THE PROCESS OF THERAPY:

A Cognitive Approach

Submitted in partial fulfillment of the requirements for the Degree of Master of Arts in Counselling Psychology at the Australian National University December 1975.
I hereby certify that the work herein submitted is the result of my own efforts.

(GEORGE MAGDULSKI)

19/11/75
LUKE 17, 20-21

AND WHEN HE WAS DEMANDED OF THE PHARISEES, WHEN THE KINGDOM OF GOD SHOULD COME, HE ANSWERED THEM AND SAID, THE KINGDOM OF GOD COMETH NOT WITH OBSERVATION:

NEITHER SHALL THEY SAY, LO HERE! OR, LO THERE! FOR, BEHOLD, THE KINGDOM OF GOD IS WITHIN YOU.
Forward

This essay is somewhat longer than initially intended. As the essay developed I found that the number of aspects of therapy requiring discussion from a cognitive point of view kept on growing. I also found it difficult to compress the statement of Piaget's theory any further without running the risk of making it incomprehensible. As a result, the number of words submitted is well in excess of that required. For this I seek the examiners' indulgence.
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A review of the literature in the field of psychotherapy was carried out with the aim of examining the process of therapy in an attempt to determine whether there is an underlying theme which is common to all of the varieties of therapeutic intervention currently in use. The question asked in regard to the various techniques was, "If this technique was used successfully, what underlying psychological processes would be involved?"

This approach was applied to twelve fairly well established therapeutic orientations currently in common use. It was found that all of the orientations were trying to achieve similar ends, although via different, and in some cases markedly different, means.

Then research on the process of therapy and related factors was reviewed. On the basis of the results of this review and the examination of the various therapeutic orientations an explanatory model, Piaget's model of cognitive development, was outlined and its application to the field of therapy discussed.
1 - INTRODUCTION

Since Freud's initial conceptualisations of psychopathology, many different techniques designed to facilitate therapeutic attitude and behaviour change have been utilised. We now have psychoanalytic psychotherapy, client-centered therapy, rational-emotive therapy, behaviour therapy, family therapy, sensitivity training, play therapy, psychodrama, encounter groups, milieu therapy, didactic and reeducative procedures and many others. Most of these innovations have been developed within differing conceptual frameworks. Furthermore differentiation within "schools" has also occurred, it now being possible to identify numerous versions of psychoanalytic, existential, phenomenological, behaviourist and neobehaviourist, cognitive, attitudinal, relationship and communication theories. These theories utilise different or differing concepts and premises. In order to account for human behaviour, they focus upon different units or types of behaviour, and postulate different conditions which have to be satisfied so that changes in (problem) behaviour can be effected. It also appears that all of these approaches are successful to some extent at least, there being support (research and/or case study) for the therapeutic utility of each of the approaches, either as practised by certain therapists or for certain client populations or for certain problem behaviour under certain conditions.

Thus from the evidence available it would appear that there are multiple ways in which therapeutic behaviour change can be effected. Despite this, much of the writing in the field is presented in the context of an "either/or" approach and is aimed at bolstering the claims of the theory to which the writer happens to be committed. Thus differences are stressed and the "schools" remain apart.
Fiedler (1950) decided to look at three schools of therapy in order to see whether the process of therapy differed amongst practitioners from these schools. The orientations he chose to investigate were Freudian Psychoanalysis, Adlerian (individual) Psychology and Rogerian Client-Centered Therapy. He used both expert and inexpert practitioners of each orientation on the assumption that the experts within each school would tend to epitomise their respective orientations much more so than would the inexpert practitioners.

His first step (1950a) was to determine how the therapists in his sample viewed the "Ideal Therapeutic Relationship". He found a surprising degree of consensus amongst them. The generally agreed upon characteristics of the ideal relationship were found to be:

- An empathic relationship.
- Therapist and patient relate well.
- Therapist sticks closely to the patient's problems.
- The patient feels free to say what he likes.
- An atmosphere of mutual trust and confidence exists.
- Rapport is excellent.
- The patient assumes an active role.
- The therapist leaves the patient free to make his own choices.
- The therapist accepts all feelings which the patient expresses as completely normal and understandable.
- A tolerant atmosphere exists.
- An understanding therapist.
- Patient feels most of the time that he is really understood.
- Therapist is really able to understand patient.
- The therapist really tries to understand the patient's feelings.
In this second step (1950b), Fiedler had a number of raters rate each therapist, while he was involved in therapy, on a number of different dimensions. He found that:

1. Expert psychotherapists of any of the three schools create a relationship more closely approximating the Ideal Therapeutic Relationship than do the nonexperts.

2. The therapeutic relationship created by an expert from school "A" resembles more closely that created by an expert of another school than it resembles the relationships created by a nonexpert within School A.

3. The most important dimension (of those measured) which differentiates experts from nonexperts is related to the therapists' ability to understand, to communicate with, and to maintain rapport with the patient. The expert therapist constantly remains sensitive to the patient's feelings.

4. The relationship between patient and therapist is a function of the expertness of the therapist rather than his theoretical orientation or therapeutic technique.

5. He doubts that the relationship alone can lead to an eventual cure. "It seems more likely that the relationship in combination with various techniques brings about improved psychological adjustment."

Thus it would appear, at least as far as those aspects of the therapeutic process focused on by Fiedler are concerned, that the experts from the three orientations involved, had much more in common than their theoretical orientations would indicate.
Of course much work has been carried out on the therapeutic process since the Fiedler studies. Much of this work seems to stem from Rogers' (1957) paper on "The necessary and sufficient conditions of therapeutic personality change," and seems to have been carried out within the client-centered tradition. Nevertheless serious differences of opinion still exist about which is the best way to conduct therapy, the implication being that there is only one best way.

Such differences of opinion, as evidenced by differences in technique, are most marked on the Rational Emotive Therapy - Client-Centered Therapy - Behaviour Therapy axis. In a study comparing these three forms of therapy, DiLoreto (1971), found strong support for the fact that the therapist's attitude of congruence, accurate empathy, and positive regard, (Rogers necessary and sufficient conditions) correlate positively with outcome in client-centered therapy. But she also reports that this is not necessarily the case in rational-emotive or behaviour therapy (the form used was systematic desensitization). Sloane et al (1970) also reports similar findings in comparing behaviour therapy and psychoanalytically oriented psychotherapy.

Findings such as these raise a number of questions. Since it appears that the conditions postulated by Rogers are not necessary in two forms of therapy but seem to be important in a number of other therapeutic orientations, does this mean that there is no generally applicable set of necessary and sufficient conditions? Is there a generally applicable set of necessary but not sufficient conditions? Are there any generally applicable sufficient conditions underlying successful therapy? Or are there groups of therapeutic orientations which have in common certain necessary and/or sufficient conditions? If so, how many groups are there and what are their similarities and differences?
A comparative study such as would be required to answer the above questions could be carried out in a number of ways. One way would be to study practitioners from each orientation in some depth. Another is to see what experts in the various forms of therapy say they do. The first approach is a very time consuming and expensive one which was not open to me. I chose the second approach in conjunction with a review of the research literature on the subject.

I was aided in the first part of my task by Corsni's (1973) "Current Psychotherapies" which consists of accounts of therapy by experienced practitioners in the twelve most popular forms of therapy. Also after I had completed the bulk of the work on this paper I became aware of the book "Encounter Groups: First Facts" by Lieberman, Yalom and Miles (1973), which is a three year in-depth study of various forms of encounter groups. As these findings tend to bear out mine, I will give a summary of them now.

"Much encounter group practice attacks cognitive functioning as sheer rationalization and defensiveness and stresses the importance of 'gut' feelings as the basic coin of exchange. Yet the study repeatedly demonstrates that thought is an essential part of the learning process. High Learners reported more critical incidents which involved the presence of insight and the reception of cognitive information, and they also rated understanding and insight as important factors in their learning. The sheer experiencing of positive feeling was less for learners than for those unchanged by the experience. Self-disclosure and the expression of positive feeling led to personal gain primarily when accompanied by cognitive insight. Leaders who supplied clear conceptual organizers, especially for the meaning of individual behaviour, achieved better outcomes. After the group, those who maintained their learnings buttressed their experimenting,
proactive behaviour with careful self-monitoring and clarifying discussion with others. They also stressed the importance of analysis and reflection in their advice to others for effective maintenance. All in all, it appears that the myth should be revised to read: Feelings, only with thought. Humans have minds, and it appears they need to use them in encounter groups and afterwards, if benefits are to ensue.

"The very core of the intensive group experience is the focus on the here-and-now [The authors had earlier pointed out that the here-and-now does not seem to be sufficient, the personal there-and-then seems to make a significant contribution] a focus which we suggest goes beyond pure, mindless experiencing. The here-and-now approach is basically a self-reflective one. Participants alternatively experience and examine their experience. The examination of the experience provides them with some type of cognitive framework which, if sound, will have generalizability. The participant must be able to carry something out of the group experience that is more than a simple affective state. He must carry with him some framework though by no means well formulated, which will enable him to transfer learning from the group to his outside life and to continue experimenting with new types of adaptive behaviour. A well balanced intensive group experience then, with accent on reflection as well as experience, and with a focus both on the present and on the future application of the present experience, may be a potent vehicle for change."

They offer two pieces of advice to participants in groups. During the group "there is one suggestion which will encourage positive gains, however: For those who maintain an active, thoughtful stance toward what is occurring in the group and in their own awareness,
durable gains are more likely. Efforts to think about the encounter group experience and its meaning, contrary to what is often asserted, are likely to make for more learning." After the group "it appears rather important to be reflective, to think about one's behaviour and its meaning in the post-group setting. All in all a relatively proactive, thoughtful stance seems most productive."

The most successful group leader, in terms of outcome measures, in the study was an expert in Transactional Analysis. Observers considered the most characteristic aspects of his behaviour to be that he summarized, supported and provided high conceptual input to the group. He generally focused on intrapsychic material; according to observer ratings, more of his statements attended to the intrapersonal lives of each of his group members than those of the other leaders. He ranked last of the leaders in focus on group process material; approximately midway in terms of how frequently he commented on interpersonal processes. He did not frequently challenge or confront members; he usually questioned them, invited them, reflected on something they had said, or called on someone in the group. He was one of the highest support leaders. He occasionally offered friendship and, less rarely, protected members. He provided the members with concepts through which they could understand their behaviour. He invited feedback, made comparisons, and explained what was happening.
Now I would like to examine the process of therapy as it occurs in twelve of the more popular therapeutic techniques and as it is described by expert practitioners of each technique.

2.1. Psychoanalysis

This summary is based on Fine (1973).

- It is a primary principle that the analysis is the patient's life in miniature.
- The aim is to make the unconscious, conscious, with the change process involving the strengthening of the ego, reducing or eliminating the superego, and expanding the awareness of the id.
- The therapy emphasizes primarily the affective factor.
- The therapist should be warm, accepting and non-judgmental.
- The patient must feel a genuine acceptance from the analyst, without this, treatment will usually be terminated at an early stage.
- As a result of his acceptance by the analyst and his free associations, the patient acquires a series of insights which facilitate the reorganization of the character structure.
- It is one of the prime tenets of psychoanalytic therapy to facilitate the production of material. In order to get better the patient must produce material, particularly fantasy and life history material. Thus the patient's activity on the couch consists essentially of talking and reporting his feelings, sensations, memories and associations.
Psychoanalytic theory recognizes that there is a strong emotional resistance on the part of the patient to becoming aware of an emotional problem.

Interpersonal factors are primary and are conceptualized through the underlying transference. The working through of the transference and resistences to treatment becomes the heart of the psychoanalytic approach. The most minute attention is paid to all the details of interaction between the therapist and patient.

The patient is encouraged both tacitly and quite deliberately to observe himself and to produce material deriving from these self-observations. This leads to a gradual growth of awareness of himself.

Goals for the therapist are the clarification of feelings and interpretations to make the unconscious, conscious. In order to do this the analyst focuses mainly on the resistences the patient brings up which contravene the treatment process.

From the patient's point of view there is a gradual growth of awareness of himself as a functioning human being. From the analyst's point of view, there is a successive working through of transferences and resistences. The resistences are invariably seen as part of reality, so the analyst has to help the patient to see that they are psychological products, not reality as such.

The working through of transferences and resistences are of inestimable value to the patient in clarifying conflicts with people on the outside, since these conflicts are also the result of unconscious transferences.

With acceptance by the therapist and the growth of insights, the patient comes face to face with the conflicts between his feelings of love and his feelings of hate.
Reality testing in the broad sense plays a central role for the patient throughout. He gradually comes to see that his view of reality is distorted by his emotional preconceptions. As his emotional reactions become resolved, he begins to see reality more and more clearly.

Intellectualization is important to the patient in the formation of his insights. At the same time it may work as a block against his ability to experience real feelings. Extremes of both intellect and feeling militate against analytic progress.

Primary emphasis is placed throughout analysis on the clarification of feelings. These feelings include anxiety, hostility, love, resentment, joy, revenge, shame, guilt, etc. As the feelings are brought to light, the defenses which have kept them under cover are also brought to light. And as the patient experiences more and more acceptance from the analyst and as his self-love increases, he is able to tolerate his feelings and as a result of this toleration he is able to dispense with the defenses which are now no longer necessary to keep the feelings in check.

As transference is an important concept both in psychoanalysis and in most of the other therapies to be examined, a discussion of it at this stage seems appropriate.

When the patient arrives for a session of analysis he is encouraged to be as relaxed and as spontaneous as possible. He is asked to talk about such things as his problem, his dreams, his childhood, and his attitudes to sex. He is asked, when discussing these matters, to be faithful to what Freud called the "fundamental rule", that is, he is "to be completely straightforward with his analyst, to keep
nothing back intentionally and... to put aside every reservation that might prevent his reporting certain thoughts or memories." (Freud 1962). During the session the psychoanalyst "keeps at a distance from the patient, speaking humanly, and surrounds himself with some degree of reserve."

After a few sessions in which a relationship of trust and confidence is established between the patient and the analyst, the patient, as he talks about his problems, gradually comes to realise that they are somehow or other connected with his childhood. By being as spontaneous and as open as possible, the patient comes to recollect experiences or feelings of his early childhood associated with his present problems that he could not formerly remember. At this stage it seems that he is getting somewhere, getting closer to the source of his troubles.

But just then something seems to go wrong. Just as the patient is approaching the beginning of his problems the task of remembering becomes more difficult. It is almost as if a barrier of some kind has been set up to prevent the memory of the original experience or feeling from coming to consciousness. This barrier Freud called resistance.

As the sessions progress, the patient's emotional attitude to the analyst seems to undergo a radical change. The "...emotional relation which the patient adopts towards (the analyst) is of a quite peculiar nature...For this emotional reaction is, to put it plainly, in the nature of falling in love..." This is positive transferrance (negative transferrance also occurs), it seems to be a compulsive act. It happens regularly in psychoanalysis (and in other forms of therapy), though the analyst does nothing to warrant or provoke it.
The patient's emotional attitude to the analyst is anything but simple. "In proportion as the purely sensual and the hostile sides of his love try to show themselves the patient's opposition to them is aroused. He struggles against them and tries to repress them before our very eyes."

In attempting to explain the above happenings, Freud suggested that we can understand resistance and the emotional changes that occur in psychotherapy if we look on the patient's behaviours in therapy as a re-enactment of the experiences of his early life:

"The patient is repeating in the form of falling in love with the analyst mental experiences which he has already been through once before; he has transferred on to the analyst mental attitudes that were lying ready in him and were intimately connected with his neurosis. He is also repeating before our eyes his old defensive actions; he would like best to repeat in his relation to the analyst all the history of that forgotten period of his life. So what he is showing us is the kernel of his intimate life history..."

Early childhood is a period of great emotional development and change. Changes take place in the child's attitudes to all about him, especially in his attitudes to his parents. Sometimes something goes wrong with this emotional evolution. The child experiences certain conflicts or tendencies - generally related to his parents - that are so emotively charged and shocking that he cannot bear them. A mechanism of defence, repression, comes into play and this emotional conflict, and the memory of it, are forced out of consciousness. However, though these memories are repressed, they have not lost their strength. They are weaknesses or flaws in the
patient's personality that sooner or later make themselves felt in the life of the patient in the form of neurotic symptoms. These memories, connected as they are with unsatisfactory emotional relationships of the patient's early life, remain as something that still has to be worked out, as "unfinished business."

The analytic situation provides the patient with an opportunity to finish this "unfinished business." Because of the relaxed and isolated atmosphere of psychotherapy, with a minimum of social pressures, the patient is gradually able to dissolve barriers set up as a defence against the anxiety provoking situations of his everyday life. He is able, bit by bit, to uncover tendencies, drives, and memories of his past that were buried in his unconscious. Many of these memories are painful, but he trusts the analyst and has been assured that these memories have something to do with his problem, that it is only by bringing these experiences to light that the troubles he suffers from can be overcome.

Many of these memories are so deeply buried in the patient's unconscious that, even in the relaxed setting of analysis, the patient is not able to remember or express them. These memories are nonetheless so powerful that they make themselves felt in the patient's behaviour. The patient cannot say what has happened. In psychotherapy the patient acts out emotional experiences and relationships that were not worked out in a satisfactory way during the first few years of his life, and he does this by directing his various emotions towards the therapist.

In other words, the patient transfers to the analyst the emotions and attitudes of an unfinished situation of his early life. Powerful memories have been bottled up inside the patient in an emotional form. The patient is unable to express them to the analyst.
He can relive them however, and that is what happens in transference. As the patient relives his past situation, he automatically directs his infantile emotions and attitudes towards a figure of authority and trust, the analyst. The analytic situation is a repetition of the troublesome situation of the patient's early life. But here the pattern is repeated in its entirety. The patient is again confronted with experiences - relived in the analytic situation - that he, because he has adopted his infantile mentality, cannot cope with. So once more he has to repress these memories, to resist them. In the transference situation the patient repeats the mechanisms of defence that he had adopted as a child. This is at the basis of resistance.

At this stage the analyst explains what has happened. He stresses the fact that the emotional drama taking place in the mind of the patient is certainly not justified by the behaviour of the analyst, who has remained quite detached during all of the proceedings. He insists that the patient has been living a past event, taking the analyst as a substitute for some early authority figure (probably the patient's parents). He explains that this is normal during analysis; in fact, it is a sign that the analysis is advancing, for now the analyst and patient both have some idea of the unfinished business bothering the patient, for they both have just witnessed a re-enactment of the earlier experience.

Once the patient accepts this interpretation, an important step forward has been made. The patient may have repressed the memory of the original experience or tendency, but he still remembers what went on in the transference. He can now be guided by the analyst back to the sorts of situations of the past that would have provoked such an outburst. Once these memories can be brought to light, the "cure" becomes a possibility. Once these memories are verbalized - the transference
re-enactment provides a great deal of help here - the patient is in a much better position to handle them, to put them in a proper perspective. "The whole difference between his age then and now, works in his favour; and the thing from which his childish ego fled in terror will often seem to his adult and strengthened ego no more than child's play."

At this stage Freud found that it was not sufficient that the therapist arrives at an accurate diagnosis. The diagnosis has to be communicated to the patient. Then the patient still had to be brought to understand and accept it. But even then the patient often accepted the diagnosis more as a matter of courtesy for the doctor, or even as a matter of intellectual insight, without genuine emotional or behavioural change occurring.

"The ego still finds it difficult to nullify its repressions, even after it has resolved to give up its resistances, and we have designated the phase of strenuous effort which follows upon this laudable resolution as the period of 'working through'."

An effective interpretation must somehow help the patient deal with the inner experiencing to which the interpretation refers. Thus Fenichel (1945) says: "Since interpretation means helping something unconscious become conscious by naming it at the moment it is striving to break through, effective interpretations can be given only at one specific point, namely, where the patient's immediate interest is momentarily centered."

It is in this way that interpretations aid in the clarification of feelings and of the patient's other experiencing. In this way interpretations attempt to accurately name what the patient is aware of and feels, but has not as yet fully conceptualized. In this way the working through of resistances and transferences, the
clarification and conceptualization of feelings and experiences currently present in the awareness of the patient, but which have not been conceptualized by the patient, occurs.

The conceptualization of these feelings and experiences enables the patient to examine them and other related behaviour in detail and to make rational judgments about how to deal with them in the future. It also enables him to reorganize his character structure in such a way as to render defensive reactions to situations evoking such feelings or experiences, unnecessary.

From this summary of the therapeutic process in psychoanalysis it would appear that:

1. The relationship between therapist and patient is considered to be extremely important.

2. The patient learns to observe himself, his behaviour, sensations, fantasies, feelings etc, in great detail. As a result of this activity he develops an awareness of himself.

3. He is provided with a conceptual framework which gives meaning and coherent structure to his experience.

4. His attention is also directed to his interpersonal relationships and how these are determined by intrapersonal factors. His self-awareness is further extended.

5. Continual reality testing provides feedback on how successfully the patient is overcoming his problems. This requires self-examination with connections being made between the past and the present.
6. The patient learns to accept and label his feelings.

7. There is a great deal of emphasis on the examination of experiences in the here-and-now as the patient works through his resistances and transferences as well as examining the there-and-then.

8. Unconceptualized feelings and experiences are conceptualized, thought about and integrated into the patient's character structure.

9. The patient's defenses are exposed and discussed and their function and purpose examined.

Thus throughout the whole procedure the patient's thinking processes are absolutely crucial. His continual self-observation and the insights which derive from it, increases his awareness of himself while the conceptual framework which he learns gives structure and meaning to his experience. This leads to a better integrated character structure with less need for defenses. A good therapeutic relationship facilitates and may even be necessary for this to occur.
2.2. Adlerian Psychotherapy

This summary is based on Mosak and Dreikurs (1973).

That which is unconscious is the nonunderstood.

A "good" therapeutic relationship is a friendly one between equals. A relationship of cooperation mutual respect and trust.

The understanding of the individual requires the understanding of his cognitive organization, the life style. This concept refers to the convictions which the individual develops early in life to help him organize experience, to understand it, to predict it, and to control it.

Emotions are actually a form of thinking, and people create or control their emotions by controlling their thinking. We are not victims of our emotions but their creators.

Confront patients with their irrational ideas.

Insist upon action.

Therapy involves a changing of faulty social values. Focus is on the patient's life style and on his relationship to the life tasks. Learning the "basic mistakes" in his cognitive map, he has the opportunity to decide whether he wishes to continue in the old ways or move in other directions.

The therapist firstly wants to understand the patient's life-style and secondly how his life-style affects his current function with respect to the life tasks. Focus is also on the assets which the patient recognizes that he has.
Insight is understanding translated into constructive action. It reflects the patient's understanding of the purposive nature of his behaviour and mistaken apperceptions as well as an understanding of the role both play in his life movement.

Insight is facilitated mainly by interpretation. The therapist interprets ordinary communication, dreams, fantasies, behaviour, symptoms, the patient-therapist transactions, and the patient's interpersonal transactions. Emphasis is on the purpose of each. Through interpretation the therapist holds up a mirror to the patient so that he can see how he copes with life.

Role playing and other "games" are used to assist the patient in reorienting himself. Playing "As if", "Task-setting", "Catching oneself" and others.

All of the comments made about psychoanalysis hold in respect of Adlerian psychotherapy although the cognitive factor seems more prominent. Again we see understanding and insight as being important with the patient learning a conceptual framework (although a different one) which he practises with and uses to organize his experience. Self observation and monitoring of behaviour is stressed, in this way the patient develops self-awareness. There is a greater stress on taking action to overcome problem situations here than in psychoanalysis. There is also a great deal of focus on the here-and-now as well as on the there-and-then with the patient learning how to deal with emotions. The underlying process seems to be similar, although the specific techniques and concepts which mediate the process differ.
2.3. Analytical (Jungian) Psychotherapy

This summary is based on Whitmont and Kaufmann (1973).

It is essential that the patient feel accepted by the therapist. The therapist should be genuinely open.

Therapy starts with a thorough investigation of the patient's conscious state. Past history, various important influences on his life, his attitudes, values, inconsistencies and contradictions, peculiar reactions and behaviour patterns are pointed out. His tacit assumptions are challenged and questioned. In this way the patient is taught the slow and difficult road to his inner world. During this time dreamwork is introduced and the individual is launched on the awesome encounter with his unconscious.

The person is also taught to make a clear distinction between his inner world and his outer world with the analyst having to emphasise one or the other so as to balance the individuals existing emphasis. This step is seen as important as, in order to establish a viable dialogue between the conscious and the unconscious, the two must be clearly separated from each other. Thus those who have lost touch with their inner world are "gently but persistently encouraged to pay heed and value" to it. Those who are overly absorbed in their introversion are "gently but persistently encouraged to pay heed" to their external reality.

The persons unconscious products are interpreted as pointing the way to further development. Dreams, transferences and other types of projection are used in this way with the aim being to strengthen the
consciousness so that it can assimilate the eruptions of the unconscious.

