out backwards from worlds such as the one in the playroom. It is a first World by a little boy in which you can see all the elements operative simultaneously. You have the four dimensions of movement, because as well as the solid three dimensions, there is the interior dimension inside the three.

As you get used to this work you will gain, as a result of you own experience, a conviction that what can be expressed in our material is a definite state of being in which a primary centre is aware of movement happening simultaneously in all directions in all kinds of ways with sounds of different sorts and different qualities attached. I know of no other work which has attempted to express and interpret this fact although, with practice, it becomes a commonplace with us.