Thus interpretation is the main work of the analytic process. It is the process of enlarging upon given data in a way that makes it possible for the patient to perceive connections, motivations and feelings of which he has been unaware. Thereby a behavioural change becomes possible.

The main emphasis throughout is on the conscious assimilation of the immediate experience since the basis of any analysis or interpretation is seen as experiencing, mere intellectual understanding being insufficient. This is not meant to minimize the important role of intellectual understanding but to emphasize the importance of experiencing a psychic reality.

Timing of interpretations is crucial. The patient must be ready to assimilate them. The patient's readiness in this matter is generally indicated by his dreams. Thus, "by doggedly following the wisdom of the unconscious, the patient slowly learns to accept the fact that within himself there exists a guiding force, the Self, which points the way, painful though it might be, to a mode of being which is more meaningful and more whole."

Again, the comments made concerning the underlying process of therapy in the case of Psychoanalysis hold true in the case of Analytical Psychotherapy. Again we see that thinking, understanding and insight are important as is the focus on present experiencing. A great deal of self-reflective occurs and the patient learns a conceptual framework which he uses to organise and give meaning to his behaviour. Also the therapeutic relationship is mentioned as being important.
2.4. Client-Centered (Rogerian) Psychotherapy

This summary is based on Meador and Rogers (1973) and Rogers, Stevens et al (1967).

"One of the major theoretical hypotheses of client-centered therapy is that during therapy the concept of the self is revised to assimilate basic experiences which had previously been denied to awareness." (Rogers & Dymond)

If certain conditions are present in the therapist then growthful change will take place in the other. These conditions are congruence, positive regard and empathic understanding.

The above statement is made on the assumption that man has within him an organismic basis for valuing. To the extent that he can be freely in touch with this valuing process in himself, he will behave in ways which are self-enhancing.

Unfortunately under the conditions which usually exist in a person's environment, that is, conditional positive regard and very little empathic understanding, a person becomes incongruent with his inner experiencing. This is because, under these conditions, a person gradually introjects the values which lead others to accept him and to give him approval. He gradually loses touch with his own organismic reactions and thus his own valuing process. The locus of evaluation shifts to others while at the same he learns to distrust his own experiencing as a guide to his behaviour. He learns from others a large number of values and adopts them as his own even though there may be wide discrepancies between them and what he is experiencing. Because the concepts are not based on his own valuing, they tend to be fixed and rigid, rather than fluid and changing. They
also may contain many contradictions and so have within them the seeds of conflict.

. Growthful change will take place in the other only if the other perceives to a minimal degree the three conditions as being in the therapist.

This seems crucial to the whole process of therapy for unless these therapist attitudes have been to some degree communicated to the client, and perceived by him, then they do not exist in his perceptual world and thus cannot be effective.

. Focus is on the present experiencing of the client. The belief being that the reestablishment of awareness of, and trust in, that experiencing, provides the resources for growthful change.

. Experiences which are not consistent with the client's concept of self are conceived as threatening and arouse anxiety. Defences are used to reduce anxiety.

. The process of therapy is an intervention into the incongruence an individual has developed between his experiencing organism and his concept of self. Given the three conditions mentioned above and his minimal perception of them, he may risk allowing into awareness and accurately symbolizing, previously distorted or denied experiences, and allow them to become part of his self concept.

. The therapist's comments (accurate empathic understanding) should reflect not only what the client is saying but should also reflect the hazy area at the edge of the client's awareness. In this way the client slowly becomes aware of the fundamental discrepancies which exist between his concepts and what he is actually experiencing, between the intellectual structure of his values and the valuing process going on previously unrecognized within him.
Awareness is seen as the symbolic representation (not necessarily in verbal symbols) of some portion of experience. This representation may have varying degrees of sharpness or vividness, from a dim awareness of something existing as ground, to a sharp awareness of something which is in focus as figure.

"Feeling" refers not only to the emotion but also to the cognitive content of the meaning of that emotion in its experiential context. It thus refers to the unity of emotion and cognition as they are experienced inseparably in the moment.

"The three necessary and sufficient conditions plus the client's perception of them to a minimal degree plus his feeling to some extent uncomfortable with himself, that is, somewhat vulnerable or anxious, will automatically result in him engaging in the process of positive personality change." (Meador & Rogers 1973).

Here again the comments made about psychoanalysis are still valid. The cognitive aspects of the process are not immediately obvious, but without them, without thinking and understanding on the client's part, accurate empathing understanding on the therapist's would have little value. The client's perception of the basic conditions is stressed as is the symbolic nature of awareness.

One important difference here is that the client develops his own cognitive framework as a result of reflection and clarifying discussion rather than generally having to accept that provided by the therapist. Nevertheless he does develop a new or amended cognitive framework.
Here, again, the relationship is seen as crucial to therapy.

In the last quote above the basic conditions are stated to be necessary and sufficient provided that two other conditions were met. This usage of the words "necessary" and "sufficient" does not seem to comply with the usual way in which those words are used.
2.5. Rational Emotive Therapy

This summary is based on Ellis (1973) and Ellis and Harper (1961).

Because human emotions are in large part the result of thinking, one may appreciably control or change one's emotions by controlling or changing one's thoughts.

Therapy largely consists of teaching the patient effective self-analysis. How to observe his own feelings and actions, how to evaluate them objectively instead of moralistically or grandiosely, and how to change them by consistent effort and practice.

The therapist sets out to achieve the above by:

1. Maintaining attitudes of unconditional positive regard and empathy throughout.

2. Pinning the client down to a few basic irrational ideas which motivate much of his disturbed behaviour.

3. Challenging the client to validate these ideas and showing him that they are extra-logical premises which cannot be validated and then logically analyzing these ideas and making "mincemeat" of them.

4. Explaining how these illogical ideas can be replaced with more rational, empirically based ones. The aim being to teach the client how to think scientifically, now and in the future, so that he can observe, logically parse, and thoroughly annihilate any subsequent irrational ideas and illogical deductions that may lead him to feel and act in a self-defeating manner.
. By continually stressing and examining the ideas that lie behind feelings.

. By continually contradicting and confuting the client, forcing him to admit his operative 'shoulds' and then attacking them.

. By continually emphasising that the client can do better and demanding continuous reality testing.

Here again we see the same basic underlying process as we saw in psychoanalysis except that the mediating technique is different and less subtle.
2.6. Gestalt Therapy

This summary is based on Kempler (1973).

Focus is on current interaction.

The fundamental mechanism is the creation of a context in which a person can show himself to another in order to be able to find himself. Thus sincerity, confidence, basic trust and full personal expression on the part of the therapist are important in facilitating the patient's self-reexamination.

The person has parts of himself that are not acceptable to other parts of himself and in certain areas he doesn't want to have anything to do with himself. In order for the process to flow again the two estranged components of the self must meet and find mutual acceptance.

If the initial complaint is vague it is necessary to pursue it to specificity. The symptom process must be dichotomized or polarized in concrete and detailed terms.

The therapist then tries to persuade the patient to face himself or whoever he identifies as his oppressor. He attends to the patients "unhappy process", he picks up the polarized, discordant elements and tries to create a dialogue between them. The aim is confrontation, the creation of experiences which will increase the patient's range of awareness of himself and which will lead the two polarized elements to merge or disappear into a new realization.

Again the underlying process seems to be the same as in psychoanalysis. The examination and reflection on behaviour and experiences; the use of thinking in developing understanding and insight; the development of a cognitive framework; the focus on present experience and the stress on relationship factors as facilitating this process.
2.7. Reality Therapy

This summary is based on Glasser and Zunin (1973).

- The therapist must communicate warmth, understanding and concern. He must show that he cares. If the patient does not feel accepted by the therapist, his chances of benefiting are markedly decreased.

- Focus is on present behaviour rather than feelings. Awareness of present behaviour is crucial. Certain types of behaviour are self-defeating and lead to depression. Behaviour which assists the person in becoming less depressed or helps prevent him from becoming more depressed is also focused on.

- Focus is on strengths as well as problems.

- Focus is on the present. Only it and the future can be changed, the past cannot be altered.

- Current behaviour is evaluated from the point of view of what the person is doing to contribute to his own failure.

- A great deal of effort is put into helping the individual to make specific and very detailed plans to change failure behaviour to success behaviour. This is put in writing (commitment) and detailed reviews of progress are carried out.

- Emphasis is on changing the patient's self-image from being failure to success oriented.

- Confrontations with irresponsible behaviour occur often. No excuse for failure is accepted.

Here again we see the same underlying process as in psychoanalysis but with a different mediating technique.
2.8. Transactional Analysis

This summary is based on Holland (1973).

Structural analysis is undertaken initially. Here the aim is to make people aware of the subjective phenomena which enable them to make a clear identification of their own functional ego state (Parent, Child, Adult) at any given moment.

Transactional analysis is undertaken only after the person is competent in structural analysis. Here the person examines his transactions with others or the therapist in terms of his functional ego states.

The person also examines his "life script" or life pattern which he seems to be following in terms of the characteristic games which he plays.

Confrontation is often used in the analysis of "cop-outs". This is the main means by which people are exposed to their own power in determining their own feelings and impulses and the consequences of their actions. These are persistently identified and worked on.

The "pay-offs" which a person derives from his various games are also focused on.

Awareness of present feelings and behaviour is seen as crucial to the making of future choices.

Visual observation of the entire body of the participant is used in therapy. Sound, and if available, video playback is used to facilitate this. The aim is to enable people to see and hear themselves the way others see and hear them. Self-observation is of critical importance in the process of structural
analysis. The emphasis is on identifying which ego state the person is functioning from.

Acceptance by the therapist is important.

Again we have a similar underlying process as in psychoanalysis although the technique of implementation is different.
2.9. Experiential Psychotherapy

Gendlin's (1961, 1971, 1973) approach to psychotherapy is an attempt to clarify the relationship between experiencing and thought. He tries to clarify the way in which self-reflection or self-observation and thinking combine to achieve a forward therapeutic movement, a movement towards an authentic being-in-the-world. Because his thinking is rather complex I have taken the liberty of quoting him at some length.

Gendlin seems to see the relationship between experiencing and thinking as a continual spiral. A person begins with experiencing or getting the feel of a thing (object, impression, memory, word, etc), this is a preconceptual event. As such it is generally, in the initial stages at least, vague and diffuse and, in people who seek therapy, uncomfortable. Thus he says (Gendlin 1971).

"In the course of trying to make decisions in our lives, many of us have been in situations that have left us feeling uncomfortable or unresolved about a particular issue. In these situations we have a felt sense that something else is required: some change, some further action, some further thought, something. We don't know what it is that bothers us about a situation; we only feel scared, or tense, or crummy, or hung-up about it.

'The finding and resolving of the personal hang-up point is only one essential factor in decision-making. I am not saying that it is the only one. It just happens to be the one most people have omitted when their decision-making doesn't sit right...feel comfortable to them."

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In order to sharpen this felt sense of uncomfortableness, to give it direction and enable it to act as an aid in our decision making we have to accurately conceptualize it. In turn we test the accuracy of our conceptualization by seeing whether it "feels right."

The thinking behind this seems to be that:

"It does no good to argue against a feeling, especially after one has tried unsuccessfully to argue against it for hours or months. One must go with it, to see what's in it."

"Going with a feeling, going into it, to see what's in it, is a very different matter from just giving in to it. Just the opposite...we go with it to see what's in it, just because having that feeling is a problem for us, whereas any number of other feelings are OK with us, and need no self-conscious attention. Therefore our values are very much a part of what feels OK and what feels unresolved. But, whatever feels unresolved must be allowed to be felt, so that we can go with it and into it. Otherwise we will say one thing, and willfully live that when we can, but actually fall down in a thousand details because we are really living the opposite from what we wish."

Concepts and values come from experience in the first place, but people have been taught many abstractions which do not emerge from their experiencing. Such general principles can help, but only if they are used to seek a step that emerges experientially. Such a step is recognizable by a felt expansion and release. The aim is to work directly with this felt sense. When we succeed in
articulating in words that feel right what we feel and live, such moments are powerful. They are further living, often involving tears and strongly sharpened feelings.

That which will carry the experiencing process forward is already implicit in it. However, it is often not implicit as a word or an act but rather as an unclear feeling. When a specific word or image is obtained, and thereby a specific feeling, carrying forward has taken place. If what is now implicit is carried forward, new aspects will become explicit which were not before, and if that which is implicit in these is carried forward etc. This process is continued until the experiencing feels "right". This is the basis of the change process in therapy.

People want to change precisely into themselves, into more of themselves than they had been able to be so far. The change is from living inauthentically to living authentically with thought and action being authentic or not depending on whether it is based on concrete experiencing or not.

Gendlin (1973) gives a brief example of this process.

"For example, suppose that one now feels some "funny" (cognitively unclear) way, one can try to make statements of what is felt. One might say "I feel this 'funny' way." If one now says "I feel an odd way," chances are the feel of it will seem to remain the same. If one says "I feel fine and ready to tackle something interesting," this might be very desirable but is probably an abrupt change which fails to carry forward the "funny" feeling. Only if, probably with hard work, one hits upon a rather special sentence, will one experience that characteristic change-with-continuity
which would make one say, "Whew, yes right, that's exactly what I was feeling!" Or, perhaps, the crux of it didn't get phrased, but some aspect of it was captured, for instance, "Whatever it is, it seems scary." Then there won't be the great flood of relief, and deep breath, but there will be a more small-scale sense that "....yes,....uh,....yea..... that is part of it." A shift is felt, something in the body is released, there is no doubt that saying this is not just words. There is a bodily effect of saying it, and this effect isn't just an abrupt change to something else. Thus, when one symbolized one's experiencing (in words or other symbols), that is itself a further experiencing, a carrying forward of the experiencing being symbolized and hence a change in it. To say what one feels changes it.

"Even repetitions of the same words can have the carrying forward effect if said by another person (or even, if one writes them down and then reads them back). Events in the environment can carry feelings forward if they feed back symbols (or "objectifications") of what one feels."

The chief responsibility of the therapist is to engender concrete interaction and then to share openly one side of it by articulating his own experiencing. His second chief responsibility is to respond to and stay continuously in touch with the patient's experiencing as far as the patient can articulate it or shows some of it.

Other points made by Gendlin in this regard are (Gendlin 1961):
"Experiencing is a preconceptual organismic process"

I would like to distinguish implicit felt meaning from what is usually called "unconscious", or "denied to awareness." Implicit meaning is often unconceptualized in awareness. However, the experiencing of the felt datum is conscious. Only because it is conscious can the client feel it, refer to it, talk about it, attempt to conceptualize it, and check the accuracy of his conceptualizations against it. The implicit meaning of experiencing is felt in awareness, although the many complex meanings of one such feeling may not have been conceptualized before. The many implicit meanings of a moment's experiencing are not already conceptual and then repressed. Rather, we must consider these meanings to be pre-conceptual, aware but as yet undifferentiated.

"The characteristics of experiencing which I have mentioned are:

(1) Experiencing is a process of feeling (2) occurring in the immediate present (3) Clients can refer directly to experiencing. (4) In forming conceptualizations, clients are guided by experiencing. (5) Experiencing has implicit meanings. (6) These are pre-conceptual.

Experiencing is a concrete organismic process, felt in awareness."

In Summary Gendlin says:

"Experiencing is a variable of the process of therapeutic changing. Experiencing is a process of feeling, rather than concepts. It occurs in the immediate present and can be directly referred to by an individual as a felt datum in his phenomenal field. Experiencing guides the client's conceptualizations, and has implicit meaning which is organismic and pre-conceptual. Change occurs in therapy even before the client has accurate concepts
to represent the feelings to which he directly refers. Experiencing is in awareness, but is felt rather than known conceptually. Experiencing can implicitly mean a great many complex meanings, all of which can be in the process of changing even while they are being directly referred to as some one "this way I feel."

I have tried to show that when therapeutic methods are oversimplified and criticized, they are usually portrayed just so as to omit experiencing. This makes them appear purely conceptual. Client-centered responses can be over simplified as mere intellectualizations. They refer to the individual's present experiencing. They attempt to accurately name what he is aware of and feels, but has not fully conceptualized. They help the individual refer to a present inner datum which, although felt in awareness, is not conceptually known.

"Genuine psychotherapy began at this point, that is to say, at the point of going beyond the intellectual approach by helping the patient to an immediate, present experiencing of his problems. Even though the problems may concern events which occurred early in life, therapeutic change in these problems requires a present experiencing, that is to say a present feeling process. Freud achieved this present immediacy by discovering manifestations of the patient's problems in the present moment of the relationship between doctor and patient. In this way the patient could be helped to grapple with his problems on an emotional level and in the immediate present."

Thus Gendlin's "experiencing" is similar to Freud's "working through."

In the attachment to this sub-chapter I have quoted fully a concrete example of the working through of a problem together with the steps involved in "focusing into the felt sense" of a problem.
The comments made about psychoanalysis also apply to experiential therapy. The reflection on and examination of experiences and feelings is important as is the cognitive symbolising process. Their interaction provides the person with a conceptual framework which allows him to organize his behaviour. All of this grows out of a focus on the person's reactions in the here-and-now.

Thus it seems that the client initially produces material either spoken, behavioural or emotional. He is then lead by the therapist to reflect on this material, especially that which he is currently exhibiting. The aim of this seems to be to bring to the clients attention discrepancies which may exist between his overt and covert reactions and to develop in him the ability to act as his own observer. As a result of these self-observations the client becomes able to state much more specifically and concretely just what it is that is bothering him. In doing this he is guided by a sense of whether his more specific formulations feel right when compared with his original much more vague feeling. As these more specific statements are developed the client concurrently develops his cognitive framework. In many cases, as this cognitive framework develops, the client needs further assistance in developing a course of action, reflecting upon this action etc., back through the cycle.

Gendlin, along with most other therapist's except those who practise Rational-Emotive or Adlerian therapy, makes a definite distinction between feeling and thinking. All that is being pointed out here is that the process of "experiencing" or following through on a feeling state necessarily involves the client in carrying out cognitive or thinking operations much of the time; e.g., in itinerating between the description and the feeling state, comparing, contrasting etc.
"Suppose, for example, I decide to do X but feel unresolved about my decision. X has to do with my parents. I then decide that my feeling unresolved doesn't matter, but having decided that, find that disregarding my unresolved feeling doesn't help me decide. Now what? Will I now think in general about what any man owes his parents, and what he does not?

To make decisions that are right in general (for anyone) ignores that I am not "anyone", but the specific person with the specific experiential texture that I am. The character, the threads which are woven into the cloth of my experiences are me - not you - not them. The general principal is only a rule, however right. What the principle means here can only be found by going into my feelings of the instance. But the instance isn't the general situation facing many others, but my situation, what it is for me to be in this situation. And if this doesn't resolve, if I don't feel whole and clear and at peace in it, then there is a reason or two, why. Nothing general, nothing that is true for all men, will give me that reason, nor how to get through it. Probably I am clear about this. (If not, it may help me to think about this too). I could spend hours, weeks, many nights on that subject. Endless varieties of issues could be considered. But I don't know which of these issues is relevant to my issue. What is my issue? Go back to my feeling of being unresolved (or not at peace, or not at ease) about what I have decided. What is that feeling? (A short silence to let it answer).

Let us assume the first thing that comes is the word crummy. That doesn't seem very informative. What is...crummy? (Another short silence, to let it answer). "It's really a sickening feeling." What is that sickening feeling?
(As you focus on the central feeling that upsets you, you can sense a certain peace in your body. As long as you zero in on that, the body feels better. As soon as you get distracted and lose hold of it, your overall, restless, jumpy, anxious, unresolved body sense will return immediately. Your body feels eased only as you keep the trouble-feeling in focus. The trouble is "that feeling," and the rest of you can breathe more easily as long as "that" is kept before you, in focus, even while you don't yet know what it is.)

"He'll never get it" comes to me now (meaning my father will never be able to understand it). But, of course, I knew that and have often thought it. What is new here is the whole tissue of feeling that goes with that sentence now. I can look further into what this now is, and let's assume that the next thing I sense from out of it is "It's so sad." (Nothing new either, but again, the wave of the feel of it is here.) "What's so sad, really...?" "I ask, and even though I know many answers to this, I stay quiet. I feel a strong pull. "I wish he could!" Then he could be pleased: he always was, and now he can't. A new, seemingly bottomless feeling opens up here (let's say), and the words come: "I'm doing this to him." That's the sickening feeling! (I now realize.)

There is nothing conceptually new about this conclusion, either. But as a feeling-step it is new. I can't say anything I couldn't just as well have said before. "Of course I'm doing it to him!" Who else? But as a feeling-step it moves me into new territory, further in, there where I am still hung.

The best I can do now is feel that powerful phrase "It's that I'm doing it to him." Each time I think it, that phrase brings back the live, focused,
bottomless feeling; and as I focus on that, I can sense my feelings of diffuse anxiety and jumpiness lessening, for a moment. "That's what it is, yes."

I can feel that it's all about me. It's that I'm doing it to him. It's not just that I care for him. If it were my little brother doing it, that, too, would make my father suffer, but it wouldn't feel this way. I wish that he could understand, and I long for him to understand; but now my longing has two distinct items. I find now, after all, that my hang-up isn't only about me. I have this bottomless "I'm doing it" feeling. But there is also my sadness for him. Two things. Really two things. What were they again? Yes, first this "I'm doing it," then "to him." Yea. But as I mull the words "to him", the wave of how I'm doing it washes back in and it's all one mess, and I get diffusely anxious again. Begin again, where was I? Oh yes, "I'm doing it. Yea." As I say that again, and see the bottomless feel of it, "That's me, I'm sick in me, yea..." I'm surprised again that this is all about me and not so much him, there again is that other feeling, I care for him. The feelings are separate again for a second. The caring for him seems sound enough, maybe. The bottomless feel, that's the one that isn't OK yet. What's in that which feels so sick?

I focus on the sick feel of it. "I'm doing it to him." I think every little while. The phrase still has the power to sharpen the feeling. "What is that?" (Silence, to let it answer.) A new phrase comes: "It's wrong, wrong, wrong!" The word wrong seems to touch the feeling, seems to move it, has a little bit of "give" in it. "Wrong..." So now I ask "What is that, 'wrong'...?" I get a memory of walking Sunday mornings with my father to get the paper, and the memory carries with it the feeling of my being OK with him and he with me. "It's wrong to hurt that, to kill it, to do violence to it.
Doing violence, yea..." And sensing how I'm killing that, I also sense another thing that separates out now. There's the "doing violence to that," and then there is that other feeling. What's that? "I'm scared", it comes home to me now. It's almost a relief, a just plain feeling that I'm scared. "Yea...ah...scared I'm going against medical advice..." (I know I mean his advice, not medical.) A good clean awful scared feeling. It's true, I am going against the whole world alone on this one, no, not the whole world, "against him. Yea". That's what it is. I'm "killing the love" (so the phrase now sounds, as it comes to me) and I'm "going alone against him." Silence. "Yea...that's it all right."
A deep breath comes involuntarily. Those two things. And it feels good to feel that being scared, funny as that is. It's like tackling life and the world alone. Sure, that's what I said I was doing, all along, for months, and that is what I want to do. But here it is, feeling sharply scary in a clean way, scared without him and not all gooped up with killing the love. I'm living in a clean scared way these few seconds. That's a real breakthrough and just what I decided for, long ago. But what I'll do about killing the love, I don't know yet. After a while, maybe, I'll look at that some more. Right now, it's good enough to have them separate and feel one of them is sharp and clear.

I purposely chose an example, here, in which nothing cognitively new arises, and in which there is no change in the decision already made. In this example, I can say nothing afterwards which I hadn't already said many times before. Feeling-steps differ from cognitive steps, yet it is clear that, after this brief sequence of feeling-steps, I can do things I could not do before. Although my conclusions are the same as they were, I will live them differently; therefore, all the details of how I really meet situations will be different.
Of course, such a sequence of feeling-steps often does alter one's grasp of the situation, and does alter one's decision. That is because one hasn't really got the decision (only a general formula for it) as long as one is still unresolved in one's feelings. Feelings are not just intra-psychic entities, they are one's sense of the real situation, how one is in the situation and of the other people in it. Universal principles and willed standpoints haven't really been realized at all until they are realized in terms of the living texture.

Some people know, and some don't, that words can come from a feeling. There is a difference between talking at yourself and listening to words coming from yourself. But if you listen, all manner of words will come. To listen in a focused way, pay attention to a specific feel (the feel of what the trouble is... of what hangs you up); and from just this feel, relevant words will come.

To let such words come, one must wait in silence. The waiting is the tough part. Even thirty seconds is far more waiting time than we ever usually give ourselves! Just for practice, look at your watch and see how really long thirty seconds of waiting is. Then later, if you focus on a feeling and wait, you will know that this very long time is only something like thirty seconds or so.

Most of life is restless and "antsy", and many people can't sit still long enough even to sift down a feeling. It is as if they held their breath all the time, and never let down. Yet it takes only a few seconds to allow oneself to descend gently to one's feeling of what is unresolved. There it is.
There is a method of focusing into the felt sense of what one is hung up on. It involves roughly the following steps:

1) The problem naturally involves thousands of facets which cannot all be thought of at once. But one can feel the whole shebang at once. Let yourself feel "all that" for a moment.

2) Without deciding what is most important, ask yourself what the main trouble is. Ask yourself this and then wait. Don't run to answer yourself in words with what you already know. Just wait, in an internal silence, for thirty seconds or so. Expect a specific feeling and perhaps a scrap of words to come up as your sense of what the main trouble is.

3) Accept whatever comes, even if the feeling is one you don't respect, accept it even if you feel you are "above that," and even if the words that come are stupid or senseless (for example: "each..." or "gee" or "I gotta") or uninformative.

4) Pursue this main trouble-feeling with your attention, expecting it to become clearer and sharper, and expecting it to open up into whatever it is about.

Of course, it is rather poetic to speak of a feeling "opening up into" what it is about (what one is hung-up on), but it happens that way if one waits a few seconds. One may have to go back to a feeling repeatedly before it "opens." Also, rather than opening, one may get still another phrase or another more specific feel of it.

5) One should not let one's mind wander, or, if it has already wandered, one can bring one's mind back (back to that specific sense of what the main trouble is).
A lot of thoughts, some wise some foolish, will come up and can be allowed to just "go by".... as one focuses one's attention on the feel of the trouble.

If the specific feel changes, that is all right. Let it do whatever it does. To pay attention in this way is to make an "it" out of one's feel of the trouble. This "it" can then move, just as though it were an independent object in one's attention space. One can attend to it. Any change in "it" is a change which one can feel.

Expect a sharpened, more specific feeling, or a slight shift in how it feels, or a phrase that will say what the specific personal truth is. Such a phrase, if it comes, will give you a felt shift, not only the words.

It is very much like remembering something you had forgotten. How can you tell when you have remembered? You can tell by the "felt give" which you experience, the flood of "oh...sure..." Everyone knows the difference between having remembered, and merely guessing "what it must have been." When we try to remember, even before we remember, we track by the feel of what it was we forgot. This feel of what it was gives us guidance, like the game in which one says, "warm, warmer, cold, colder, ice cold..." Without this felt guidance one couldn't even try to remember; one would have to guess.

As you focus your attention on the feel of the main trouble, expect it to shift, ease, sharpen, or in some other manner indicate the difference between all the good thoughts that aren't relevant to it (you let them go by) and that phrase which seems to "touch it".
6) There is a "zig-zag" movement from feeling to words and back again. If you have a phrase, feel what it does to you. Then let that feeling generate a new phrase. Then feel what that new phrase does to you.

Another way to put this "zig-zag" is simply: get the exactly right words for how it momentarily feels. Ask about each word, "IS this the right word? Could I just as well say...(some synonym)?" Sense that even though the dictionary meaning of the two words is roughly the same, they don't feel equally right.

As you find the exactly right words you will sense the feel easing or focusing or changing. The process of finding the right words to express feelings isn't really what it seems to be, that is, just a labeling process. Rather, the action of seeking words is itself a living forward into, a journey into and beyond where one was hung-up and stopped before. Therefore, instead of just one phrase that is exactly right, one can then feel this "rightness" for a few seconds, enjoy the sense of easing which "rightness" brings (even if what it says isn't a happy thing at all)... and soon one will have a slightly altered feeling which can again produce new words that are exactly right... (new moments can bring new phrases).

Often, a second step's words won't follow at all logically from the first step's words... of course not, since the feeling-shift occurred in between. Even a sense of the sheer truth of some words is a process. Even just feeling how true this is, leads, over a few seconds, to an altered condition. One is further down a path, and from there what one had said with so much felt truth may now be contradicted by a new step's words.
7) At times, make a fresh start - though still attending to the same felt trouble. We need an occasional fresh start, because the pursuing of words and specific feelings (6 above) gets too channeled at times. Just stop, sense again the whole "all that," and wait for a fresh new phrase of specific feeling to come.

8) When a really marked easing or new truth has been found, it may be time to quit for the moment, but make sure of having a phrase which best characterizes the newly felt truth. The phrase should have a marked clarifying effect you can feel.

   If it isn't enough to permit a resolved and "all clear" decision, discover exactly where and why you are still unresolved, and what will move you beyond that point. Ask yourself: "Why can't I get over this?" or, "What is it now about this which still stops me?"
   One doesn't only always ask: "What is it?" Equally well one can ask: "Why is this?" or "Why does this still bug me?" or "What would fix it?" The trick is not to rush in and answer oneself, but to wait, attending to the feel that comes up in answer, and to let words come from that feel. Later you can ask: "Is it all OK? Is anything else off?" (In silence, sense what comes). You may find some "this", and "oh yes that", things you can handle. "Anything else?" You may sense some real peace and gladness as you scan for anything else and find that things are at peace in this regard.

   If you have found, sensed, and moved through the steps of resolving where the real difficulty(ies) is (are), then, if the decision isn't already made for you, there is also a totaling or weighing process. But even then, this process is not a cognitive one, not one of making a list of items. Rather, one stands as it were at the center, just as in the focusing procedure described, and one "looks"
successively down each avenue as they occur to one. Now, instead of moving down any avenue, one stands still and senses each. Rather than imagining the whole world as it will be if one choice is made, then imagining it the other way (each taking hours to do), one just senses it all that way, and then the other. People have this capacity. Instead, they often "argue" as if they were the lawyer for one side—making everything fit that side—then later, making everything fit the other side. That is artificial. Since the decision isn't made, obviously not everything fits either side. If one has already done much thinking, then it may be time not to go down every avenue all the way, but to sense down it, from the center. When, having sensed them all, one's desire has the felt-sense kind of focusing, then the decision sits right."
2.10 Encounter

This summary is based on Schutz (1973; 1972).

Man is seen as unified. He is at the same time physical, psychological and spiritual. Man functions best when these aspects are integrated and he has self-awareness.

A main purpose of encounter is to help a person become more aware of himself.

It is assumed that the emotions of most people have been suppressed by the culture, and that in order to recover these feelings the body must be made more available to people's awareness.

Whenever a person has a feeling he wants to express and a conflicting feeling inhibits this expression, he is left with a tension in his body. This is particularly true if he is not aware of this conflict. If the same out-of-awareness conflict occurs frequently, the tense muscles will become chronic. Compensations will occur in related muscles as a result of the interdependence of body organs and a characteristic tension state will result. E.g., Psychologically a person builds defenses that enable him not to cry so easily. Physically he tenses the muscles of his chin. If he can stop his chin from quivering, perhaps he can stop the whole muscular pattern that leads to tears. His chin muscles get chronically tense. Perhaps that makes his chin look small, pulls down the muscles around his mouth and tightens his neck muscles, making him more susceptible to throat troubles. If twenty years later someone attempts to massage his chin muscles deep enough to loosen them, he may relax the chronic tension and tears will start flowing. It is as if the film in the person's life was stopped at age five and, now twenty years later, the projector is
turned on again and the flow, the memories, thoughts, feelings, sensations all return, and with careful work the incident can be worked through emotionally so that there is no longer any need for the chin to remain tense. It can relax and related muscles along with it.

Because, by holding muscles under tension a person suppresses emotional feelings, a basic rule in the encounter movement is "whenever you can either talk about something or do it, it is preferable to do it." Great emphasis is given to drawing to the awareness of the group member the facial and postural gestures occurring outside his awareness. "Pay close attention to your body. It's signals are the only raw data of which you can be certain."

All communication in the group is to be as open and honest as it is possible to make it.

Concentration is on feelings rather than ideas. Ideas are often used to hide feelings. Ideas are good mainly to explore a feeling already experienced.

Stay with the here-and-now as much as possible. This helps to stay with feelings and avoids going off into safer areas invested with much less real emotional energy.

The best indicator of whether an issue has been really resolved is to see whether the person's energy has been discharged and his body relaxed.

The encounter group provides for multiple transference objects and therefore makes it easier for many deep feelings to be aroused.
Insight. "Following the idea of the unified man, it would seem that maximum change would occur when the body, the feelings, and the intellect have all undergone the same alterations. One without the others is incomplete. In addition, I feel that the deepest level of change is in the body, the next deepest is with the feelings, and the least so in the intellect. Put it another way, if a body change is not accompanied by parallel changes in the feelings and thoughts, the change is still real, but there is the danger that the body will eventually return to its former condition because the original cause of the body aberration still exists. However, intellectual insight not accompanied by emotional and body changes is really not a true insight and will lead to minimal change, if any at all. Furthermore the accuracy of insight is confirmed by body reaction and emotions in that tensions and unpleasant feelings are dissipated and the person feels freer, more at ease with himself, more whole. Thus by constant reference to the body, insights can be discriminated as valid or intellectualized." Schutz (1972).

Again we see an emphasis on the here-and-now together with the examination of and reflection on the persons behaviour and experiences. The importance of understanding and insight together with the development of a cognitive framework with which to structure experience is admitted at least as far as ensuring lasting change is concerned. Thus we have the same basic, underlying process as described previously which again, is mediated by a different technique.

Here again a very definite distinction is made between feeling and thinking. It seems that we must be open to our feeling states and continually use them to verify the conclusions reached as a result of our cognitive processes. Thus feelings are both data for thinking and the ultimate criteria against which the conclusions reached as a result of thinking are compared. This comparing also involves thinking.
2.11 Eclectic Psychotherapy

This summary is based on Thorne (1973).

He suggests that understanding psychotherapy can be greatly simplified by translating it into integrational terms.

Integration is defined as the level of organization at which the organism is able to mobilize all its resources in a functionally autonomous manner in coping with the life situations of the moment. It is the central unifying process supporting the strivings of the organism to maintain the highest levels of organization across time.

If integration (unification) is the central process organizing all behaviour states, then it follows that all psychotherapy must be directed toward dealing with negative integrations or disintegrations and replacing them with more tenable positive integrations.

The integrative approach deals with the psychological state of the client; the momentary cross section of the client's stream of life being lived in the here-and-now. It is important to understand the client's psychological state and to study his integrative processes and their effects in order to determine what can be done to remove blocks to higher integration and to achieve reintegration.

The central task of the therapist is to make the client aware of the nature of his problems and then to teach him how to do something about them in the form of more effective conscious controls over his behaviour.
The method "par excellence" of achieving these objectives is to direct the client's attention to his own clinically significant psychological states. The client is confronted with his integrative failures and asked "How come?" and "What are you going to do about it?" All the critical elements in the situation are brought out into the open and the client is taught how to manipulate them more adaptively.

Consciousness is regarded as the central integrating mechanism.

Although representation of the problem in consciousness (insight) appears to be a necessary precondition for reorganizing behaviour into more highly integrated patterns, insight alone does not always result in behaviour change. Although normal growth and adaptational processes tend to work toward the organization of higher integrations, integration is achieved most expeditiously in therapy when the client learns not only what is wrong but what he must do about it to achieve desired self-actualizations.

Conditions underlying therapy are:
- Unconditional positive acceptance
- Empathic understanding
- Nonpossessive warmth
- Genuineness
- Concreteness
- Self-disclosure

Here the underlying process of therapy is explicitly stated.
2.12 Behaviour Therapy

Goldstein (1973) indicates that

The development of a good working relationship is viewed as an essential ingredient in therapy. It is facilitated by the therapist's attitudes of attentiveness, acceptance, warmth and openness about the therapeutic process. These attitudes convey to the patient that he is understood and valued as a person, that the therapist has the ability and willingness to be of help with the problems presented, and that they are working as a team. A good working relationship is seen as a necessary but not a sufficient condition for successful outcome.

The theoretical framework in which the patient's problems are cast is derived from experimentally deduced "law of learning" which have led directly to therapeutic strategies which have been further refined by the continual process of scientific evaluation.

Neurosis is seen as being unadaptive, learned behaviour (feelings, thoughts and motor activity all included) with the correction of this maladaptive behaviour lying in the application of techniques derived from the "laws of learning."

Human beings are seen as responding beings, that is, whatever behaviours are being engaged in are elicited. Behaviour is a response to stimulation, for the most part external stimulation, but to some degree internal as well. Thus the behaviour therapist is mainly concerned with stimulus-response connections.

Since neurotic behaviour is seen in terms of learned maladaptive responses, it is necessary that the therapist determine which responses are maladaptive
(motor, cognitive, or emotional), when they occur and what elicits the unadaptive behaviour. The information required to determine these points is obtained by the taking of a history. This is structured so as to elicit detailed and concrete examples of the presenting complaints in terms of what responses are occurring and what stimuli evoke them. "It is these S-R connections which furnish understanding of the problem, and it is at these connections that the thrust of therapy will be directed."

On this point Krumboltz & Thoresen (1969) have this to say:

"The first aim of the behavioral therapist is to formulate the goals of therapy clearly and specifically, because most clients are confused and uncertain and cannot specify what behaviour they desire. The counsellor begins by listening carefully to the client's concerns. He tries to understand and assess the client's thoughts and feelings. He tries to see things from the client's point of view. He communicates his understandings to the client and attempts to determine if he is accurately perceiving the client's thoughts and feelings." He also determines:

- What precisely is going on in the client's everyday life.
- In what ways others respond to the client's words, actions, feelings.
- Generally directs close attention to the client and the particulars of his environment.

"The therapist helps the client to describe how he would like to act instead of the way in which he normally acts."
He also helps the client to translate his confusions, fears and amorphous feelings into specific goals which he would like to accomplish and which would begin to resolve his problems.

Lazarus (1969) in describing his "Inner Circle" strategy for identifying crucial problems says that it "Helps to focus the client's attention on personal and relevant material. Meaningful material is uncovered rapidly and the clients also seem to emerge with a "cognitive map" which helps them model future interpersonal relationships."

Bandura (1969) says that "The selection of goals involves value choices.... The change agent's role in the decision process should be primarily to explore alternative courses of action available, and their probable consequences, on the basis of which clients can make informed choices."

Goldstein (1973) indicates that another commonly used method of obtaining history data is to have the client keep a very detailed diary of daily events over a period of weeks. A number of questionnaires are also used to gather information.

The initial focus during the taking of the history is on current relationships. This may be followed by a history of childhood family relationships, school, work and sexual development.

"In addition to allowing for gathering of information by the therapist, history taking builds a feeling within the patient that he is really understood. An essential element in leaving the patient feeling cooperative is to give feedback in the form of as complete an explanation as possible concerning the orderliness in his behaviour; inculcating an understanding in the patient of the seemingly incomprehensible
forces that he finds himself subject to, and as much as possible a reasonable explanation of the historical events shaping his behaviour. The explanatory system is related to learning phenomena and an explanation of how these are operating in his particular situation is given. This process leads to an agreement between therapist and patient as to the goals of therapy, and at this point the therapist proposes a treatment plan, explaining the rationale for it in detail. An important by product of this explanatory and planning phase is that it structures the patient's role in therapy." This approach is also strongly suggested by Wolpe (1969).

An important limiting factor to note here is that "To the degree to which the patient is able to accept it [the tentative conceptualizations formulated by the therapist on the basis of the information given by the patient and offered back to the patient as feedback] further defining of the problem area may be pursued." Thus it is the patient's understanding and accepting a formulation (interpretation?) that determines the direction of therapy.

A number of behaviour therapy techniques such as modeling, role playing, and assertive training are "pursued through a combination of interventions which lead the patient to feel and to act on the assumption that he has the right to be himself and to freely express his feelings so long as he hurts no one else in the process." Here the patient is taught the expression of "not only anger or irritation, but of all feelings including warm and loving feelings." "The degree to which rapid positive change in self-image and self-confidence occurs as a consequence of vigorous expression training is remarkable."

Where patients are unaware of the relationship between their behaviour and their unpleasant feelings and
somatic complaints and their accompanying attitudes
"it is necessary to exhaustively explain the
relationship between their feelings and feelings
about themselves, and their lack of appropriate
behaviour."

From the above description of the way behaviour
therapy is actually practised, a description drawn from
eminent practicioners of the technique, it appears to me
that behaviour therapists use many of the techniques
used by other psychotherapists with the addition of a
great deal of structured behavioural practice. Despite
this, when it comes to explaining why it is that their
technique works they focus exclusively on the operant
techniques which they use on stimulus response associa-
tions and on the effects of positive and negative
reinforcement. This results in them conceptualizing
neuroses as being conditioned responses or habits, tacitly
implying that they are nothing else.

This simplistic formulation has been questioned
by a number of writers. For example Breger and McGaugh
(1965) point out that "within learning theory, conceptions
of habit and response have been shown to be inadequate
and are giving way to conceptions emphasizing "strategies",
"plans", "programs", "schemata" or other complex central
mediators." They also point out that the notions of
"reinforcement" and "conditioning" as used by the behaviour
therapists have long been found to be inadequate in
explaining animal learning in the laboratory. They
further indicate that "...Osgood's text was one of the
first to give heavy emphasis to the role of mediation,
in an attempt to compensate for the inadequacies of a
simple conditioning or one stage S-R approach." "These
inadequacies center, in part, around the problem of
generalization.... It is a problem that is crucial in
simple laboratory phenomena such as maze learning where
it has resulted in the introduction of a variety of mediational concepts, and is certainly a problem when complex human behaviour is being dealt with. For example, Dollard and Miller (1950) began their book with an attempt to explain neurosis with simple conditioning principles. A careful reading of the book reveals, however, that as the behaviour to be explained became more and more complex, their explanations relied more and more on mediational concepts, including language. The necessity for these mediators arises from the inadequacy of a simple peripheral S-R model to account for the generality of learning, the equivalence of responses, and the adaptive application of behaviour in novel situations."

Breger and McGaugh also quote a number of behaviour therapy case reports. They go on to say: "As can be seen, the number and variety of activities that go on during these treatment sessions is great, including, in these few examples, discussions, explanations of the unadaptiveness of anxiety and symptoms, hypnosis of various sorts, relaxation practice and training with and without hypnosis, "nondirective cathartic discussions," "obtaining an understanding of the patient's personality and background," and the "unearthing" of a 17 year-old memory of an illicit affair. The case reports are brief and presented anecdotically so that it is really impossible to know what else went on in addition to those things described. What should be abundantly clear from these examples is that there is no attempt to restrict what goes on, to learning techniques. Since it seems clear that a great variety of things do go on, any attribution of behaviour change to specific learning techniques is entirely unwarranted."

In conclusion they state that "Our view of learning centers around the concepts of information storage and retrieval. Learning is viewed as the process by which
information about the environment is acquired, stored, and categorized. This cognitive view is, of course, quite contrary to the view that learning consists of the acquisition of specific responses; responses, according to our view, are mediated by the nature of the stored information, which may consist of facts or of strategies or programs analogous to the grammar that is acquired in the learning of a language. Thus, "what is learned" may be a system for generating responses as a consequence of the specific information that is stored. This general point of view has been emphasized by Lashley (see Beach et al 1960), by Miller, Galenter, and Pribram (1960) in the form of the TOTE hypothesis, and by a number of workers in the cognitive learning tradition (Tolman, 1951; Woodworth, 1958). Recently it has even been suggested as a necessary formulation for dealing with that eminently S-R area, motor skills (Adams, 1964; Fitts, 1964)."

A review of more recent studies indicates that a simple peripheral S-R explanation of behaviour therapy outcome is insufficient and that a central, cognitive view is more appropriate.

As has been stated above, according to Wolpe (1958), systematic desensitization is based on the principle of counter conditioning. The fearful stimulus is presented while the patient is relaxed. Since muscular relaxation is incompatible with the autonomic response involved in fear, the relaxation is conditioned to the imagined stimulus. The progressive hierarchy is important to ensure that the imagined stimulus does not elicit the anxiety response in spite of relaxation.

On relaxation Goldstein (1973) writes that "The essential requirement is that the patient reach a stage of subjective quiescence, a feeling of calmness
and well being, for this is the state to be paired with the potentially anxiety-producing scenes." (Underlining mine).

Valins (1970) in reviewing a number of studies writes, "The results of these experiments suggest that the false-feedback procedure and the muscle-relaxation procedure used in desensitization therapy may both be effective because they allow subjects to believe that a previously frightening stimulus is no longer having a physiological effect."

"In support of this cognitive interpretation of systematic desensitization, it should be noted that there is little evidence that the commonly used version of the muscle-relaxation procedure has any physiological effects. That is, subjects are trained and instructed to relax their muscles but they have not been observed to be more somatically or autonomically relaxed during training than control subjects (e.g. Grossbert, 1965). More importantly, there is no evidence that subjects who are presumably relaxed during the presentation of an anxiety item are less physiologically reactive to that item than unrelaxed, control subjects. Since the relevant physiological effects have not been observed, it seems reasonable that the muscle-relaxation procedure may be important because of it's cognitive effects. Just as the false-feedback procedure makes subjects believe incorrectly that their hearts are not reacting, the muscle-relaxation procedure, which involves self-instruction, and instruction from a prestigeful experimenter or therapist, may lead subjects to believe incorrectly that their efforts were successful and that they are relaxed. The cognitive evaluation of this nonveridical physiological state may thus be responsible for fear reduction."
Also contrary to the underlying theory, several studies (Geer and Turlletaub, 1967; Ritter, 1968; Bandura, Blanchard and Ritter 1969) suggest that cognitive rehearsal alone is a sufficient condition for desensitization. They showed that observation of a model approaching a phobic object results in a marked reduction of avoidance in subsequent behavioural tasks. The authors indicated that the changes occurring as a result of such observation involve vicarious extinction, but no systematic relaxation training or counterconditioning.

Also Hogan and Kirchner, (1967), (1968); Levis and Carrera (1967) and Wolpin and Rains (1966) using implosive therapy successfully extinguished anxiety by getting their subjects to imagine themselves overrun by the phobic objects (rats and snakes). Neither relaxation nor a graded hierarchy are involved in this technique.

Several studies have investigated the relief of phobias as a result of changed beliefs about the self by the use of false information. Velins and Ray (1967) led their subjects to believe that they were listening to their own heart beats whereas they were actually listening to recorded heart beats. They heard "their" heart beats increase appropriately when they anticipated shock, but there was no apparent increase when they saw slides of snakes or an actual snake. Thus, they were led to believe that they were not as afraid of snakes as they thought they were. It was found that the experimental subjects approached the snakes more frequently than the controls.

Marcia, Rubin and Efran (1969) told their subjects that phobic stimuli would be presented on a tachistoscope at a speed too fast to be seen consciously. Subjects were also told that the stimuli would be perceived unconsciously and that this unconscious perception
would be followed by a mild electric shock. The procedure was presented as highly effective in reducing fear and false GSR records were presented to document the improvement. Actually only blank cards were shown in the tachistoscope. Nevertheless it was found that T-scope therapy was as effective as systematic desensitization in reducing phobic behaviour.

The idea that desensitization involves changes in central cognitive structures is also supported by the fact that behaviour therapists indicate that when a symptom is removed, there often follows a general, nonspecific improvement in the individual's daily life. Thus Wolpe describes his patients as becoming more productive, having improved adjustment and pleasure in sex, improved interpersonal relationships etc. Also Gelder, Marks and Wolff (1967) found that systematic desensitization not only decreased the main phobia and related fears more effectively than individual or group therapy, but it had also generalized to areas that had little connection with the focus of treatment. The desensitization group showed greater improvements in adjustment to work and leisure-time activities than either of the other two treatment groups, and as much improvement in general social relationships as those patients in group therapy. Invoking the concept of "generalization" as used in learning theory to explain such a broad carryover of effect would be to seriously misuse the concept, since, within a S-R framework, generalization occurs along the dimension of physical stimulus similarity whereas this is obviously lacking in the therapy situations mentioned above.

Also McFall and Marston (1971), and McFall and Lillesand (1971), working with assertive training have demonstrated that behavioural rehearsal is the effective variable in producing appropriate assertive behaviour in
subsequent life situations and that of the main components of behaviour rehearsal therapy (overt and covert response practice, symbolic verbal modeling and therapist coaching), covert rehearsal tended to produce the greatest improvement. Here again we see the cognitive factor as being crucial.

Furthermore, Goldstein and Wolpe (1971), list six factors which they hypothesize as being responsible for therapeutic behaviour change. The factors listed are feedback, modeling, behaviour rehearsal, desensitization, motivational stimulation and social reinforcement. The first four factors at least have a significant cognitive content. Thus it would appear that, although peripheral stimulus-response conditioning does occur, the major improvements stemming from behaviour therapy are the result of changes occurring at a central cognitive level.

If we review the methods used by behaviour therapists we find that the patient is encouraged to examine and reflect on his behaviour, feelings and experiences. Indeed these are subject to a great deal of clarifying discussion leading to detailed and very specific descriptions being given. The therapist supplies a great deal of feedback as well as conceptual information which facilitates the development of understanding and insight by the patient. As the patient accepts this information he slowly develops a cognitive framework which helps him to organise and give meaning to his behaviour. The focus of therapy is mainly on current experience with strong emphasis being given to the future application of the skills being practised. Also a great deal of time and effort is put into the practise of behaviours which are more constructive and adaptive from the patient's point of view.

This picture is not very dissimilar from what occurs in other forms of therapy, at least as far as the underlying process is concerned.
2.13 Summary and Conclusion

We have seen that all the approaches to therapy examined here have certain basic themes in common. These seem to be that the client must first of all become aware of his own emotions and behaviours, especially how he feels and behaves in those situations which cause problems for him. This is generally achieved by having the client reflect on, and examine in some detail, various problem situations. The focus, generally, is on what the client is currently experiencing in the therapy situation, although the importance of the here-and-now varies from orientation to orientation. There-and-then (and there-and-now) material is also examined. Most of the orientations explicitly demand that experiences be dealt with in a specific, detailed and concrete way rather than in broad generalizations.

Helping the client to focus on his feelings, to work on them, to determine what their significance is for him, what is implicit in them and to make it explicit, and so come to terms with them and use his feelings as guides or indicators in the future, is stressed by almost all the therapeutic orientations. This "working through" is best described by Gendlin. It appears to be an important aspect in the development of awareness, although a number of orientations do not work directly with feelings but focus rather on the client’s behaviour and its consequences or on the thinking processes which are at the root of certain emotions.

This awareness of and reflection on specific, concrete behaviours and feelings results in the client developing an understanding of and insight into the various cause-effect relationships which are operative in situations in which he experiences problems. As a result of his own thinking and of the concepts introduced by the therapist
the client slowly develops a cognitive framework which helps him to better understand, organise and integrate his behaviour.

As a result of his understanding the client may find that the meanings of certain aspects of what were previously problem situations for him have changed so that the situations no longer pose a problem. On the other hand the client may find that in order to cope with the problem situation in a more constructively adaptive (for him) manner, he must develop new modes of behaviour and/or cease behaving as he currently does. Most of the orientations cover this contingency by providing, to varying degrees, opportunities for the client to practice the required new behaviours within the safe therapeutic situation. Other orientations leave this aspect completely up to the client.

There also seems to be common agreement on the importance of a good client-therapist relationship if successful therapeutic outcome is to be ensured. A good relationship, although it seems not to be sufficient, appears to be necessary for successful therapy to occur.

Thus it appears that the development of awareness, at least in the specific problem areas, is at least a necessary condition for successful therapeutic outcome. This implies that the examination of and reflection on behaviour and experience is also necessary, as is the development of understanding and insight. The development of a cognitive framework which helps the client to organize his behaviour and experiences, and which stems from understanding and insight, also seems to be important. The practising of new behaviours in the therapy situation, although it doesn't seem to be necessary to ensure successful therapeutic outcome, seems to greatly facilitate it. It also seems that the use of feelings as guides to the accuracy of conceptualization can be particularly useful.
The differences between the various orientations seem to stem mainly a) from the cognitive framework which each sees as the most appropriate one with which to explain human behaviour and b) from the techniques which each views as being the most appropriate to facilitate the client's attempts at developing his self-awareness and any necessary new behaviours. Reliance on and use of the client's feeling states also varies from orientation to orientation. Most hold that there is a qualitative difference between cognition, which is seen as logical and reasonable, and emotion, which is seen as alogical and quite divorced from cognition. The validity of this distinction is examined in the next chapter.
3 - RESEARCH STUDIES ON THERAPY

In order to further clarify the status of those factors involved in the process of therapy which have already been discussed, and to see whether any other factors have been identified as contributing to successful therapeutic outcome, a review of the research literature in this general area was undertaken. The results of this exercise are as follows:

3.1. Emotion

Since a person's emotional reactions play a major role in the development of psychopathology, and since the central aim of most therapeutic orientations involves the facilitation of client examination of and reflection on his emotional reactions, the area of emotional development seems to be an important one to look at.

Carkhuff and Berenson (1967) state that "Individuals from the general public, when cast in a helping role, function midway between levels 1 and 2; [There being 5 levels on the scale, with level 5 being the highest] that is, at this index of their maximum level of interpersonal functioning, they are essentially oblivious to the feelings and experiences of the person before them." "Thus, in our assessments of the general population; the first person, at a maximum, responds to the superficial feelings of the other person, not only infrequently, but also, continuing to ignore the deeper feelings, he communicates little positive regard, displaying a lack of concern or interest for the second person; his verbalizations are somewhat unrelated to what he is feeling, and most often he is responding according to a prescribed "role" rather than by expressing
what he personally feels or means; he frequently leads or allows discussions of material personally relevant to the second person to be dealt with on a vague and abstract level. Furthermore, at a maximum, the second responds with discussion to the introduction of personally relevant material by the first person, but does so in a mechanical manner and without the demonstration of emotional feeling.

"It is significant that from within the non-professional population, a person under duress can receive the highest levels of facilitative conditions, an overall average of level 2, from his best friend... Even with his best friend, however, the level of interpersonal functioning is inadequate." [They consider level 3 as representing a basically adequate level of functioning].

Truax and Wargo (1966) report a study in which less than one third of a sample of 237 therapists could be rated as having a warm positive attitude to their clients. This finding held separately for psychiatrists, psychologists, social workers, and for eclectically oriented, client-centered oriented, and psychoanalytically oriented therapists. This general finding held for therapists who themselves had been analyzed as well as for those who had no personal therapy.

Banaka (1971) states that "Many people in our culture are inhibited about the direct expression of their inner reactions and feelings." He goes on to say that interpersonal, relational issues are usually not resolved, rather they are avoided, and describes a number of ways in which this avoidance takes place:

"1. One or both persons privately discount how they are feeling.

2. One person perceives a nonverbal reaction in the other, assumes he knows enough of
how the other person feels, and proceeds without checking out his perception.

3. One person obviously is experiencing an inner reaction, and the other person avoids it with any number of rationalizations:

- "It would embarrass him."
- "It would make his feelings worse or stronger."
- "It might hurt him if I give him feedback on how he seems to feel."
- "It's up to him to expose a feeling if he has one."

4. Sensing some tension between them, one person "inadvertently" changes the topic to reduce the tension."

James and Jongewaard (1971), in reviewing the inhibited expression of feelings from the point of view of Transactional Analysis and Gestalt Therapy, indicate that "people who reject awareness, spontaneity and intimacy (defined in terms of the expression of emotions) also reject the responsibility for shaping their own lives." Such people they go on to say, tend to play "blaming games" and try to force others to play "persecutor", "rescuer", or "victim" roles. The aim of "blaming games" it seems, is to create a situation where, no matter what happens, it is not their fault; they cannot be held responsible. It's their parents, or society, or the system, or somebody else who is to blame, but it's never themselves. It's always someone else who has to change, not themselves.

Such people, when they become parents, can have a detrimental effect upon the development of their children, as Karen Horney (1937) points out. She indicates that children, living in an atomosphere in which there seems to
be a necessity to find out whose fault everything is, almost inevitably lose much of their spontaneity, become very defensive, learn to be cautious, to minimise risks, and to suppress the expression of their emotions.

Stein (1969) in discussing guilt, points out that "The capacity to extend feelings of love and identification of an empathic sort to another human being, which constitute the root of all moral behaviour, depends on the prior feeling of love for oneself which can be imaginatively projected. This primary self-love is the core of a healthy personality and the basis of ego-growth, identification and the formation of the ego-ideal." He goes on to show that the development of self-love, and thus the capacity to extend feelings of love to others, is dependant upon a general atmosphere of acceptance of the child and its behaviour by significant others. Where an atmosphere of rejection is the prevailing one then the child may develop feelings of worthlessness and alienation and thus lay the foundations of a future neurosis.
From the work of Carkhuff & Berenson, Truax and Wargo, and Banaka mentioned above, it appears that the majority of children grow up in environments in which emotions are usually dealt with at a level which these investigators consider to be inadequate from the point of view of the child's psychological development. It seems that the prevailing cultural climate (and this holds true of approximately 70% of a sample of trained therapists) stresses the development of self-control especially in the area of the emotions.

Izard (1971) indicates that infants express emotions spontaneously with the muscles of their faces and bodies from a very early age, and that by about the end of the first year of life their facial musculature is sufficiently well developed to express all of the common emotions.

He goes on to say that "In early childhood, then, there is a mutually reinforcing relationship between maturing facial musculature and evolving emotions. But as socialization and other emotion control practices suppress the display of externally observable facial patterns of emotion, cognitive development makes possible the substitution of a symbol (memory image) for the actual motor pattern. The memory image may be reinforced or supplemented by slight and micromomentary facial movement. The diminished facial activity and the symbol substitution mechanism may become devices capable to some extent of regulating and controlling the emotions."

Evidence for micromomentary expression comes from the research of Haggard and Isaacs (1966). They found that, while scanning motion pictures of psychotherapy interviews, "occasionally the expression on a client's face would change dramatically within three to five frames of film (as from smile to grimace to smile), the equivalent of 1/8 to 1/5 of a second." These changes were not detectable at the normal speed of the film. Investigation
of these micromomentary expressions showed that they were related to the psychodynamics of the client's relationship to the person he was discussing at the time.

Emotional development occurs in an interpersonal context as the young child begins to feel many complex reactions to adults and other children. For example, how can his parents dissuade him or how can child "A" dissuade himself from hitting child "B", because "B" has a shiny new toy that he, "A", wants. The desire is there, the impulse to act is there but the means of controlling or directing this desire in a socially acceptable manner is not as yet present. Thus a threat, punishment or an equally tempting toy is the only solution. The child has no means of assessing or weighing his inclinations, no means of naming them and, as long as this is the case, he has no means of controlling them (Luria 1961).

The acquisition of the various emotion concepts by a child is an arduous and tricky business, a task much more difficult than learning to talk about everyday objects such as chairs and toys and trees. As it is more difficult it is more likely to go wrong.

Once a child learns the trick of pointing to things and asking their names, he is already well on the way to acquiring an extensive vocabulary for talking about things. Unfortunately there does not appear to be a comparable technique for learning emotion words. Whether he is interested in his own or someone else's emotions, there is no readily recognizable item of his experience to which he can point while asking "What is that?"
There appear to be two broad ways in which a child learns to use emotion words. Firstly, for example, a young child is provoked in some way, feels all hot inside and goes through the motions of retaliating. If his parents and others do not tell him, in effect, "you are angry" on such appropriate occasions, then it is likely that he will have difficulty in learning to name and understand this and other emotions.

Secondly a child's learning of emotion words can be retarded through the failure of his parents to show their emotions. If he is not provided with sufficient examples of emotion behaviour in others then he will experience difficulty in recognizing the same patterns in his own life. In this case not only will he have difficulty in naming emotions, he will also lack the ability to deal constructively with them. Emotions, especially negative and strong positive emotions, are likely to become undifferentiated feelings (visceral reactions) which are to be ignored, especially if the child was punished for showing emotion when he was young. Thus the child may develop schemas for dealing with emotions, the visceral changes in his body, by not including them in his field of awareness or he may develop a poorly differentiated classificatory system for emotions.

Thus experience with a broad range of emotions seems to be important from the point of view of learning how to cope with emotional situations. In this regard Valins (1970) writes "It has been found, however, that bodily changes alone will have little effect on emotional behaviour if an individual cannot attribute these changes to emotional stimuli." He goes on to say that "Emotionality is an extremely complex area of human functioning which involves the whole person. The stimulus aspect cannot be neglected. Thinking or expectation is always involved. There is no emotion without either the actual perception
of the provoking situation or the anticipation of it in terms of possible outcomes. Normally, a situation does not provoke genuine fear or anger or jealousy or joy or elation unless it is first perceived or thought of as something about which one must be fearful or angry or jealous or joyful or elated. Even in the case of irrational anxiety or worry, images or other symbols representing past experiences either real or imagined, are being thought about."

Bindra (1970) supports Valins. He writes, "Schachter and Singer's findings show conclusively that emotional experiences are secondary constructions rather than primary processes. Thus anger, fear, jealousy, joy, love etc. are the outcome of a categorizing process that combines a number of separate sensory events into a unitary category or "experience." Visceral reaction without an "emotional" experience is not likely to produce an emotional experience." And "Recognizing emotion in others or an emotional experience in ourselves is a high order classification or summary of the total situation, giving an indication of what is going to happen next."

In summary it appears that people generally tend to respond only to the superficial feeling of others, as a result the general level of interpersonal emotional functioning is inadequate. Relational issues tend to be avoided and so rarely clarified and dealt with. This seems to be the result of the type of socialization which occurs in our culture, a socialization which tends to suppress the display of feelings. Such suppression could interfere with learning to appropriately label emotional states and so limit the child's ability to make fine conceptual discriminations of emotions in both himself and others. Since having an emotional experience is ".... the outcome of a categorizing process that combines a number of separate sensory events into a unitary category or experience", this state of affairs could result in an improvised emotional, and thereby interpersonal, life.
3.2 Structuring of Experience

It would appear, from the information presented above, that our emotional reactions stem directly from the values and meanings we assign to events. These values and meanings are derived directly from the way in which we classify or categorize the information which is available to us as a result of our perceptions of those stimulus events.

In this regard Penfield (1952) found that an event and the feeling which was originally experienced during the original occurrence of the event are inextricably locked together in the brain so that one cannot be evoked without the other. He says:

"The subject (when a particular part of his brain is stimulated with an electrode) feels again the emotion which the (recalled) situation originally produced in him and he is aware of the same interpretations, true or false, which he himself gave to the experience in the first place. Thus, evoked recollection is not the exact photographic or phonographic reproduction of past scenes or events. It is a reproduction of what the patient saw and heard and felt and understood." That is, it is a reproduction of the patient's interpretation of what occurred.

The power of an evoked image is shown in a spectacular case of structuring which was reported by Fisher (1975) where Luria, the Russian neurophysiologist, describes a patient with remarkable eidetic memory. By imagining one hand resting on a hot stove he could actually raise the skin temperature of that hand while simultaneously lowering the temperature of the other hand by imagining that it was resting on a block of ice.
An observation which Penfield makes in respect of the psychological state of the subject while he is recalling events as a result of the electrical stimulation of his brain is that the subject is aware of two streams of occurrences running in parallel: the memory playback and the activity going on around him in the operating theatre. Subjects relive the recalled experience as if it was actually happening to them at that particular time, but, at the same time they know fully well that they are in an operating theatre and that they are only reliving a previously experienced event. The colours, sounds, smells, and emotions as they actually occurred are re-experienced.

He also indicates that ".... a new experience is somehow immediately classified together with records of former similar experiences so that judgments of differences and similarities are possible." And "The demonstration of the existence of cortical 'patterns' that preserve the detail of current experience, as though in a library of many volumes is one of the first steps towards a physiology of the mind." He also found that not every event is recorded in a persons brain, rather only events attended to are so recorded.

The extent to which our classificatory activity affects the way in which we experience a situation was investigated by Schachter and Singer (1962). This series of experiments are probably the best known examples of the structuring of experience. As they have been alluded to above an example of one of them will be given here.

Schachter and Singer took two groups of volunteer subjects and injected one group with adrenalin which produced a state of nonspecific high arousal. The remaining group was used as a control and was injected with a placebo of common salt solution.
The adrenalin group was subdivided into three subgroups with different instructions being given to each. One group had correctly described to it the physiological changes which would result from the adrenalin. A second group was given no information about how they would feel. The third group was informed that they would experience such symptoms as headaches, numbness in the feet and itching.

The subjects from all the groups were then placed in a situation that was potentially conducive either to a light-hearted, joyous atmosphere or to anger and aggression. Stooges set the emotional atmosphere in each case. The results indicated that those subjects who had been misinformed about the effects of the injection, and those who had not been told anything about what to expect, readily adopted the emotion provided by the stooge. On the other hand, those who had been correctly informed of what to expect, and the controls, showed a very much less marked tendency to assume the modelled emotion. Thus those who were misinformed or not informed could not, on the information available to them, account for their high state of arousal whereas the others could. The authors concluded that, "given a state of physiological arousal for which no immediate explanation is available, the individual will label, and genuinely feel, his state of arousal in terms of the information available to him."

Furthermore it appears that our emotions are not the only facets of our experiencing which are effected by our propensity to categorise environmental information. It seems that all of our transactions with our environment are mediated by this activity which, on most occasions, we carry out automatically and without ever being aware of doing so. Thus Abercombe (1969) describes her attempt to conduct a series of seminars based on group discussion lines for medical students aimed at getting them to examine
the factors that influence them in the making of judgments in an attempt to make them aware of how they individually structure their environments. Some of her findings were:

- "The course presented to students a changed view of the external world and of their relations to it. Previously they had implicitly accepted the nineteenth century view (Dingle, 1951); now they were seeing its limitations. The course challenged the student's assumption that he is a passive receiver of information from the outside world through his senses. The first three discussions showed that the knowledge of the external world obtained through sight is conditioned by one's own mental processes, and this shook the student's previously held belief in the concreteness and permanence of physical things. Examples of statements made after these revelations are 'It's as though my world had been cracked open', 'But you can't have all the world a jelly', 'I dare'n't walk down stairs in case the stairs aren't there.' At the same time the student was supported by seeing that everybody else's perceptions were equally subjective...."

- In discussing various problems of diagnosis it became apparent that "egocentric or autistic modes of thinking were inextricably mixed with reality-adjusted thinking..."

- In discussing radiographs she found that "many a student's drawing resembles a text book figure more than the specimen in front of him, and the more complicated the specimen and the more unfamiliar, the more it's picture looks like a book"....the problem is how to help them to organise their store of information in flexible schemata so that new information can be taken in and appropriately assimilated."
- "...When asked to list the differences between radiographs of two hands, many students did not recognize the difference between descriptions and inferences," and treated their inferences as given facts not requiring or capable of further verification. It was not until after heated discussion that some of them came to see that inferences depended upon naming and classifying and that the same principles apply to thinking as apply to 'seeing'. In discussion it was stressed that the validity of inferences would be increased "... if we consider alternative possibilities of classification, and by further testing of information directly obtainable from the object, seek confirmation and non-confirmation of our guesses as to the class in which the object is most appropriately placed."

- An aspect which continually cropped up throughout the course was a strong resistance to change. "An example was frequently provided in the discussion on classification, where it was made clear that any one thing can belong to various different classes according to convenience. As we saw, however, many people felt strongly that there is somewhere a system of classification which does not depend on human convenience, which exists outside ourselves and is perfect, permanent and unchanging. They seemed to be expressing a desire to retain the notion of something fixed and eternal which exists independently of the vagaries of human needs."

"Even more frightening than seeing the world change around one, may be seeing change in oneself. 'I can't trust myself now, let alone anyone else', one man said after the first discussion: Sometimes a student may express a strong dislike for the idea that he could
change. For instance one wrote, "...I would be sorry if I had changed to any degree in so short a time. It would show, I think, instability of former reasoning and I don't think that anyone would like to admit having such a radical fault as that. 'In the same vein, some student might jeer at another who demonstrably changed his opinions during discussion, as though this was to be reprehended rather than approved."

In summary she says "...the course demonstrated to the student his own personal involvement with his perception of the external world. It showed to what an extraordinary extent the information he received from any situation depended on his own assumptions or preconceptions. Consequently his belief in the stability and independence of the external world and his confidence in his ability to secure reliable information about it were shaken. Not only is 'authority' to be questioned...but himself - the validity of his own judgments. The course brought the student face to face with the need for continual change in himself if he is to take in more of the information available to him. In some circumstances, such a message could be so painful that it would be rejected. I regard a lot of my work in the discussions as directed towards making it acceptable. The aim was to make it possible for the student to relinquish the security of thinking in well-defined, given channels and to find a new kind of stability based on the recognition and acceptance of ambiguity, uncertainty and open choice."

Thus we see that in an area where objectivity is held up as an important criterion, the examination of one's own thought processes can be a very harrowing experience. If such issues are not dealt with very well, from the point
of view of reflexive (developing self-awareness) thinking, the subjective, emotional interpersonal, relational issues are probably far less adequately dealt with.

So it seems that we do influence or interpret environmental input and that we do this by means of our cognitive structures. Now it appears that these structures develop from the small number of reflex organizations with which each of us is born; development being a direct result of social and environmental interaction.

Thus Luria (1961) says: "The fact that a child's mental activities are conditioned from the very beginning by his social relationships with adults is of basic importance. Age-old human experience is passed on to the child by adults and mastering this experience - in which process the child acquires not only new knowledge but also new modes of behaviour becomes the main form of the mental development unknown in animals." He goes on to say "...That all the most important mental activities result from the child's social development, in the course of which there arise new functional systems whose sources are to be sought not in the depths of the mind but in the forms of the child's relationships with the adult world." And "...after he acquires the faculty of speech, the child begins to name them (objects, etc.) actively and thus to organize his acts of perception and his deliberate attention."

The function of the cognitive structures which develop out of this social interaction in human behaviour, was also discussed by Luria, who, speaking about the mediating function of language, says: "This adoption of a verbal rule at once modifies that nature of all subsequent reactions. Once taken into the system of verbally formulated links, the stimulus in question becomes not a mere signal but an item of generalized information and all subsequent reactions depend more on the system it is taken into, than on its physical properties.
"The complex and indirect nature of temporary links in man means a considerable modification in all their laws of evolution.

"Whereas temporary links evolve gradually in animals, in man they are as a rule formed at once by incorporating the given signal into or excluding it from an existing system of reactions. Thus the great majority of temporary links established in man under artificial laboratory conditions do not go through the stage of preliminary generalization and gradual concentration of nervous processes, but are incorporated at once into an existing category and regulated thereafter by a verbally formulated rule. This verbal-generalization system determines both the formation and the non-formation of new links; in one experiment we observed that such a generalization system resulted in adult subjects (students) proving unable to produce a differentiated reaction to signals of varying duration, even after numerous combinations: this was because the preceding experiment (pressing for every third signal) had formed in them a stable generalized tendency to watch for the rules of reaction to a given complex alternation of signals.

"Whereas in animals eliminating the reinforcement means the gradual extinction of the link established, no such phenomenon is observed in man; having formulated a given rule, man no longer needs the constant external reinforcement. The coincidence of the reaction with the behaviour-rule as formulated now becomes the reinforcement (the 'action-acceptor' to use the term suggested by Anokhin); thus man's behaviour takes on the character of "the highest self-regulating system" described by Pavlov.

"We have seen that reshaping a firmly established link is a very difficult process in animals, in adult humans and normal schoolchildren, however, as experiments
have shown, the reinforcement of a given stimulus need be changed only once (for instance by saying "don't press" at a red light), and the whole information-system is at once modified...."

"Finally, it is not difficult to see how easily man forms systems of reactions to abstract attributes (for instances to the sequence of the signals, to alternate signals, and so on).

"No-one can doubt, therefore, that previously systemized experience plays a vital part in evolving new links - that this evolution takes on a new and systematic character - and that the whole dynamic of man's higher nervous processes acquires new and specifically human features - as a result of the formation of complex functional systems in which the abstracting and generalizing function of speech is an integral factor."

Also it would appear that it is our structuring of our experience rather than the experience itself that is important from the point of view of the etiology of psychopathology. Schutz (1972) for example says "Several years ago I was concurrently leading groups of psychotics at a mental hospital and leading groups of highly successful men as an industrial consultant. I observed that the early childhood dynamics of these two groups were not nearly so different from each other as would be expected... .What seems more significant than the specific childhood event is its effect on the child's self concept."

Ellis (1961) makes a similar point.

"Let us assume that a child is continually criticized and rejected by his mother; that he consequently feels himself loathsome and inadequate; that he therefore
refuses to try certain tasks; and that he ends up feeling more and more inadequate."

"Such an individual will of course be seriously disturbed. But will he be disturbed because of the fact of his mother's rejecting him or because of his ideas about this rejection and its supposed consequences?"

"Largely, the latter. For the bare fact of maternal rejection is not necessarily noxious, as shown by the observation that in our society not all rejected children turn out too badly, and as also shown by reports that in certain other societies children are severely criticized and rejected by their mothers without growing up to be unusually disturbed."

"Lili E. Peller writes in this connection, "I have had the opportunity to observe children - Arab children in rural areas of Palestine and Egypt - where there is almost no consideration for their welfare, where they experience the effects of the changing moods of adults; considerations of their wishes and needs are of no importance and they are a nuisance. Should any brutality be spared them by their parents, there are plenty of siblings and hardly-older uncles and aunts to provide it. Yet these children do not become neurotic for lack of love."

"What is harmful about maternal rejection in our society is not merely the rejection itself (though, admittedly, that is not likely to do a child much good) but the set of ideas that almost all of us learn in connection with this rejection."

Frank (1965) comes to a similar conclusion when he summarises an extensive review of the literature by saying:
"We end this survey by concluding that we have not been able to find any unique factors in the family of the schizophrenic, which distinguishes it from the family of the neurotic or from the family of controls, who are ostensibly free from evidence of patterns of gross psychopathology. In short, we end by stating that the assumption that the family is the factor in the development of personality has not been validated. It is interesting to note that Orlansky (1949), in his review of the literature exploring the relationships between certain childhood experiences, for example, feeding, toilet training, thumbsucking, the degree of tactile stimulation by the mother, etc., upon the development of personality characteristics, was also forced to conclude that the data failed to confirm an invariant relationship between the experience in infancy and the resultant personality. Of course, it might well be that the reality of the family is not the important dimension in determining the child's reactions; rather, it might be its perception of the family members, and this might often have little or no relation to the people as they really are. This would mean, then, that in many instances the important variables in the development of psychopathology might be factors which the child brings to the family, the functioning of the nervous and metabolic systems and the cognitive capacity to integrate stimuli into meaningful perceptual and conceptual schema. Indeed, we are left to wonder, as do the psychoanalysts, whether the proclivity towards fantasy distortion of reality might not be the factor in the development of psychopathology, and this proclivity might not be always determined by the child's experiences per se."

The above studies indicate that our emotional response to an occurrence depends heavily upon the meaning it has for us; upon what we see as being appropriate or inappropriate behaviour in respect of such an occurrence; and upon our expectations of the possible outcomes which may arise out of the occurrence.
In determining the meaning of the occurrence, we not only use its situational context, but also our own internalized cognitive structures. However, it would appear that our cognitive structures not only help us interpret incoming data but also act as selective filters, in that they may lead to distortion of input so as to make it fit our preconceptions or expectations concerning the elements of the occurrence under observation.

In fact it would appear that so powerful are our internalized structures that, given no external input at all, we can create marked physiological changes in our bodies by activating the appropriate structures internally. It would also appear that the physiological feedback system is such that it either cannot or does not discriminate between externally originating or internally manufactured sensory states. (This, of course, also happens during systematic desensitization and other behaviour therapy techniques). In fact it appears difficult and often impossible for us to differentiate between external input as a result of observation, from internal, self-produced, data (inferences) stemming from our assumptions or preconceptions, when these inputs occur almost simultaneously. It also appears that we can become aware of these parallel processes as a result of reflecting on our thinking habits but that this can be a very difficult and painful procedure.

The evidence presented above also seems to indicate that we do have control over the way in which we cognitively process information; that the constructions we put on events have a greater affect upon our behaviour than the actual stimulus content of the events; and that, unless we become aware of the way in which we habitually tend to process information and of our existing cognitive structures, we may go blithely on trying to adapt to a situation which, in varying degrees, is a figment of our own manufacture bearing in some instances only a passing resemblance to the situation as it actually exists. And, seeing that emotion is a secondary construction and not a primary process, we could be putting ourselves through unpleasant emotional
turmoil as a result.

This last point is important in that, as mentioned previously, most therapists, and in particular Schutz and Gendlin, consider that the emotional and cognitive modalities are quite distinct. It would appear rather that our feeling states are very closely interrelated with the cognitive structuring of the environment taking place below the level of our awareness. Thus the nature and intensity of an emotion which we experience as a result of a stimulus event is determined by the way in which we classify that stimulus event. That is, it varies according to the values and meanings which we assign to the event. This in turn depends upon the cognitive structures which are activated by the stimulus and which we bring to bear upon it. Now this puts the focusing on feelings which Rogers, Gendlin and Schutz in particular stress, in a different light. We are not focusing on an experience which is a pure visceral reaction, but rather on an experience which is the result of cognitive processing.

This is no way affects the use to which Gendlin and Schutz recommend that feeling states be put. Both of these therapists see the continual monitoring of feeling states as the only reliable guide as to whether an insight achieved as a result of conscious and deliberate effort is accurate. Thus, if a consciously arrived at insight results in positive change or movement, in a feeling which is the result of the unconscious processing of environmental information, then, to the extent that this occurs, the insight is accurate.

Stevens (1967) gives some good examples of the unconscious processing of environmental information. "A young therapist described a therapy session to me in this way: 'This fellow - a young guy, nineteen - was laughing at himself and his friends for sitting on the beach day after day laughing at themselves for the way they were 'all fucked up' - mixed up in homosexuality, doing crazy things that got them nowhere. They called themselves names and ridiculed themselves, and he went on doing this with me. I couldn't get him to feel anything. He just
kept on laughing at what dopes they all were, including him. So then, I started laughing too, laughing with him at his being such a dope - and then he got mad, and began to say how he really felt about it. Then he knew that what he was really feeling wasn't funny.' After that, they began to move in therapy.

"I asked the therapist, 'Was that something that you figured out and then did, or did it happen and afterward you saw the sense of it and why it was successful?' He looked a bit disconcerted and unhappy for a moment... .Then he said that it had happened to his surprise, and afterward he figured out why it had worked the way it did."

By way of explanation she goes on to quote Tauber and Green (1959) who say: "In this connection there are many situations in ordinary experience which demonstrate that much can be reacted to more effectively if consciousness does not prematurely share in the perceptual experience. There are many illustrations, for example, of man's capacity to register perception accurately in space and time categories provided that conscious cognitive processes are postponed. With this knowledge of man's superior judgment when using his precognitive capacities for certain tasks, the army trains artillery observers to utilize their capacities to the utmost. The observers must always call the position of a shot as quickly as possible - there must be "zero delay" between noting the fall and shouting out the location. All beginners wish to estimate with the aid of rational judgment, but experience has shown that there is unquestioned superiority of performance when rational estimation is suspended. The first flashing quick guess turns out to be the best guess."

Thus our intuitive feel (unconscious structuring) of a situation, or our dealing with a situation "by ear"
is not dependant upon vague and mysterious processes, but rather upon extremely rapid information processing, swift, nonvacillating decision making and immediate action.

As Gendlin indicates, most of the time things work out, it's only when we get the message that something is wrong that we have to stop and consciously examine the situation and the way in which we are structuring it and other aspects of our environment. This is done by focusing on the anxiety or other emotional indicators and on the words which most accurately describe our feeling state at that particular time. Then, using our felt sense of our conceptualizations, we can try to trace back through the thought processes which had previously occurred below our level of awareness in order to see what it is that is resulting in us having the feeling of there being something wrong. Thus cognition (comparing, contrasting, classifying), awareness of and reflection on experience are inextricably involved in the working through of a problem situation.
3.2A ANXIETY

Sarbin (1964) in discussing structuring procedures says that "if the world of occurrences provides unclear or insufficient cues to solve the problem of ecological placement, then we have the condition of cognitive strain. The referent for the strain metaphor is a large increase in cognitive behaviour. This increase occurs in two ways: (a) in attempts to fit what-is-now-happening (inputs) into the summaries of what-has-happened-before (the cognitive organization, the major premises); and (b) in attempts validly to use the multiplicity of major premises that are activated by the sensory inputs. We assume that there are optimal degrees of cognitive strain for efficient cognitive behaviour just as there are optimal degrees of muscle tones for different kinds of motoric activities."

That is, the person is faced with an object or event which is sufficiently similar to his existing structures for it not to be considered irrelevant but the mismatch between the two is too great to be easily bridged. Sarbin refers to this situation as "cognitive strain" a metaphor which he suggests is more suitable than the "mentalistic anxiety metaphor".
Here emphasis must be placed on the words "... validly to use..." The person could assimilate what objective information was assimilable and distort the rest so as to make it fit his existing structures. In such a case no cognitive strain would occur. Strain occurs only when structures are used validly. This presupposes some degree of self-awareness on the part of the person involved, in that he would have to be capable of making the kinds of discriminations which Abercrombie discusses (see above). Another possibility here is that, although the person may not be aware of the parallel processes of external data processing and internal inference manufacturing which were taking place, he may nevertheless experience what Gendlin refers to as a "bodily felt", an uncomfortable feeling that there was something wrong. This feeling also would be noticed only if the person was being self-reflective. If he did notice this "bodily felt" the person could probably "work through" it in the way which Gendlin suggests.

Now Sarbin divides the world of occurrences into two broad ecologies, the proximal and the distal. The proximal ecology consists of the body and its various sensations. The distal ecology is composed of five systems.

- The self-maintenance ecology
- The spatial ecology
- The social ecology
- The normative ecology
- The transcendental(Religious) ecology

He goes on to say that "To be alert to multiform stimulus events, an organism maintains an attitude of vigilance, a readiness to classify an object or event as threatening, dangerous, friendly, neutral, etc. It has been suggested that human or other animals in the
vigilant posture, upon noticing a stimulus event, might be described as asking the question "What? or What next?" or "What is it in relation to me?" The answer that the person gives to the "What?" question in the simplest case is threat or nonthreat, but the refinements of extended experience, perceptual learning, and linguistic development allow all kinds of modulated answers to be given."

He concludes by saying "The implications for psychotherapeutic practice are especially clear. Instead of focusing on anxiety as a mentalistic or as a physiological signaler of internal psychic struggles, the therapist will focus on the difficulties presented by a patient in coming to terms with his world." And "Experienced clinicians recognize......that when therapy is successful it is not due to the purging of anxiety. Rather, it is because the patient has learned how to minimize, with his finite cognitive capacities, the strains produced in his efforts to find himself in a complex, changing, and often contradictory world."

Studies carried out on people who display a high level of "cognitive strain" indicate that they perform relatively poorly under conditions of stress. For example Sarason (1957), using a simple nonsense syllable learning task, found that highly anxious subjects did best under neutral instruction (that is a non threatening structuring of the task) whereas low anxious subjects performed best under instructions stressing the importance of success for self-esteem. When instructions emphasized merely the experimenter's attempt to develop a test, there was little difference among subjects with different levels of anxiety.

Studies on the vulnerability to stress such as Sarason's suggest that the highly anxious person is generally insecure, self-depreciatory and lacking in
self-confidence. Other studies (Doris & Sarason, 1955; Bendig, 1956) indicate that high anxiety subjects tend to be too self-preoccupied, and generally less content with themselves than are low anxiety subjects. These findings, together with those concerning vulnerability to stress have led Mednick (1957) to interpret anxiety as leading, when high, to self- (rather than task-) oriented responses in the face of stress.

Taking Sarbin, above, into account, these findings, in conjunction with Horney's (1937) distinction between basic and situational anxiety, indicate that a highly anxious person (that is, a person who scores highly on the Manifest Anxiety Scale which was used as the criterion in the studies mentioned above) is one whose view of himself and his abilities is very low but who sees other peoples' expectations of him as high and who sees the demands of the task as being beyond his ability to cope. These discrepancies result in the person experiencing severe cognitive strain. (The anxiety is situational if its occurrence is relatively unusual, situation specific and fairly obviously stress induced. It is basic if it is a fairly general state of the individual).

Horney, in describing basic anxiety, says that it"...is more or less the same everywhere, varying only in extent and intensity. It may be roughly described as a feeling of being small, insignificant, helpless, deserted, endangered, in a world that is out to abuse, cheat, attack, humiliate, betray, envy."

She goes on to say that "In psychoses one will often find a rather high degree of awareness of the existence of such an anxiety. In paranoid patients this anxiety is restricted to one or several definite persons; in schizophrenic patients there is often a keen awareness of the potential hostility of the world around them, so much so that they are inclined to take even a kindness shown to them as implying potential hostility.
"In neuroses, however, there is rarely an awareness of the existence of the basic anxiety, or of the basic hostility, at least not of the weight and significance it has for the entire life. A patient of mine who saw herself in a dream as a small mouse that had to hide in a hole in order not to be stepped upon and thereby gave an absolutely true picture of how she acted in life - had not the remotest idea that factually she was frightened of everyone, and told me she did not know what anxiety was. A basic distrust toward everyone may be covered up by a superficial conviction that people in general are quite likable, and it may coexist with perfunctorily good relations with others; an existing deep contempt for everyone may be camouflaged by a readiness to admire.

"Although the basic anxiety concerns people, it may be entirely divested of its personal character and transformed into a feeling of being endangered by thunderstorms, political events, germs, accidents, canned food, or a feeling of being doomed by fate. It is not difficult for the trained observer to recognize the basis of these attitudes, but it always requires intense psychoanalytic work before the neurotic person himself recognizes that his anxiety does not really concern germs and the like, but people, and that his irritation against people is not, or is not only, an adequate and justified reaction to some actual provocation, but that he has become basically hostile towards others, distrustful of them." She goes on to say that, in neurosis, "the more unbearable the anxiety the more thorough the protective means have to be."

Support for Horney's distinction between basic and situational anxiety has come from factor analytic studies where the concepts of state and trait anxiety were identified by Cattell and Scheier (1961). Spielberger
et al (1966; 1972a; 1972b) have subsequently refined these concepts and developed procedures for their operational measurement. State anxiety (A-State) is defined by Spielberger et al. (1970) as a transitory emotional state or condition characterized by feelings of tension and apprehension, and by activation of the autonomic nervous system. A-States vary in intensity and fluctuate over time as a function of the amount of stress that impinges upon an individual. Trait anxiety (A-Trait) refers to relatively stable individual differences in anxiety proneness. Bartsch & Nesselroade (1973) have recently validated trait-state anxiety in a factor analytic study.

In his State-Trait Anxiety theory, Spielberger (1966, 1972a, 1972b) has attempted to specify the relationship between the two types of anxiety. He theorizes that A-Trait may be interpreted as "reflecting individual differences in the frequency and the intensity with which A-States have been manifested in the past, and in the probability that such states will be experienced in the future. Persons who are high in A-Trait tend to perceive a larger number of situations as dangerous or threatening than persons who are low in A-Trait, and to respond to threatening situations with A-State elevations of greater intensity." (Spielberger, 1972a).

So we see that there are people whose cognitive structures are such that they tend to categorise many events in their experience as potentially threatening. This results in these people experiencing cognitive strain or anxiety on such occasions. These people also exhibit fairly rigid thinking patterns, a finding reported by Davids (1955) who found a high positive correlation between scores on the Manifest Anxiety Scale and various measures of authoritarianism.
It further appears that some of these people, those falling into the category of "psychotic", are acutely aware of their anxiety and associated factors to the exclusion of almost all other information, and on some occasions to the total exclusion of other information.

Unfortunately, although they have an awareness of their anxiety, psychotics seem to lack any insight into, or understanding of, the causes of their anxiety and thus try to cope with it by cutting themselves off from it and from the world. This tends to indicate that awareness, of itself, is insufficient to ensure therapeutic change. Understanding and insight seem to be also required. It would appear, though that before a therapist attempted to work with the client's anxiety he would first of all have to develop a warm and trusting relationship with the psychotic otherwise he would probably not allow the therapist to psychologically reach him.

While psychotics are acutely aware of their anxiety much of the time, neurotics tend to lack an awareness of their anxiety. It seems that they are able to structure their perceptions so as to filter information which is potentially anxiety provoking out of their awareness. It also appears that neurotics, on those occasions when situational stress is experienced as particularly intense, are unable to completely defuse the situation and so become aware of their anxiety, at least as far as it is related to the specific stimulus event which is most contiguous in time with the onset of anxiety. When this occurs they too begin to focus on their subjective experiences to the exclusion of task related information. This phenomenon is probably the result of an overloaded immediate memory span.
Miller (1956) reported that the average human cognitive processing capacity at any one time is \( 7 \pm 2 \) bits or discrete units of information. Now it would appear reasonable to suppose that effective decision-making involving complex issues which consist of a large number of relevant and independent information units would require as much cognitive processing capacity as could possibly be made available. But, if the person was, for whatever reason, focused on his emotional experience then the distinctive stimulus attributes of the emotion itself would begin to occupy some of the limited processing capacity, thereby reducing the space available for task-relevant cues. This of course would result in the person being able to scan fewer units of task relevant information. This may or may not be sufficient to produce a satisfactory task solution. If it was insufficient then error messages would be created and, given the poor self-image of the person, this would generate more stress signals which would, in turn, take up still more previously useful processing capacity etc. In this way complex behaviour would, under these conditions, rapidly deteriorate, thereby further reinforcing the person's existing self-image.

Some support for this position comes from Tolman's (1948) suggestion that anxiety acts to narrow the individual's cognitive map. Other data has indicated that anxiety retards learning (Montague (1953) ) and increases rigidity in problem solving (Ross & Rupel (1952), Cowen (1952) ). Also Postman and Bruner (1948) have shown that stressing subjects in higher perceptual recognition thresholds and a general deterioration in perceptual performance (perceptual defense). Sarasen (1960) has shown that whenever a person is in a state of high drive (high emotion) he becomes aware of the stimuli of the drive itself and reacts to these rather than to the ones that are relevant to the problem situation.
Thus even if the person's information processing ability was normally very good, a high level of cognitive strain would tend to seriously hamper it and probably produce a spiral effect which would result in the person's efficiency in problem solving gradually decreasing until he reached a stage where he just could not cope with life and so he would "suffer a nervous breakdown."
3.3 Defenses

It was mentioned above that neurotics were able to filter anxiety provoking information out of their awareness.

Now the assumption underlying the notion of a person being able to exclude information from his awareness is that an individual is able to detect the presence of anxiety arousing stimuli at an unconscious or preawareness level. Lazarus and McCleary (1951) demonstrated that subjects were able to discriminate among stimuli in terms of an autonomic nervous system response when the stimuli were exposed at speeds too rapid for verbal or conscious identification. Nonsense syllables to which a GSR had previously been conditioned produced significantly greater GSR's than non-conditioned nonsense syllables even though all the syllables were exposed at tachistoscopic speeds too rapid for verbal discrimination. A number of other investigators [Alper (1946), Postman & Solomon (1950); Eriksen (1952) (a & b); Eriksen (1954); Lazarus and Longo (1953)] have used experimental procedures which took into account individual differences in response to self-esteem threat. These results indicate that some subjects respond to anxiety or threat by psychological avoidance. They tend to forget or repress stimuli associated with it. Other subjects show a sensitization to anxiety related stimuli. They appear to dwell and worry about them. The results also show that perceptual defence is much more likely to be shown by the former than by the latter. Also Lazarus, Erikson and Fonda (1951) have shown that differences in psychological defenses observed at the clinical level of description lead to different perceptual effects. Patients characterized as using an avoidance, repressive, type of defence were found to have higher recognition thresholds for anxiety arousing stimuli than patients described as using intellectual or rationalizing defences.
Lazarus et al (1951) used psychiatric outpatients as subjects and classified them on the basis of interviews and other clinical tests as either sensitizers or repressors, depending upon whether they characteristically responded to anxiety in terms of intellectualization as a defense, or, whether they tended to avoid and deny thoughts and ideas related to conflicts. Their results indicated that the sensitizers tended to give freely aggressive and sexual endings to a sentence completion test whereas the repressers tended to block or distort into innocuous forms sentence completion stems that would normally suggest either aggressive or sexual content. Furthermore when performance on the sentence completion test was compared with auditory perception of hostile and sexual sentences heard against a noise background, the sensitizers were superior to the repressers in recognition of the emotional content.

Eriksen (1963) in reviewing the results of defensiveness research says "...that the clinical concept of repression is more sophisticated than to assume that all people or even a majority of people automatically repress any sexual or aggressive ideation, or that all anxiety-arousing thoughts or feelings are repressed. Instead, repression is a defense mechanism used sometimes by some people to handle anxiety-arousing thoughts or feelings whose anxiety-provoking nature is a function of the individual's own unique past experiences. Thus one would not expect a great deal of communality among people in terms of the kind of stimuli that should lead to repression. Furthermore, theories of personality dynamics also recognize that there are other types of defense mechanisms. Repression is not the only way individuals defend against ego-threatening stimulation.

"Intellectualization, reaction formation, and projection are defensive mechanisms that one might expect actually to lead to a sensitization for a stimulus related
to the conflict. In the instance of reaction formation, the person manifesting this defense seems to be particularly alert to finding and stamping out the evil that he denies in himself. Similarly, in the case of projection, those manifesting this defense are considered to be hyper-alert in detecting the presence of the defended-against impulse in others. Intellectualization frequently leads to a considerable preoccupation with the subject matter of the unacceptable impulse.

"These differences in defensive mechanisms would be expected to have different perceptual concomitants. In the case of repression or denial one might expect a tendency for the subject to manifest avoidance or higher duration thresholds for stimuli related to the sources of conflict. On the other hand, those manifesting defenses of intellectualization, reaction formation or projection might be expected to show a lower duration threshold for anxiety-related stimuli."

Thus it would appear that perceptual vigilance may reflect the sensitizing defenses such as reaction formation and intellectualization, whereas perceptual defense reflects the desensitizing defenses such as repression or denial. It would also appear that sensitization and desensitization effects on memory, that is, recall, for failed or completed tasks also reflects these defensive processes.

Bruner (1957), in discussing possible physiological correlates of defense, posited central nervous system control of stimulation coming into the organism and suggested that the term "gating" would be descriptive of its functioning. In support of his formulation he quoted Adrian (1954) who stated that "The operations of the brain stem seem to be related to particular fields of sensory information which vary from moment to moment with the shifts of our attention. The signals from the sense
organs must be treated differently when we attend to them and when we do not, and if we could decide how and where the divergencies arise, we should be nearer to understanding how the level of consciousness is reached. The question is whether the afferent messages that evoke sensations are allowed at all times to reach the cerebral cortex or are sometimes blocked at a lower level. Clearly we can reduce the inflow from the sense organs as we do by closing the eyes and relaxing the muscles when we wish to sleep and it is quite probable that the sensitivity of some of the sense organs can be directly influenced by the central nervous system. But even in deep sleep or coma there is no reason to believe that sensory messages no longer reach the central nervous system. At some stage therefore on their passage to consciousness the messages meet with barriers that are sometimes open and sometimes closed. Where are these barriers, in the cortex, the brain stem, or elsewhere?"

Maddi (1972), after reviewing physiological investigations into central nervous system control of stimulation coming into the organism, made a suggestion as to how such a mechanism would function:

"Perhaps exteroceptive and interoceptive sensory stimulation entering the central nervous system is compared to a template or model of stimulation existing in the memory. This template or model could well be affected by the past history of reward and punishment encountered in dealing with other people. When incoming stimulation and the template match well, no gating occurs. But when they do not match the discrepancy may constitute the physiological concomitant of conflict and anxiety. The mismatch may instigate some control process sensitizing or desensitizing certain or all exteroceptive and interoceptive sensory modalities, such that, precisely that stimulation which would match the template better
is permitted to pass on to the brain. Stimulation not permitted to pass would then be unconscious because it was literally not in the brain, even though in the organism at the level of sense organs. This resolves the paradox of assuming mental content that is not available to awareness, a paradox that has bothered many critics of the concept of defense."

Further evidence in support of this general position comes from Petrie (1967) who became interested in individual differences in pain perception, as a result of reports from doctors and nurses that people differed markedly in their responses to pain and suffering. The results of her research suggested a neurological basis for variation in the tolerance of pain.

She found that there were essentially three different ways of experiencing sensory stimulation, of which pain is an excess. People either increase the intensity of what they perceive, they lessen it, or they experience it more or less as it really is. The first type she called augmenters, the second reducers, and the third moderates. These types form a natural range within the population. (Her findings tend also to support the sensitizor - repressor distinction made above).

In carrying out an extensive programme of research involving these three types she found that because the reducer's tolerance of pain is a result of his tendency to diminish sensory perception he is handicapped in an environment which provides little stimulation. She reports, for example, that reducers actually suffer psychologically from being in an iron lung, or similar device, where movement and sensation are greatly restricted. Augmenters tolerate
such sensory starvation more easily and are willing to remain in such an environment longer than reducers. For the reducer the low level of sensation seems not only less, initially, than it actually is, but it continues to decrease as time passes and so the situation becomes intolerable fairly quickly. Although this kind of suffering is more diffuse and easily recognizable than suffering from the pain of over stimulation, it nevertheless, is just as real.

Anxiety or fear is the usual response of an augmenter to prolonged or intense sensory bombardment of whatever kind. Also physiological changes accompanying emotion are more quickly noticed by augmenters. Petrie suggests that extreme augmentation of internal cues accompanying emotions probably contribute in part to the development of some psychiatric symptoms.

Reducers and augmenters have their own ways of coping with the environment when stimulation is too strong. The reducer limits right away whereas the augmenter exposes himself until a defensive reaction sets in causing him to reduce. Thus augmentation seems to be self-limiting.

Interesting results occur when augmenters are given aspirin or alcohol. With two aspirin, or two ounces of alcohol, augmenters reduce markedly so that they become almost the equivalent of reducers, whereas reducers and moderates are very little affected. No augmenters in the studies continued to augment after either alcohol or aspirin and the more extreme the augmenter the more marked the effect. An interesting finding here was that the drug chlorpromazine (largactil) seems to increase augmentation.
In testing alcoholics, Petrie found one half to be augmenters and one half moderates. There were no reducers. Moreover all the moderates were augmenting slightly.

In her studies of schizophrenics she found them to be extraordinarily tolerant of pain. This contrasted sharply with observations of these patients prior to the onset of schizophrenia when they had displayed pathological hyperaesthesia. It would appear that the schizophrenic phase, at least in some patients, may be due to a defensive reduction in stimulation following on too much perceptual bombardment. Petrie reports that during this phase 82% of the patients tested were found to be reducing and 15% were shifting between extreme augmentation and extreme reduction. The tests were carried out on two occasions about 24 hours apart. As there is a marked restriction in the intake of stimulation from the environment in schizophrenics, Petrie suggests that hallucinations may, in fact, be an effort made by the individual to compensate.

She says "When the schizophrenic goes into what may be called his spasm of reduction, it is not a carefully modulated procedure in which he reduces just enough for his convenience. Rather he is seemingly forced by his sensibility to go to an extreme. In this extreme state of reduction the world may become unbearable - not because of what it contains, but because of what it does not contain. The schizophrenic finds himself having to cope with a new problem - the problem of nothingness. The psychotic experiences that then occur might be thought of as creating a world in which the schizophrenic can live."
That augmenters show up as introverts on personality tests whereas reducers show up as extroverts. She also noted that brain operations resulting in an increased tolerance for pain in the patient also resulted in increased extroversion, whereas other brain operations did not.

Reason (1970) in reviewing Petrie's work together with a number of other studies dealing with central nervous system control of stimulation coming into the organism writes:

"In one study by M. Buchsbaum and J. Silverman, subjects - classified as augmenters by their judgements of size - showed systematic increases in the amount of their cortical-evoked responses with increasing levels of light energy. In contrast, reducers showed a much smaller increase with more intense stimulation and, in some cases, there was an actual decrease in the cortical response. This result was confirmed in a second study by B. Spilker and E. Callaway."

"These results are important for two reasons. First, they clearly demonstrate that we are dealing with a central brain function rather than a phenomenon in the peripheral sense organs. Secondly, they indicate that the observed differences in the behaviour of augmenters and reducers are mediated by corresponding differences in the underlying brain activity. This goes a long way toward meeting the criticism - justified on the subjective evidence alone - that augmenters and reducers may differ not so much in the way their nervous systems transmit stimulus energy but in the way they choose to observe and report their sensory experiences. The neurophysiological evidence places the source of these pervasive individual differences fairly and squarely in the sensory coding areas of the central nervous system."
Although "the source of these pervasive individual differences" is placed "fairly and squarely in the sensory coding areas of the central nervous system" this does not obviate the possibility that individuals can influence the way their nervous systems code and transmit stimulus energy. For example Petrie (1967) has found that there are very few reducers among those born deaf, whereas the normal number of reducers is found among those people who became deaf later in life. This suggests that those born deaf learned early to adapt to their insufficiency by acquiring increased stimulation from their remaining senses. That is they learn to utilize to a greater extent the information available to them from their other senses. Thus it appears that the method of coding sensory input may be learned early in life and may be dependant upon the environmental circumstances and the type of coding which the child sees as necessary for it to make an adequate adaptation to his environment as he interprets it. Further support for this interpretation comes from the selective affect of alcohol on augmenters, moderates and reducers reported above. If the affects were purely neurophysiological one would expect there to be an across-the-board affect of some kind. As augmenters only are affected it seems reasonable to assume that cognitive structuring of the environment is at least partially involved. Fiske and Maddi's (1961) findings also supported this latter interpretation.

Other work on the dimension of sensitization-repression has been carried out by Lazarus and his colleagues at the University of California at Berkeley. They viewed sensitization-repression as a continuum, and as the mechanism underlying a person's defenses. They saw those responses (e.g., repression, denial) involving avoidance of anxiety-arousing stimuli and their consequents as lying at one end of the continuum. At the other, sensitizing, extreme of the continuum are behaviours which involve an attempt to reduce anxiety by approaching or
controlling the stimulus and its consequents. These mechanisms include intellectualization, obsessive behaviours, and ruminative worrying.

Lazarus and Alfert (1964) in reviewing much of this work reported that subjects with low scores on the Repression-Sensitization Scale (ie. repressors) indicated less anxiety and depression on the Nowlis Adjective Checklist of Mood after being exposed to a high anxiety producing stimulus than did those with high scores. The reverse pattern was found for skin conductance. They concluded: "Judging from these Nowlis (Mood Scale) patterns, verbally derived measures of stress response in the form of dysphoric affect interacts with personality variables in a direction opposite from what is found with autonomic indicators. High deniers refuse to admit disturbance verbally but reveal it autonomicly, while low deniers are apt to say they are more disturbed while showing less autonomic reactivity."

Lazarus and Alfert also describe a study by Davison (1963). He divided his subjects into repressers, sensitizers and neutrals (those with medium scores) and found that defense mechanisms significantly influenced reaction to the anxiety provoking stimulus in terms of skin conductance, heart rate, and general bodily movement. His results indicated that the neutral subjects show the greatest physiological response to threat, closely followed by repressors with the sensitizers showing the least physiological disturbance. These findings were interpreted as indicating that the development of a consistant defensive pattern protects an individual against physiological stress and that sensitization is a better protection than repression.

The research reviewed above lends further support to the hypothesis that people tend to structure their experiences such that these are generally in accord with
their expectations. Furthermore it would appear that people tend to develop characteristic modes of structuring of incoming information such that their existing schemas, or cognitive maps, are conserved. These protective strategies, which reduce the necessity for the person to alter or amend his existing cognitive structures so as to facilitate the assimilation of stimulus details as they actually are, can vary within the one person from time to time, depending upon his evaluation of the nature, importance, and possible consequences of the specific event being considered at that particular time.

It also appears that these defenses, or strategies of structuring information, operate at a level below awareness. The person is not aware of how he is operating on his environment or in what way he is distorting ecological information.

These strategies of selective attending have been found to lead to different outcomes in therapy, depending upon the type of therapy employed. DiLoreto (1971) compared behaviour therapy (systematic desensitization), client-centered therapy and rational-emotive therapy, in the treatment of interpersonal anxiety. She reported that behaviour therapy and rational-emotive therapy were equally effective with introverts and that both were significantly more effective with this group than was client-centered therapy. On the other hand both client-centered and behaviour therapy were equally effective with extroverts, significantly more so than was rational-emotive therapy. She also reports that when all subjects were combined, behaviour therapy was shown to be considerably more effective than either of the other treatments. Now rational-emotive therapy tends to focus primarily on the way the person's thinking affects his feelings and behaviour, with the emphasis being on the logical processing of information and the examination of certain hidden "crazy" premises underlying the person's non-adaptive responses.
Client-centered therapy, on the other hand, focuses primarily on the person's feeling states. Thus introverts, that is, people who tend to augment their feeling states and who tend to be inward looking, who work with a therapist with a rational-emotive bias, are shown how they actually create and maintain their feeling states, and so can learn how to control them. If they worked with a client-centered therapist they would become involved in doing more of what they are already doing. Whereas extroverts, that is, people who tend to reduce the intensity of their feeling states and who are action rather than feeling-oriented, who work with a client-centered therapist would have their attention drawn inwards, into themselves, and would be made more aware of their feeling states, and be helped to come to terms with and utilize them in making future decisions. A rational-emotive therapist, on the other hand, would have found it, initially at least, very difficult to get extroverts to meaningfully examine the thinking underlying their emotional states, since they are not very aware of their emotional states in the first place.

Thus it would appear that, since anxiety (cognitive strain) for these two groups results from diametrically opposed ways of dealing with incoming information, learning how to minimise cognitive strain involves facilitating the reversal of the person's usual coping or structuring mechanisms. As has already been mentioned Jungian therapists also make a similar distinction.

Now if the person's cognitive strain was the result of the way in which he was structuring incoming ecological information and of the interpretations and implications arising out of his manner of structuring, then the above approaches would appear to be sufficient in eliminating or at least significantly reducing it. But, if his experience of cognitive strain was the result of deficits in the appropriate behavioural responses available to him in his repertoire then this deficit would have to be remedied if cognitive strain was to be eliminated or reduced. Thus it seems that an approach combining both insight and action (ie. Behaviour Therapy) is generally most effective
3.4 The Self-Concept

As implied above, the way a person views himself, that is his self-concept, substantially affects his behaviour. Hall and Lindzey (1957) indicate that the self-concept "may be defined simply as the total aggregate of attitudes, judgments, and values which an individual holds with respect to his behaviour, his ability, his worth as a person - in short, how he perceives and evaluates himself."

It appears (Hall and Lindzey 1957) that, either on the basis of inheritance or learning, a need for positive regard develops universally. Furthermore the satisfaction of this need is totally dependant on other people, or, more accurately on an individual's perception of the way in which others regard him. The satisfaction of this need seems to be sufficiently important for the individual's behaviour to be more influenced by it than by his actual organic experience.

Growing out of this need for positive regard from others is the need for positive self-regard. It appears that a child's self-concept is formed by means of interactions with others, and that the child adopts for itself, or internalizes, this need to be thought worthwhile. As a result of this, the child also internalizes the values of its significant others. Although many experiences in a person's life are in accord with his internalized conditions of worth (ideal self), many other experiences which the person has are incongruent with them. It seems that some people can deal with this discrepancy more constructively than others.

Chase (1957) using an adjusted and a maladjusted group of male, hospitalized veterans gave all his subjects a Q-sort dealing with self as actually perceived, and ideal self. He computed self-ideal correlations for each subject and then determined the mean correlations for each group. He found that the mean for the adjusted subjects \( r = .64 \) was significantly higher than for the
maladjusted subjects (r = .36). He also reports that all subjects tended to have similar conceptions of the ideal self. The differences between groups occurred with respect to the self-concept.

Turner and Vanderlippe (1958), also using the Q-sort, measured the self-concept and the ideal self in a large group of undergraduates. From this sample they selected two groups for comparison; those with the greatest and those with the least self-ideal discrepancy. They found the congruent group to have a significantly higher adjustment score than did the discrepant group. They also found that compared to the high discrepancy group, members of the congruent group participated more in extra-curricular activities, had higher sociometric status in their living groups, and had a higher grade-point average even though there were no differences between the two groups in terms of college aptitude test scores. Also, the degree of self-ideal congruence was found to be positively related to scores on scales measuring general activity, ascendance, sociability, emotional stability and thoughtfulness. "In each instance, the scores for those high in self-ideal congruence are indicative of better adjustment than are those for Ss low in self-ideal correspondence." A number of other studies (Hanlon et al 1954; Smith 1958; Davids and Lawton 1961), utilizing various measures of self-concept and adjustment, have reported that the congruence between self-concept and ideal self-concept can be used as valid measures of adjustment.

A number of other studies have found that the relationship between congruence of self and ideal self and adjustment is curvilinear. For example Block and Thomas (1955) reported that, although high self-ideal discrepancy is indicative of maladjustment, in that self-dissatisfied individuals tended to score higher on the hypochondriasis, depression, psychopathic personality,
psychasthenia and schizophrenia scales of the MMPI than did more self-satisfied individuals, the more highly self-satisfied individuals seemed also not to be well adjusted. They tended to score higher on scales measuring overcontrol, denial, constriction, and lack of candour. On the basis of these findings together with a subsequent item-analysis of the Q-sort material, the authors concluded that the best adjusted individuals were those with a medium degree of self-ideal discrepancy, they describe such individuals as "...reasonable and accepting in their self-appraisals. They would like more of what they value and less of what makes them uncomfortable. They accept the ambiguity of emotions and are comfortable in their relations with others. They have their problems, certainly, but they neither despair nor deny." Zuckerman and Monashkin (1957), reported similar findings.

Kamano (1961) in investigating the relationship between defenses and self-ideal discrepancy obtained self, ideal-self and least-liked-self scores from a group of female schizophrenics. The group was then divided into two sub-groups. The most self-satisfied and the least self-satisfied. As a measure of defensiveness, a paragraph containing statements favourable and unfavourable to each subject was read, and then the subject was asked to recall as much of the paragraph as possible. Those with a low self-ideal discrepancy (self-satisfied) recalled significantly fewer unfavourable statements than did the self-dissatisfied subjects. There was no difference between the groups in their recall of favourable items. This finding was interpreted in terms of the use of denial mechanisms by the high self-esteem individuals. Similar findings have been reported by Altrocchi et al (1960) and by Lucky and Grigg (1964).

Hillson and Worchel (1957) compared three groups: normal students; anxious neurotic patients in treatment; and defensive hospitalized schizophrenic patients. The
neurotics were found to have significantly higher self-ideal discrepancy scores than the normals. Similarly, the neurotics had significantly higher discrepancy scores than the psychotics. The normals and psychotics, did not differ in self-satisfaction. In a second study they (Worchel and Hillson 1958) compared a normal group of males with male prisoners in jail. The criminal group were found to have a significantly more positive self-concept and a significantly smaller self-ideal discrepancy than the normal subjects. Hillson and Worchel's findings agree with Friedman's (1955) earlier work wherein he compared normals, neurotics and paranoid schizophrenics using a Q-sort technique. Friedman suggested that the positive self-concepts of the normals and the negative self-concepts of the neurotics were based on a fairly realistic self-appraisal, whereas the positive self-concepts of the schizophrenics were based on unrealistic self-appraisals and self-enhancing defenses.

Achenbach and Zigler (1963) investigated self-ideal discrepancy as a function of social competence (social status) in a group of normals and in a group of psychiatric patients. They hypothesized that for both groups, level of social competence would be positively related to amount of discrepancy. They argued that at higher levels of social competence, a greater number of social demands, mores, and values have been incorporated, and so there would be a greater potential for guilt. Their findings were in the predicted direction. In both groups, high competence individuals recorded higher self-ideal discrepancy scores than did low-competence individuals. They state that: "Indeed, the present study indicates that high self-image disparity is concomitant with the demonstrated capacity to achieve in areas most valued in our society. Rather than being ominous in nature, high self-image disparity would invariably appear to accompany the attainment of higher levels of development since the greater cognitive differentiation found at such
levels invariably leads to a greater capacity for self-
derogation, guilt and anxiety....What is being suggested here is that the attainment of higher developmental levels is not an unmitigated blessing. While such attainment guarantees the individual a greater ability to deal with whatever problems confront him, his greater cognitive differentiation also gives him the capacity to construct more problems for himself."

Hatfield (1961) carried out a study into the relationship between self-concept and effective behaviour at a given level of social competence. He obtained supervisor's ratings of all students entering a student teacher program. A group of students receiving the lowest ratings were matched with another group receiving the highest ratings on the basis of sex, age, amount of teaching experience, grade level at college, IQ, and socioeconomic background. The two groups were assumed to be equal in social-competence level. Using a Q-sort, self-ideal self correlations were determined for each individual. The mean self-ideal coefficient of the superior student teachers was .86, whereas that of the inferior student teachers was .63. The difference between the groups was found to be significant at the .01 level of confidence. Item analysis indicated that the ideal self-concepts of the two groups did not differ. Rather, Hatfield found that the differences lay in self-ratings, with the inferior student teachers giving more negative self-evaluative responses. It would appear, therefore, that self-ideal congruence is characteristic of those individuals performing most adequately at a particular developmental level. Thus, while social demands and potential feelings of inadequacy may increase as we proceed up the scale of social competence, it would appear that it is the least competent individuals at any particular level who display the greatest discrepancy between self-concept and ideal self-concept.
Chodorkoff (1954) investigated responses to experiences which were contrary to an individual's self-concept. He found that the greater the accuracy of an individual's self-perception the less perceptual defense the individual used against threatening stimuli. Furthermore, judges' estimates of each individual's adjustment correlated significantly with his perceptual defense score. The better the adjustment, the lower the use of perceptual defenses. Chodorkoff goes on to say that "The better adjusted individual attempts to obtain mastery over threatening situations by getting to know, as quickly as possible, what it is that is threatening. He may be alerted to the possibility of threat and may be influenced by a set which leads him to try to differentiate and symbolize aspects of himself and his environment which are potentially threatening. The less adequately adjusted individual, in contrast, may be thought of as influenced by a set to keep threat inadequately differentiated and inadequately symbolized.

"Furthermore, it can be argued that adequate behaviour depends upon adequate perception. If an individual cannot differentiate and symbolize aspects of himself and his environment, his behaviour in turn will not be adequate. He will also be unable to resolve threatening situations when they confront him, for if he does not recognize threat, how can he be expected to deal with it effectively?"

Cartwright (1956) approached the problem of perceptual defense by investigating the hypothesis that differential recall of stimuli would occur as some function of the consistency of those stimuli with respect to the individual's self-concept. He also hypothesized that differential recall of consistent and inconsistent stimuli would be greater for maladjusted than for adjusted individuals.
He used two groups, a group of adjusted and a group of maladjusted individuals. He found that, taking his total subjects, recall for adjectives which were consistent with each individual's self-concept was significantly better than recall for inconsistent adjectives. He also found, as predicted, that the maladjusted group displayed a significantly greater difference between recall for the two types of adjectives than did the adjusted group; on the basis of this he suggests that inconsistent stimuli constitute a greater source of threat for the maladjusted subjects. Cartwright reports other evidence indicating that experiences inconsistent with self may be admitted into awareness in distorted form. On this point he writes: "There was considerable evidence of distortion in immediate recall for inconsistent adjectives. Typical examples, all from different Ss are: "satisfied" was misrecalled as "dissatisfied" for one trial; "hopeless" was misrecalled as "hopeful" for two trials; "hostile" was misrecalled as "hospitable" for three trials; "tolerant" was misrecalled as "intolerant" for five trials. Since Ss had sorted their cards to say they were NOT satisfied, hopeless, etc, it is clear that misrecall resulted in making the stimulus word consistent with their self-structure."

Worchel and his colleagues, in a series of studies (Worchel 1958, Rothaus and Worchel (1960); Veldman and Worchel (1961); and Worchel and McCormick (1963) ) found that for individuals who are well adjusted in terms of congruence between experience and self-concept, frustrating conditions lead to the arousal of hostile impulses which are accurately conceptualized and directed towards the appropriate target, the frustrating agent. In contrast, those individuals whose self-concepts are such that aggressive impulses are not admitted into their awareness, respond quite differently in a frustrating situation. As they are not able to verbalize feelings of hostility toward the frustrating agent, they tend to
express their aggression in a more disguised form such as self-blame or displacement onto an inappropriate target.

Videbeck (1960) hypothesized that changes could be brought about in a person's self-concept by manipulating the type of evaluation that the person is given by others. He assigned subjects to one of two conditions on a random basis: Approval or disapproval.

Videbeck reported that, although the self-ratings of the two groups did not differ prior to the experimental treatment, afterwards however, the self-concepts of those in the approval group became more positive while the self-concepts of those in the disapproval group became more negative. Self-ideal discrepancy became smaller in the approval group and larger in the disapproval group.

Wessman et al (1960) studied the effects of changes in a person's mood on the self-concept. They found that self-ideal congruence is significantly lower when a person is depressed than when elated. The median self-ideal correlation during an elated mood was .55, whereas during a depressed mood the correlation was .07. They also found that most of the difference resulted from changes in the self-concept rather than from changes in the ideal self. As their subjects were women, they reported that mood tended to be lower (and hence self-ideal discrepancy greater) on the two days prior to menstruation. This finding adds further support to the Schachter and Singer studies reviewed above.

The studies reviewed here tend to indicate that our cognitive structures have a marked influence on our behaviour. It would appear that there is an important interaction between the conditions which we regard as measures of our self-worth, the view we have of ourselves, and the way in which we tend to perceive ecological information, that is, the types of defenses that we tend to use. Thus, people with an unrealistic/high self-esteem
(that is, a very low discrepancy between the self as actually perceived and their ideal self) tend to use repressive defenses in order to conserve or maintain their view of themselves. This probably means that the conditional positive regard received by repressors depended upon them achieving very high standards, with very little leeway being allowed. Even slight departures from the very high standards would probably have drawn derogatory (strong negative) reinforcement (at least as interpreted by the individual himself. Thus for these individuals to consider themselves to be worthwhile they would have to see themselves as satisfying very demanding and rigidly applied conditions of worth. Their defenses would be aimed at ensuring that cognitive strain (anxiety) was not generated as a result of any possible mismatch between what-is-happening-now (inputs) and the summaries of what has happened before (the cognitive organization, the major premises) (Sarbin 1964).

People with an unrealistically low self-esteem (that is, a very high discrepancy between self and ideal self) tend to use sensitizing defenses; they tend to focus on the negative aspects of their experience and make excuses for them, or somehow explain them away, or indulge in some behavior which will either mitigate or control them. These people have probably experienced very little straightforward positive regard from significant others. They may have felt that their shortcomings were stressed more than their accomplishments and so may have felt the need to continually justify themselves in order to maintain even a reasonably positive self image. These people would probably find it difficult to cope with positive feedback, experiencing it as embarrassingly pleasurable. Despite the fact that they would find it difficult to cope with positive feedback, one would expect that negative information, that is, information which was generally consistent with their low self-image would cause little anxiety (cognitive strain). Yet it
seems that, although they are sensitized to negative feedback and can readily assimilate it into their self-concept they nevertheless experience anxiety and use protective manoeuvres in order to minimise it.

Sarbin's (1964) second condition for the generation of cognitive strain seems to provide an adequate explanation. This condition indicates that people tend to experience cognitive strain when they experience difficulties in validly using the multiplicity of major premises that are activated by their sensory inputs from what-is-happening-now. One of the 'multiplicity of major premises' that are activated, besides the self-concept, is the ideal-self, the internalized conditions of worth. It would appear therefore that sensitizers, who also have a need to be considered worthwhile, try to preempt any overly critical evaluation of their competence by pointing out that they are not really responsible for their poor performance. Other factors affected their performance and resulted in them not being able to match the standard set by their conditions of worth.

In therapy the client is induced to approach threatening ecological information, examine it, and come to terms with it so that he is then able to assimilate the ecological information into his existing self-structure and also alter his self-structure so as to reflect a more realistic self-image. Although the initial approach is tension inducing, the net result is a reduction in tension in this area. On this point Gendlin and Berlin (1961) gave clients tape-recorded instructions to do various things followed by a period of silence in which they could carry out the instructions. The result of the client's focusing inwardly on the felt meanings of unpleasant personal problems was a decrease in tension as measured by galvanic skin response, skin temperature and heart rate.
Butler and Haigh (1954) found that self-ideal congruence occurred in clients after therapy, and that this change was due to the therapeutic treatment. Dymond (1954) reported that clients receiving therapy showed a significant increase in adjustment over the therapy period. A control group showed no change. In summarising this research Rogers (1954) writes: "It appears reasonable to conclude that the psychotherapy is the effective agent of change, since changes of comparable magnitude do not occur in a control group or in our clients during a control period. In our judgment the research set forth for the first time objective evidence that one defined approach to psychotherapy produces certain measurable and significant changes in the individual coming for help."

The research reviewed here has focused on two extremely important cognitive structures which mediate our interactions with our environment. It seems that the discrepancy between these structures, the self-as-perceived and the ideal self, tends to determine whether a particular piece of information is construed as threatening or not; it also seems to determine the manner in which this perceived threat is dealt with. The research has also indicated that the discrepancy between self and ideal-self follows a curvilinear path as far as adequacy of adjustment and degree of reality contact is concerned.
3.5 The Ideal Patient

Strupp (1962) after reviewing the literature on patient types states that "Therapists appear to have fairly definite and probably valid ideas of what constitutes a promising patient. In addition to being intelligent and reasonably well educated such a person seems to possess a certain psychological-mindedness (capacity for insight), the ability to communicate about his feelings, a more or less clear recognition that his difficulties are psychological and a willingness to be helped via psychological treatment."

Rosenberg's (1954) findings support this picture. He found that the successful patient has superior intelligence, has the ability to produce associations easily, is not rigid, has a wide range of interests, is sensitive to his environment, feels deeply, exhibits a high energy level, and is free from bodily concerns. Barron (1953) in two studies (a & b) found that a) The patients who are most likely to get well are not very sick in the first place, and b) That ego strength or degree of personality integration appears to be positively related to outcome in psychotherapy.

Klein et al (1970) found that successful therapy patients start, continue, and end therapy, at a higher level of experiencing than do less successful patients.

Rogers, Gendlin, Kiesler and Truax, (1967) reported that patients high on socioeducational status with high verbal intelligence, high mental health ratings on the TAT and a generally low level of rated manifest psychotic disturbance, were most successful. Keith-Spiegel and Spiegel (1967) found that the higher the education and intelligence level of the patient the more he perceived psychiatrists as most helpful, and hospital aides and
other patients as least helpful. The converse was true for those of lower education and intelligence levels. A very memorable quote from this study is that of a patient with an IQ of 83 and an eight-grade education who said: "My doctor was a nice enough guy, but I never knew what the hell he was talking about."

Truax and Carkhuff (1967) point out that "In successful psychotherapy, both individual and group, the successful patient spends much of his time in self-exploration....attempting to understand and define his own beliefs, values, motives, and actions...while the therapist, by reason of his training and knowledge, is attempting to facilitate this process. This is the essence of the "talking cure" pioneered by Freud and his associates." "Rogers in particular has stressed the role of patient self exploration. In attempting to describe this in the client, Rogers (1955) describes in a different language the basic phenomena dealt with by Freud: 'Optimal therapy has meant an exploration of increasingly strange and unknown and dangerous feelings in himself.... Thus he becomes acquainted with elements of his experiences which have in the past been denied to awareness as too threatening, too damaging to the structure of the self."

Thus it appears to be easier for an "ideal" patient to learn to bring reflexive modes of thought to bear on his inter-and intrapersonal behaviour; to center on the emotional aspects of his functioning; to see the interdependence between thinking, feeling and action; and to see recurrent patterns in his behaviours and so form insights into the underlying causes. Such a patient is not very "sick" to begin with, progresses relatively quickly in therapy and provides the therapist with positive feedback about himself and so makes him feel good about himself and therefore probably warm, empathic etc, towards the patient. The above studies imply that as the patient moves away from this "ideal" it becomes progressively more difficult for the therapist to achieve, significant therapeutic movement by relying on existing patient resources.
3.6 Therapist Expectations

In work which followed up the studies on the ideal patient Carkhuff (1971) found that therapists whose expectations for a given client or group of clients are high, elicit constructive change. On the other hand therapists whose expectations for clients are low, have a retarding effect upon constructive behaviour change. It seems that clients come to expect of themselves that which their therapists expect of them.

On the last point Carkhuff writes that "It is important to note that the effects of helper expectancies hold independently of the assumptions concerning the resources of the individual helpee. That is, expectations based upon erroneous information concerning the individual's ability to achieve, nevertheless have an effect upon that individual's ability to achieve."

Furthermore, experiments with rats, planaria, as well as human subjects (Rosenthal and Jacobson, 1968) exhibit the same phenomenon, thus suggesting that the experimenter in some way, and probably unconsciously, manipulates the situation to conform to his expectations. Carkhuff (1971) suggests that therapist expectations may result in a very subtle process in which therapists elicit and reinforce a changed self-image on the part of the client. This, of course, would not be an adequate explanation for what occurs with animal subjects, but it at least seems reasonable from the point of view of human subjects.
3.7 Patient Expectations

A number of studies have indicated that the client may be helped more when therapy is consistent with his expectations then when it runs counter to them, initially at least (Go in Yamamoto and Silverman, 1965; Levitt, 1966). Goldstein (1962) in reviewing the literature up to that time indicated that the client's expectations concerning therapy are of some importance for both continuation in therapy and its outcome, and that therapists should pay explicit attention to such expectations at the beginning of therapy.

The power of client expectancies is indicated by the fact that upon entering therapy many people show an observable reduction in anxiety and symptoms. Murray, in a series of studies using content analysis, found a rapid decline in uninterpreted intellectual defenses (1954), physical complaints (1956) and psychotic symptoms (1962). Frank (1961) found that accepting a person into a treatment is not necessary for symptom reduction to occur. This could be achieved by giving the client a placebo or by putting him on the waiting list. Thus, actually being helped does not appear to be necessary for symptom reduction. It appears to be sufficient, in many cases at least, that the person develop the expectation of being helped by a socially recognized helping agent. Such expectations seem to result in a strong sense of hope, relief and confidence. It would also appear that such feelings exert a powerful influence on the client's emotions, thoughts and behaviour.

The impact of client expectations was studied by Freedman et al (1958) who analyzed notes of initial interviews in terms of the warmth or detachment provided by the therapist. They found that although those clients who dropped out of therapy did not differ from those
remaining, in terms of the warmth of the therapist-client relationship provided, when the type of relationship was matched with the client's expectations concerning treatment, a significant interaction was found. Clients who denied "mental illness" and encountered a warm relationship tended to drop out, whereas the reverse was true with those clients who accepted their "illness" and were exposed to a warm relationship. That is, a person recognizes that he is in trouble and goes to seek help from another person who is a socially accepted helping agent. The first person has certain expectations as to how to behave in a helpee-helper relationship. Unless these expectations are fulfilled he will find himself confused, disappointed, experience cognitive strain and probably withdraw. On the other hand a person may find himself in a situation where, although he states that he does not fit a particular category, (a "mentally ill" person), he is being treated in a way which, to him at least, makes it appear as if he was considered to belong to that category by an "expert". He also experiences cognitive strain, is unable to assimilate the information and withdraws.

Both situations imply that it is important to start work from the person's existing cognitive structures and move in easily assimilable steps.

Thus we see again that those people who structure future situations in a certain way tend to be able to assimilate accurately only that portion of the actual situation which corresponds to their structure. Other aspects of the situation may be either distorted to fit or rejected depending upon the person's ability to change his structures. That is, the prestructuring provides a model against which to evaluate reality. This tendency seems to be true of both clients and therapists in that it appears that therapists (and experimenters) tend to manipulate situations to fit their expectations. (Rosenthal and Jacobson, 1968; Carkhuff 1971).
3.8 Patient-Therapist Relationship

A number of studies dealing with individual and group therapy and with client populations of neurotics, psychotics, juvenile delinquents and the physically and mentally handicapped have tended to show that therapists high in social influence produce better client personality and behavioural improvement than equally trained therapists who are lower in social influence (Truax et al 1968; Truax 1969).

Back (1951), Rasmussen and Zander (1954) and Burdick and Burnes (1958) found that interpersonal attraction increases receptivity to interpersonal influence. The more one person likes another, the more he is willing to be influenced by the other. Goldstein and Simonson (1971) in investigating the attraction with which a patient views his therapist as a result of their initial therapeutic session found that a) When patient attraction to the therapist is high, the patient

1. is less covertly resistive
2. talks more
3. is self-descriptively sicker, and
4. has more favourable prognostic expectancies for himself.

and b) The more attracted the therapist is to the patient

1. the more the patient talks
2. the more open he is in the content of his communication, and
3. the less covertly and overtly resistive he is

They also predicted and found support for the hypothesis that patients highly attracted to their therapist would be rated as more attractive by their therapist than would patients having low attraction to their therapist.
Goldstein and Simonson also discuss studies in which patients were exposed to a prestructuring experience prior to actually meeting a therapist. They indicate that therapists who were initially presented as warm or experienced were more attractive to potential patients than were therapists who were made to appear as cold or inexperienced. In respect of the former, patients were more receptive to their influence attempts, were more persuaded by their communications as measured by an opinion shift questionnaire, and evaluated their work more positively than did the patients of the latter therapists.

An important question which arises now is, who determines the type of relationship which is to exist between client and therapist. It has been pointed out above that therapists prefer to work with certain types of clients and that a client's liking for a therapist can be structured. A number of studies reviewed by Carkhuff and Berenson (1967) led those authors to state quite categorically that the therapist determined the type of relationship. Other studies were not quite as explicit. Heller, Myers, and Kline (1963) for example investigated the operation of reciprocal affect in psychotherapy. They used actors to simulate patients for unsuspecting real therapists and studied the effects upon these therapists of "patients" who were essentially friendly versus "patients" who were essentially hostile. Their results indicated that reciprocal affect was generated in the real therapists. Therapists responded in a more friendly fashion to friendly "patients" and in a more hostile manner to hostile "patients".

Truax and Wargo (1966) suggested that "Under ideal circumstances, an ideal therapist would provide high therapeutic conditions to all patients at all times. But even the therapist, after all, is human. This means that his own personal prejudices will inevitably operate to some degree - that he will provide lower levels of
conditions (say, warmth) to patients who are more personally irritating or unpleasant. Beyond personal prejudices, general prejudices are also operative throughout the profession of psychotherapy. In general, the average therapist has been taught that prognosis is poor for schizophrenic and psychopathic patients. It seems almost inevitable that he would communicate pessimism to such patients and also provide lower conditions to people he believed he could not help. His lowered level of therapeutic conditions would lead predictably to poor outcome, and thereby confirm his original pessimism. If, on the other hand, the therapist could overcome such prejudices, both personal and professional, then the offering of high conditions would lead to positive outcome for the low I.Q. patient, the schizophrenic, and even the psychopath.

"It is of significance to note that in the Schizophrenic Research Project at Wisconsin there was no relationship between the patient's age, sex, socioeconomic status, or even premorbid adjustment and case outcome. Further, in several of the most successful cases, the patients were characterized by diagnosticians as having large components of psychopathic personality characteristics. The explanation of these seemingly surprising findings might well lie in the fact that each therapist knew that his therapy was being recorded and that his patient was being evaluated by a battery of instruments to assess outcome. In short, he was unusually motivated to do the very best with whatever case was assigned to him. Under such circumstances (he knew colleagues would listen and evaluate his therapy), he was motivated to provide his patient with the highest possible therapeutic conditions, regardless of the patient's age, sex, socioeconomic status, or degree of maladjustment."

Although a reanalysis of the data by Kiesler, Mathieu and Klien (in Rogers et al 1967) does not fully support Truax's statements in the first sentence of the
second paragraph quoted above, nevertheless it does appear that a therapist need not react to the client's negative communications and behaviours with similar behaviours provided that he is aware of his biases. He can in fact structure the situation in such a way that it becomes a potentially constructive growth experience, as long as he is sufficiently motivated to do so.

Another important aspect of therapy, mentioned earlier in this paper is that of transference, which seems to be a result of a trusting relationship, and which appears to be characteristic of most successful therapy. Even in the area of Behaviour Therapy we find this aspect being mentioned. Thus Gelder, Marks and Wolff (1967) observed that a transference relationship builds up during systematic desensitization although it is not encouraged or interpreted as in traditional therapy. They suggest that the positive aspect of the transference is useful as a means of engaging the cooperation of the patient. As negative transference may lead to dropping out of treatment they recommend that it be interpreted as an adjunct to desensitization. Wolpin and Ramies (1966) also working with behaviour therapy, suggest that the subject must trust the helping person and be prepared to do what he requests. They also state that their most successful patients were those who were most compliant and cooperative.

Shapiro (1971) in discussing placebo effects implicates the patient-doctor relationship as the underlying causal factor in its success.

He defines a placebo as any therapy, or component of any therapy, that is without specific activity for the condition being treated.

He has come to the conclusion, as a result of carrying out many studies and reviewing numerous others, that the placebo effect is a derivative of a transference
relationship between patient and physician, a relationship characterized by rapport, warmth, trust, faith and empathy. He has also found that the direction of transference seems to influence the direction of the placebo effect that is positive, absent or negative.

Shapiro says that the factor most frequently reported to be characteristic of positive placebo reactors is that of manifest, unelaborated, free-floating anxiety and a reliance on outer stimuli. (In this regard Fine (1957) and Sarason (1958) reported that high anxiety results in a greater sensitivity to reinforcements provided by the experimenter in learning situations, and to a greater susceptibility to persuasion and opinion change). Negative reactors are characterized as vague, nonspecific, hard to pin down about their history, more rigid and controlled and with less personality deviation then positive reactors. They tend to rely more on inner stimuli and to have more paranoid and masochistic traits. Non-reactors are seen as rigid, authoritarian, stereotypic, with a strong tendency to use the mechanism of denial. They are not psychologically oriented.

Shapiro finds that "The arousal of hope in the patient by the therapist seems important. When hope is aroused, anxiety, depression and other symptoms decrease, the patient feels better, functions better, and may develop ego capacity (this seems to be in accord with findings mentioned earlier). He has also found that

. Psychologists who are warm and interested in their patients or experimental subjects are more persuasive, elicit better conditioning and learning, higher intelligence scores and better Rorschach records.

. The interest of the investigator affects surgery in dogs, gastric acid secretion, metabolic changes, and the galvanic skin
response. Also the success of psychochemotherapy, hypnosis, the success of Shamans and quacks, and the saving of derelicts by the Salvation Army.

The physician's attitude toward his treatment, such as faith, belief, enthusiasm, conviction, commitment, optimism, positive and negative expectations, skepticism, disbelief and pessimism, is a non-specific factor in most therapies, e.g., general medical treatment, insulin coma treatment, psychochemotherapy, hypnosis etc.

He says that "an inescapable conclusion is that the therapist's interest in the patient, treatment, and results, is related to success in treatment and placebo effects."

It seems that the primary and direct effect of the therapist's interest (or lack of it) in the patient, is to reduce (or increase) guilt. "Guilt is manifested by, or associated with, many common feelings such as worthlessness, inadequacy, inferiority, impotence, depression, conflict between inner and outer behaviour, and shame about inner impulses and past behaviour. Fantasies are often perceived as ego-alien experiences, not shared by other people. Inner sensitivity to irrationality stimulates fear and defense against insanity and loss of control, which cannot be fully examined without help from another person. As guilt, anxiety, and discomfort are reduced and hope mobilized, the patient can better utilize his previously impaired assets. Spontaneous remission, as well as favourable environmental and other changes, have a greater chance of occurring, and are more easily stimulated, integrated, and utilized because of the favourable psychological state of the patient. These non-specific therapeutic factors may now interact with the specific effects of various therapies."
3.9 The Effective Therapist

What makes a person attractive to others and thus a potential reinforcer for them? That is, what makes one person react to another such that information coming from the second person is more likely to be accepted rather than rejected or ignored.

Truax and Carkhuff (1967) summarised a large number of studies which examined this problem. The findings, which emerged from this examination of many divergent viewpoints are that:

1. An effective therapist is nonphony, nondefensive and authentic or genuine in the therapeutic situation.

2. An effective therapist is able to provide a non-threatening, safe, trusting or secure atmosphere through his own acceptance, positive regard, love, valuing or nonpossessive warmth for the client.

3. An effective therapist is able to understand, be with, grasp the meaning of, or have a high degree of accurate empathic understanding of the client on a moment to moment basis.

They also indicate that these characteristics are not peculiar to the therapeutic situation but are common to all constructive human interaction.

Combs et al (1969) found that effective and ineffective helpers could be distinguished by differences in personal beliefs and traits. Effective helpers perceived other people as able, rather than unable, to solve their own problems and manage their lives. They also perceived people as dependable, friendly, and worthy.
Effective helpers tend to identify with people rather than things, they also display a capacity to cope with problems rather than lack of problem solving ability, and more self-revelation and willingness to be themselves than to be self-concealing.

Kolb, Rubin and McIntyre (1971) found that ineffective helpers are differentiated from effective helpers and non-helpers by very high n-Achievement and n-Power scores and very low n-Affiliation scores. They also report that these three motives did not significantly differentiate between effective helpers and non-helpers, although they do say that non-helpers seem to be accepting and democratic people who lack the self-confidence to influence others.

Effective helper, on the other hand, are self-confident without being overbearing. Their scores on achievement, affiliation and power lie about midway between the non-helpers and the ineffective helpers. (A non-helper being defined as a person who made no attempt to help another; an ineffective helper as being a person who did attempt to help but whose help was resisted; while an effective helper is one whose help was accepted).

They indicate that the brash, over-confident, superior approach of the ineffective helper tended to place the client on the defensive, whereas the timid, hesitant, passive approach of the non-helper tended to raise questions in the client's mind about the helper's qualifications and led to a lack of confidence in his abilities to provide help.

Other findings were that:

- Effective helpers were seen by receivers as giving significantly more positive feedback while ineffective helpers were seen as giving significantly more negative feedback.
There was no difference in the amount of affection feedback given by effective and ineffective helpers as reported by receivers.

Ineffective helpers were seen by receivers as giving significantly more control-type feedback than effective helpers. The controlling behaviour of ineffective helpers was stressed on several occasions by the authors.

Brammer (1973) states that "Research has confirmed....that the helpful person needs to be an attractive, friendly person, someone with whom you feel comfortable, someone whose opinions you value, and someone who inspires confidence and trust."

It was pointed out above that the therapist, if he is to be maximally facilitative, should be open or non-defensive about his feelings. This appears to be important, since, as this the aim of therapy for the client, the therapist, who is in the power position should be able to exhibit and model these behaviours. This becomes especially important when the therapist begins to feel negatively towards the client because these negative feelings can adversely affect the therapeutic relationship. Thus if the therapist can model a constructive way of dealing with negative behaviour, the client could benefit significantly (Bandura 1971). On this point Rogers and Truax (1967) say "....so if I sense that I am feeling bored by my contacts with this client and this feeling persists, I think I owe it to him and to our relationship to share this feeling with him. The same would hold if my feeling is one of being afraid of this client, or if my attention is so focused on my own problems that I can scarcely listen to him. But as I attempt to share these feelings I also want to be constantly in touch with what is going on in me. If I am, I will recognize that it is
my feeling of being bored which I am expressing, and not some supposed fact about him as a boring person. If I voice it as my own reaction, it has the potentiality of leading to a deep relationship. But this feeling exists in the context of a complex and changing flow, and this needs to be communicated, too. I would like to share with him my distress at feeling bored and the discomfort I feel in expressing this aspect of me. As I share these attitudes I find that my feeling of boredom arises from my sense of remoteness from him and that I would like to be more in touch with him and even as I try to express these feelings they change. I am certainly not bored as I wait with eagerness and perhaps a bit of apprehension for his response. I also feel a new sensitivity to him now that I have shared this feeling which has been a barrier between us. I am very much more able to hear the surprise or perhaps the hurt in his voice as he now finds himself speaking more genuinely because I have dared be real to him. I have let myself be a person - real, imperfect - in my relationship with him."

The ability to engage in this kind of behaviour implies that the therapist is able to use reflexive modes of thought; is aware of his reactions; is able to mentally operate on them and thereby determine why he finds the person irritating or unpleasant, this involves him in examining his prejudices (cognitive structures) etc, at least in the therapeutic situation. In this way he will continue to explore and discover more about himself, become more highly integrated and be able to offer his client higher levels of a facilitative relationship.
3.10 Therapist use of Influence

How do therapists use their social influence in the therapeutic relationship? It appears that they use it to influence the choice of topics which are brought up by the client and discussed in therapy. This they do by applying differential reinforcement (approach-avoidance behaviour) to client utterances. For example Murray (1956) applied content-analysis to one of Carl Rogers' cases. He found that one group of categories, primarily independence oriented, was approved while another group, including "dependence", "sexual material" and "defenses", was disapproved. He also showed that verbal behaviour related to the approved categories increased, while that related to the disapproved ones decreased.

These results indicate that therapist approval and disapproval functions as positive and negative reinforcers and that they are applied systematically and differentially to client utterances. Truax (1966) analysed the same interview using nine classes of patient behaviour and three reinforcers; empathy, nonpossessive warmth or acceptance, and directiveness. He found that Rogers tended to respond (at significantly high statistical levels) selectively with differential levels of the reinforcers to high and low levels of five of the nine classes of patient behaviour. Thus a clear and significant pattern of selective responding was indicated by the data. (Also Truax 1968).

So we have a client who is attracted to his therapist and as a consequence of this attraction is open to the therapist's attempts at guiding the conversation and in moving the client to use reflexive thought in particular problem areas.

However, it appears that the therapist's use of his influence within the therapeutic relationship is far from being a simple, straightforward matter. A problem
which often arises, and one which the therapist must overcome if therapy is to progress, is overt, or more usually, covert, resistance on the part of the client to being helped. It would appear that this resistance is, in part at least, resistance against the therapist's use of his influence.

Brammer (1973) writing on this point says, "Helpees come to a helping relationship with mixed feelings. On the one hand, they want whatever the helper has to offer; yet on the other hand there is a strong resistance in even the most highly motivated helpees. Resistance is a standard term in counselling literature used to denote the helpee's defensive reluctance to begin a helping relationship as well as his covert thwarting of the goals of the interview, once the process is underway."

The reasons he gives for the development of resistance are:

- Cultural pressure to be independent
- The discomfort of changing
- Fear of confronting own feelings.

"...even those who have made a clear commitment to seek a helping relationship use all kinds of stratagems, of which they are unaware, to resist changing. This process also takes place long after the helping relationship is underway. The helper constantly needs to devise methods for dealing with resistance, such as confronting the helpee with his behaviour..." Now Bremmer's second and third points have been dealt with already in discussing Abercrombie's (1969) attempts at helping medical students to revise their preconceptions and in the discussion of defenses above.

Concerning Brammer's first point, Brehm (1966) investigated advice-giving and advice accepting in a general social context and found it to be fairly common
in advice giving situations that the advice given by one person to another had negative rather than positive influence. That is, the advice receiver tended to react against the advice which had been given. This seemed to be true no matter how benign the apparent motives of the person giving the advice and no matter which side of a decision the advice supported. His data indicates that what the advised individual generally wants is the freedom to make up his own mind, and it seems that any advice would interfere with this freedom, no matter which side the advice supported, and, within a broad range, no matter who gave the advice. "The negative influence, then, was conceived as an attempt on the part of the individual to reestablish his freedom to decide for himself."

He also found that the fact that a person wanted to pursue a course of action, in itself, did not arouse "reactance." Reactance occurred only if the person felt, or had some reason to believe, that he is, or should be, free to make his own decision and act on it. (The development of this feeling is, of course, the aim of all of the psychotherapies).

It was also found that the magnitude of reactance aroused by the elimination or threat of elimination of the freedom to make one's own choices and decisions is a direct function of the following factors:

- "The absolute importance to the individual of the freedom, that is, its unique instrumental value for the satisfaction of potentially important needs."

- "The relative importance of the freedom compared to the importances of other freedoms at the time of elimination."

- The proportion of freedoms being eliminated or being threatened with elimination.
The possibility, implied in the current threat, of other freedoms also being eliminated.

The magnitude of the pressure to comply when there is a threat of elimination of freedom.

When a person experiences reactance he will tend to show the following signs:

- Increased desire for the behaviour which has been eliminated or threatened, and increased feeling of being able to have what was eliminated or threatened.

- A tendency to engage in the threatened behaviour.

- A tendency to engage in any behaviour which implies that he could also engage in the threatened or eliminated behaviour.

- A tendency to encourage an "equivalent" person to engage in the threatened or eliminated behaviour, or a behaviour that implies that that person could engage in the threatened behaviour.

Gordon (1973) also discusses the effects that advice giving, or "control messages," have on other people. The net result seems to be that it makes the person feel that his freedom of choice is restricted, he feels one-down, and that, somehow, he is unaccepted by the other. This tends to occur especially where the other has some power over the situation in which the choice is being exercised.

He goes on to say that an attempt at control which results in people feeling unaccepted "... too often closes people up, makes them feel defensive, produces discomfort, makes them afraid to talk or to take a look at themselves."
Thus, the psychotherapist's ability to foster change and growth in a troubled person is partly due to the absence of unacceptance in the relationship with them and his ability to talk the language of acceptance so that the other genuinely feels accepted."

Thus it is important for the therapist not to try to control the client and not to try to impose upon the client any view of the problem situation which the client is not prepared to accept.

Fenichel's (1941) statement concerning the most appropriate point at which to aim interpretations so as to avoid patient resistance may be better understood against this background. He said "Since interpretation means helping something unconscious become conscious, by naming it at the moment it is striving to break through, effective interpretations can be given only at one specific point, where the patient's immediate interest is momentarily centered."

The Jungian therapist's concern about not giving the patient interpretations which he cannot assimilate, and the emphasis which he places on using the products of a patient's unconscious (ie. dreams) in determining that patient's readiness to accept a particular interpretation seems to have a similar aim. Gendlin's (1971) method of "experiencing" also avoids, or tries to avoid, the problem of client resistance by keeping the client focused on his "bodily felt."

Thus it would appear from the information given above that therapists use their influence in the therapeutic relationship in determining the choice of topics that are discussed and probably the manner in which the chosen topics are dealt with. It would also appear that it is important that the therapist does not behave in a controlling manner, at least in areas where the client feels
that he has freedom of choice and where he has not given the therapist permission to be in control. Over and above this, it appears to be most important that the client does not get the impression, rightly or wrongly, that the therapist is trying to control him.
3.11 Therapeutic Conditions

Much research has gone into the conditions which seem to be highly correlated with success in psychotherapy. The initial research effort was aimed at clarifying the contribution which the Rogers' postulated necessary and sufficient conditions (Genuineness, Nonpossessive Warmth and Accurate Empathy) made to successful therapy. The results of this research are summarised below.

3.11.1. Rogers' Necessary and Sufficient Conditions

Genuineness

Truax and Mitchell (1971) in reviewing the area say:

"From the research evidence and an examination of the raw data itself relating genuineness to outcome, as well as collateral evidence, it is clear that what is effective is an absence of defensiveness and phoniness - a lack of evidence that the therapist is not genuine. In other words, it is not the positive end of the genuineness scale that contributes to therapeutic outcome. Instead it is a lack of genuineness that mitigates against positive client change. The highest levels of the genuineness scale do not discriminate between differential outcomes. The scale itself and the evidence concerning the role of therapist genuineness would be more precise if we dropped the term genuineness and called it instead by some negative term that would include both defensiveness and being phony."
"Perhaps a large part of the reason for the effectiveness and central importance of genuineness lies in the fact that our own openness and personal freedom from defensiveness in a therapeutic encounter provides a model for the other person to follow in moving towards openness and freedom to be himself. Stating this negatively, we might ask "can we expect openness, self-acceptance, and personal freedom from defensiveness in another person when we ourselves lack these qualities in a relationship?"

Truax and Carkhuff (1964) further clarify the situation. They indicate that "whereas low levels of genuineness are clearly impediments to client progress in therapy, above a certain minimum level, very high levels of genuineness are not related to additional increases in client functioning. Therefore, while it appears of critical importance to avoid the conscious or unconscious facade of "playing the therapeutic role," the necessity for the therapist expressing himself fully at all times is not supported."

Nonpossessive Warmth

Carkhuff and Berenson (1967) indicate that most patients in psychotherapy have problems involving low self-esteem and behavioural patterns that attempt to avoid feelings of low self-esteem. "Clients frequently believe that they are not capable of dealing with their problems; that they are not able to love and are not worthy of being loved and that they have fixed and unchangeable personality characteristics of an undesirable nature."

They indicate that self-esteem is enhanced by the acceptance of the client in therapy and the continual acceptance of him by the therapist as the client reveals what he believes to be negative things about himself. Thus, changes in self-esteem occur as a result of the therapist's efforts to understand. It is by making this
effort that the therapist communicates respect. The client comes to believe that he has some redeeming qualities, since the therapist continues to accept and respect him in spite of his negative characteristics and many failures. Novas and Landfield (1963) indicate that those therapists whose communications of warmth incorporate understanding have the greatest success in therapy. Also Spotts (1962) found that positive regard or warmth, regardless of conditionality, was significantly associated with constructive personality change. Wharton (1962) found that successful cases in therapy had received significantly higher levels of positive regard throughout the first thirty sessions of therapy when compared to both the failure and indeterminate cases combined.

It would appear that an important function of the two core conditions, as pointed out above, is anxiety reduction. Thus Truax (1963) found that patients receiving low conditions showed a marked increase in anxiety level while controls showed almost no change and patients receiving high conditions showed a marked drop in anxiety level. Wargo (1962) found that positive change in ego-strength was significantly greater for patients receiving high conditions. He also reported that therapists who present low conditions to patients may be facilitating loss of ego-strength. Shapiro (1971) in his review of research on the placebo effect, discussed above, arrived at essentially similar conclusions.

**Accurate Empathy**

Accurate empathic understanding involves the ability to perceive and communicate accurately and with sensitivity both the feelings and experiences of another person and their meaning and significance. Thus Truax (1961) indicates that "In one sense we help clarify another person's understanding of himself by serving as a mirror to his emotional and phenomenological self."
Just as he learns about his physical self by seeing his image reflected in a mirror, he learns about his emotional and phenomenological self by hearing these aspects of him reflected by us.

"The accurately empathic, therapeutic person not only indicates a sensitive understanding of the patient's apparent-feelings, but goes further to clarify and expand what is hinted by voice, posture, and content cues." "To both accurately predict and effectively communicate what the client or patient is currently experiencing and feeling and therefore, of what the patient might well say were he more open and less defensive, is the quality of accurate empathic understanding."

Carkhuff (1971) points out that the helper must see the world through the eyes of the other person and communicate accurately to him what he sees. The helpee then "...has the experience of having his own expressions understood in depth with a fineness of discrimination that extends his communications and allows him to understand himself at deeper and deeper levels." When the helpee "actively engages in an inward probing to newly discover feelings or experiences about himself and his world, then he has the opportunity to reorganize and reassess these previously distorted perceptions about himself and his world."

Truax and Wargo (1966) reported a study which indicated that failure cases were typified by a large frequency of low and moderate levels of accurate empathy. In particular the failure cases had a high frequency of therapist responses characterized as inaccuracy of the therapist in responding to preconscious material. The data also indicated that while patients who received, on the average, higher levels of empathy were those who showed improvement, the highest moments of accurate empathy obtained throughout the interviews were more predictive of outcome when compared to cases in which the highest moments were relatively lower. However, there was no
relationship between the level of the lowest moments of accurate empathy and case outcomes. They summarised the study findings as follows:

"....A therapist would be more helpful by striving for deeper understanding, even at the risk of occasional misunderstanding; that the occasional low moments of accurate empathy had no relationship to outcome; and that outcome was significantly effected by both the average levels and the very highest moments of accurate empathy."

Truax and Carkhuff (1963) found that too much empathy too early in therapy may have a deleterious effect upon patient development because it may create too much tension or anxiety (cognitive strain) in the client. Carkhuff and Berenson (1967) indicate that there exists an optimum amount of empathy below which too little psychological tension will exist to initiate a process of constructive change. In discussing the various studies they indicate that "The emphasis, then is upon movement to levels of feeling and experiencing deeper than those communicated by the client, yet within a range of expression which the client can constructively employ for his own purposes. The therapist's ability to communicate at high levels of empathic understanding appears to involve the therapists ability to allow himself to experience or merge in the experience of the client, reflect upon this experience while suspending his own judgments, tolerating his own anxiety and communicating this understanding to the client." "Thus, as the therapist proceeds with his client to explore previously unexplored areas of human living and human relationships, it is his communication of his ever-growing awareness of the client, and of himself in relation to the client, which provides the client with the experiential base for change."

In summary, then, the essence of nonpossessive warmth is to preserve the client's self-respect as a
person and to provide a trusting, safe atmosphere. The purpose of genuineness, to provide an honest, non-defensive relationship that allows the therapist to point to unpleasant truths about the relationship and about the client rather than to hide behind a facade. "Accurate empathic understanding serves as the work of the therapeutic relationship." (Truax and Mitchell, 1971). The effect of these core conditions on clients is stated very clearly by Carkhuff and Berenson (1967).

"The improvement for clients of therapists offering high levels of facilitative conditions can be understood in a number of ways: (1) The facilitative stimulus complex of high conditions elicits client exploration of anxiety-laden material; (2) The anxiety reduction which takes place when the client explores himself in the context of high levels of facilitative conditions is reinforcing; (3) Therapists who provide high levels of conditions become personally potent reinforcers for the client; (4) The high conditions elicit a high degree of reciprocally positive affect in the client; (5) In general the conditions shatter the client's experience of isolation and hopelessness.

"The client comes to therapy motivated for something that will allay his anxieties and enable him to function more effectively. In therapy the client responds to a complex of stimuli, some of which are essential to the acquisition of improved adjustive behaviors, others of which are essential to the extinction of maladjustive behaviors. Among the client responses which high levels of therapist offered conditions nuture and indeed elicit, is the process of self-exploration of thoughts and feelings, which have made for difficulty in past social relationships. The Client's verbalizations of anxiety-laden material, and the active and spontaneous engagement in an inward probing about newly discovered feelings or experiences about himself and his world is
reinforced by (1) the anxiety reduction which takes place when the material is brought up in the context of genuine warmth and understanding; ameliorating conditions which are viewed as the inverse of those conditions which dominated the client's life and which originally contributed to the acquisition of the anxiety, and (2) The improved prospect for the re-establishment of positive social responsiveness, (With some clients high levels of conditions may not constitute the inverse of those conditions which led to the difficulty or psychopathology in the first place. For example, some clients may come from apparently free and permissive homes, and a structured, disciplinary but concerned approach might be most efficacious, at least initially: Alexander (1963) ). Thus therapy involves a social relationship in which thoughts and feelings which have made for past pathological behaviour are elicited, and, because the therapist is not rejecting, anxiety extinction takes place.

"In addition, the therapist who is offering high levels of facilitative conditions emerges as a potent reinforcer. Since reinforcement is intimately related to motivation, the reinforcement value of social approval or disapproval is itself dependent upon the interpersonal relationship. The reinforcement value of the therapist is based upon the client's need for a protective relationship. The therapist who can establish a high-level emotional relationship can capitalize on the client's initial relief and attachment to the therapist: (Murray, 1963). As the relationship becomes for the client (and, we might add, for the therapist), a secure one in which he can experience and experiment fully with himself, the therapist can positively reinforce positive affect or extinguish negative affect and self-destructive activities on the part of the client. On the other hand, therapists who are unable to establish such a facilitative atmosphere and relationship are ineffective and produce deteriorative client change because they are psychonxious stimuli and serve as aversive reinforcers.
"Finally, the facilitative therapists elicit a high degree of positive affect in the client through the principle of reciprocal affect (Truax and Carkhuff, 1966). This positive affect increases the level of the client's positive self-reinforcement and decreases the anxiety. In turn, the client communicates higher levels of positive affect to others and, thus, increases the probability of receiving in return positive affect and positive reinforcement from others. Therapists who are functioning at low levels of facilitative conditions elicit negative affect in the client, increasing the level of the negative affect communicated to and received from others."

A number of studies involving the three core conditions, produced data which suggested that other conditions were also of significance in producing therapeutic change. For instance Truax (1966) reported a number of studies in which therapist warmth, by itself, tended to have either no effect or a negative effect on patient outcome. He also mentioned a number of studies in which therapist accurate empathy and warmth were highly intercorrelated but were both negatively associated with genuineness which was negatively related to patient outcome while they were positively related to it.
3.11.2. Confrontation

Two studies (Berenson, Mitchell and Laney, 1968 and Berenson, Mitchell and Moravec, 1968) examined the effects of therapist initiated confrontations in the first therapy interview. The results indicated that therapists high on empathy, positive regard, genuineness and concreteness confronted their clients significantly more often with discrepancies between what the client said and what he did than therapists low on these conditions. Furthermore, high and low-functioning therapists used confrontations differently. Those high on the core dimensions offered significantly more Experiential, Didactic, Strength and total number of confrontations. Low functioning therapists offered significantly more Weakness confrontations.

Experiential confrontation was defined as the therapist's specific response to any discrepancy between the patient and therapist's experiencing of the patient; or to any discrepancy between the patient's statement about himself and the patient's inner experience of himself; or to any discrepancy between the patient and therapist's experience of the therapist. A didactic confrontation was defined as the therapist's direct clarification of the patient's misinformation or lack of information. This type of confrontation may include the therapist's efforts to offer the patient information based on test data, behaviour, or data about some aspect of the world, as well as details about the therapist or the structure and function of the therapy process. Confrontation of Strength referred to an experiential confrontation that focused on the patient's resources. Weakness referred to an experiential confrontation that focused on the patient's liabilities or pathology.

Mitchell and Mitchell (1968) found that when therapists were divided into high and low-functioning types on the basis of the three core dimensions, significant
differences in therapist behaviours occur. High-functioning therapists, significantly more often than low-functioning therapists, focused their client's exploration on persons who at least theoretically, would seem to be more important to the etiology and/or maintenance of the disordered behaviour.

Truax (1969) found that therapists who focus on client defense mechanisms have better outcomes than those showing little or no attention to defenses. Furthermore, therapists who are low on the core conditions but who focus on client defenses do get moderately good client outcomes. Those therapists low on accurate empathy, non-possessive warmth, and genuineness and who do not focus on client defenses account for the bulk of therapeutic failures.

In another study in 1969, Truax found that the extent to which the therapist focused on the sources of threat and anxiety in the client was also highly predictive of therapeutic success. Therapists high on accurate empathy who focused on client sources of threat and anxiety, produced the very best global patient improvement. (Both studies reported in Truax and Mitchell 1971).

Murray, Auld and White (1954) have shown that in a successful treatment case the patient progressed into more and more significant areas. As anxiety about one area decreased the patient moved into other areas also associated with anxiety. Dittes in two studies in 1957 in which he investigated the process of extinction in a patient treated in psychoanalytic therapy reported similar results. He took a continuous measure of galvanic skin response during the therapy sessions and scored the content of the patient's speech for Embarrassing Sexual Statements. Over the course of therapy the GSR reaction to Embarrassing Sexual Statements decreased in a manner very similar to anxiety extinction curves in other situations. During therapy the therapist approached or focused on this area and Dittes showed that GSR measures for an hour as a whole were related to the
judged permissiveness or acceptance of the remarks and general attitudes of the therapist. Dollard and Miller (1950) suggest that an important consequence of the reduction of anxiety which takes place as a result of a successful approach to a significant conflict area is an increase in the person's problem-solving capacities in those areas of social living. The person may be able to re-evaluate his fears and beliefs. Thus anxiety reduction may lead to significant cognitive and behavioural changes.

It appears that guiding the client so that he will focus on specific problem areas is very important from the point of view of therapeutic success. What determines whether a therapist will approach or avoid important topics? An important factor appears to be the personality of the therapist, specifically his anxiety in various areas. Bandura (1956) found that therapist effectiveness is related to his anxiety in the areas of hostility, dependency and sex. Some years later (Bandura et al 1960) he showed that a therapist's anxiety level in the area of hostility predicted whether he would approach or avoid expressions of hostility by a patient. Winder et al (1962) found that a similar prediction could be made in the area of dependency. Apparently clients whose therapists react to dependency with approach rather than avoidance, tend to remain in therapy while those whose therapists avoided dependency more than they approached it, tended to terminate. This effect was most marked when the dependency was directed towards the therapist himself.

Thus we see that therapist's focusing of the client's attention on specific problem areas aids client self-exploration which in turn results in a lowering of anxiety in that particular subject area. The extent to which a therapist can focus on a given problem area is related to his own feelings of anxiety (cognitive strain) in that area. Therapists who can focus on a problem area and also
provide high levels of genuineness and nonpossessive warmth achieve the best results. It would also appear that focusing refers to the application of accurate empathy to specific subject areas, that is, a selective reflection on areas which tend to be highly charged with anxiety (cognitive strain) and, therefore, areas which the client will tend to avoid or exhibit resistance in approaching.
3.11.3. Concreteness

It has been found that this focusing or confrontation has to be of a specific type in order for it to be of maximum therapeutic value. Truax and Carkhuff (1964) report that focusing must be concrete. They report that "concreteness, or specificity of expression, a variable which is largely under the therapist's direct control, involves the fluent, direct and complete expression of specific feelings and experiences, regardless of their emotional content, by both therapist and client. This dimension appears to serve at least three important functions. First, the therapist's concreteness ensures that his response does not become too far removed emotionally from the client's feelings and experiences. Secondly, it encourages the therapist to be more accurate in his understanding of the client, and thus misunderstandings can be clarified and corrections made when the feelings and experiences are stated in specific terms. Third, the client is directly influenced to attend specifically to problem areas and emotional conflicts. In at least one study concreteness emerged as the most significant contributor to effective therapy, far outweighing the contributions of empathy, positive regard and genuineness. Perhaps the most significant qualification upon this variable is that the material must be of personally meaningful relevance to the client."

"The crucial importance of concreteness for psychotherapy is implied in the discussions of client centered, analytic, and eclectic theory. Freud's (1950) initial position stressed two points, both of which remain basic to psychoanalytic theory: (1) the recovery of repressed memories, and (2) the handling of repressed affects. Relief from repressions is stated as essential to therapy. From Freud's discussion, it is quite clear that even when these memories and affects are fantasy productions they are specific and concrete and not abstract.
In Rogers' discussion of empathic understanding, too, there is reference to specific experiencings of the patient rather than to abstract experiencings (Rogers, 1951). Eclectic theorists, too, regard abstract interactions as nontherapeutic. Indeed, therapists and counsellors from almost all "schools" regard a patient's discussion of abstractions as defensive rather than exploratory."

So it appears that it is the client's focusing on the specific details of highly anxiety laden experiences which facilitates the reorganization of his cognitive structures, which, in turn, will facilitate his more realistic adaptations in the future.
3.11.4. Summary

The research reviewed above indicates that:

As far as the condition of genuineness is concerned, it is a lack of it which mitigates against positive client change rather than its presence facilitating client change. The emphasis is now placed on the absence of defensiveness and phoniness on the part of the therapist.

The function of therapist respect and non-possessive warmth is to help improve the client's very low self-esteem and self-image.

The above two conditions function to reduce anxiety. Thus the therapist who offers high levels of them emerges as a potent reinforcer who is able to use empathic understanding and concrete confrontations to maximum therapeutic effect.

Accurate empathic understanding seems to function in essentially the same way as Gendlin's "experiencing" or Fenichel's "interpretations." Its effect seems to lie in its facilitation of the client's attempts at self-reflection and at the development of insights. It also facilitates the client's attempts at reorganizing his cognitive structures. It appears that empathic understanding is facilitative only in so far as each instance of it is capable of being assimilated and so understood by the client.

If the therapist is to constructively employ accurate empathic understanding in the therapeutic situation he must be capable of reflection upon his own experience. Not only must he be capable of doing so, he must actually reflect on his experiencing during the ongoing interaction.
Concrete confrontation, or the focusing of the client's attention on specific problem areas so that he reflects on them in a specific and highly detailed way, is a very effective therapeutic intervention. It also appears that this mode of behaviour is quite different to that involved in accurate empathic understanding, although the two can be used in conjunction.

Concrete confrontation involves the focusing of the client's attention on the specific details of experiences or events which are highly anxiety laden and which the client wants to avoid. For example.

- Discrepancies between what the client says and what he does.
- Relationships with persons significantly involved in the etiology and/or maintenance of the problem behaviours.
- On the client's defense mechanisms.
- On sources of threat or anxiety in the client.

It also seems to have the effects of facilitating the client's reorganization of his cognitive structures.

In summary the findings reported above indicate that high conditions of genuineness and positive regard generally facilitate client self-exploration. However, client self exploration is more significantly effected by the therapist focusing, by means of accurate empathy, in concrete (specific) terms on discrepancies existing between belief and behaviour (confrontation) in areas personally meaningful and relevant to the client.
3.12 The Influence of Taking Action
On Therapeutic Behaviour Change

Carkhuff (1971) writes that "The basic assumption [ in most verbal therapy ] is that once an insight has been developed, it can serve as a discriminative stimulus, and thus increase the probability that related behaviours will occur. However, the subject or helpee's ability to commit himself to action is contingent upon the same kind of training that enables him to make the necessary discrimination. Nothing can be taken for granted. Action does not necessarily follow insight. But action can follow insight. What is required is systematic training in following through on the insights."

A study carried out by Paul (1966) supports Carkhuff's statement. Paul treated fear of public speaking in College students by using two treatments, systematic desensitization and insight-oriented psychotherapy. He included three groups; a pseudo-therapy group, which was treated by being given attention only, a non-treatment group and a non-contact group, as controls. Treatment was conducted by five dynamically oriented therapists with from six to eighteen years of experience in therapy. These therapists were used to carry out both treatments. Thus they were taught the systematic desensitization method for the purpose of the study.

The initial results of the study indicated that systematic desensitization was decidedly superior to the insight-oriented treatment. He also found that the insight-oriented and the pseudo-therapy treatment groups yielded equivalent results but that both were superior to the no-treatment controls. In a two year follow up Paul (1967) reported that improvement had been maintained or further increased in all of the treatment subjects. The percentages of subjects showing significant improvement at
the two year follow-up as compared to pretreatment ratings were: Systematic Desensitization, 85%; Insight-Oriented psychotherapy, 50%; Nonspecific attention placebo, 50%; Untreated Controls, 22%. Paul also reports no evidence of the occurrence of symptom substitution.

From this it would appear that, as far as observable behaviour change is concerned, both the nonspecific attention placebo controls and the insight-oriented treatment group, were significantly less successful in achieving therapeutic movement that was behaviour therapy. Thus the detailed planning, execution, and feedback of results (which, as mentioned earlier in this paper, appear to be the only major differences between behaviour and insight-oriented therapies) would appear to account for the 35% difference. Thus action (plus insight) would appear to be more influential in affecting therapeutic change than is insight alone.

DiLoreto (1971) in a study mentioned earlier in this paper, compared systematic desensitization, client-centered therapy and rational-emotive therapy in the treatment of interpersonal anxiety. She found that rational-emotive therapy and systematic desensitization were equally effective with introverts, while client-centered therapy and systematic desensitization were equally effective with extroverts. But when all subjects were combined, systematic desensitization was found to be significantly more effective than either of the other two treatments.

It would thus appear that therapeutic behaviour change as a result of cognitive restructuring, when based on an action plus insight approach, occurs in a far broader range of people than does therapeutic behaviour change resulting from cognitive restructuring stemming from any one particular type of mainly insight-oriented therapy.
It seems, therefore, that people tend more efficiently, to learn to take effective action by actually taking effective action and by developing an awareness of the degree of their success in changing the situation in which they are operating, than they do by just talking about taking effective action. A person may learn to talk about taking action simply by talking about taking action, but, if he is to learn to take action, then it seems to be very helpful if he actually takes action (rather than just talks about taking action), and sees the effect, not just of talking about taking action (at which he may appear competent) but of actually taking the action (at which he may fall somewhat short of being competent). In his actually undertaking the activity, the person initiates an interchange between himself and the situation in which he is operating. It seems that it is the person's awareness of, and reflection on, this interchange that facilitates the reorganization and reintegration of his underlying cognitive structures. (Revans 1971)
3.13 Summary and Conclusions

It would appear, from the studies reviewed above, that we are not passive receivers of information. Rather, it seems that we have a store of "schemata" or "programs" by means of which we organize or classify incoming ecological information. Extremely important from this point of view are our self and ideal-self concepts, and the degree of discrepancy between them. It also appears that our conceptual categories act as selective filters, in that there is a tendency for us to distort the input so as to make it fit our preconceptions. Thus our interpretation of a reality event will vary in the degree of accuracy of its approximation to the actual event, depending upon the complexity of the event, the nature and adequacy of our cognitive structures and the flexibility with which we use them. In this regard we tend to try to conserve our cognitive classificatory structures rather than alter them in any way. In fact we strongly resist changing them.

Furthermore it seems that we are not usually aware of how we process the incoming ecological information, and that we usually tend not to make distinctions between descriptive statements and inferences. We tend to treat our inferences as facts neither requiring nor capable of further verification. We are also able to detect the presence of anxiety-arousing information at an unconscious or preawareness level. This enables us to exclude information, which, if we attempted to categorize it, would cause cognitive strain.

Cognitive strain seems to occur under the following conditions:

a) When we attempt to fit what-is-now-happening (inputs) into the summaries of what-has-happened-before (the cognitive organization, the major premises).
b) When we concurrently attempt to validly use the multiplicity of major premises that are activated by the sensory inputs; and

c) When we either consider the possibility of coping or actually attempt to cope with a situation and realise that we don't have the appropriate behavioural responses available in our repertoire.

The experiencing of cognitive strain indicates that we are becoming aware of the difficulties that we are having in coming to terms with our world. We tend to try to protect ourselves from experiencing cognitive strain by the manner in which we manage our modes of perception. That is, by being either sensitizers or repressors. Some people fall into a category between these two. Their perceptions seem to be more truly representative of the reality event. The experience of cognitive strain has an adverse affect upon our ability and efficiency in coping with stressful situations. This is because of the constricting effect it has on our limited capacity for processing information. It appears that most of us can only cope adequately with $7 \pm 2$ chunks of information at any one time. Thus, if we are using up part of our limited channel capacity by processing the distinctive stimulus attributes of the emotion, we are reducing the space available for processing task related information. If the task is complex the probability of errors occurring increases. Error messages increase the intensity of the emotion, which in turn tends to require more channel capacity for processing etc. It must be remembered here that recognizing emotion is a high order classification, or summary, of the total situation, giving an indication of what we expect to happen next. Thus it is a very complex activity in itself.
Not only are our emotional reactions to situations the outcomes of the ways in which we structure incoming ecological information; it seems that they also affect the way in which we subsequently cope with those situations. Thus it would appear that it is our structuring of our experience, rather than the experience itself which is important from the point of view of the etiology of psychopathology. In support of this view, there is strong neurophysiological evidence to suggest that the central nervous system does, in fact, control, by means of the mechanism of gating, the stimulation coming into the organism. Stimulation not permitted to pass on to the brain, is, as a result, unconscious, because it is literally not in the brain, even though it is in the organism at the level of the sense organs.

As far as therapy is concerned, the effective helper is a person who is attractive and friendly; someone with whom the client can feel comfortable; someone whose opinion the client can value, and someone who inspires confidence and trust.

The successful patient spends much of his time in self-exploration, in attempting to understand and define his own beliefs, values, motives and actions. This activity seems to be facilitated by a relationship with the therapist which is characterized by rapport, warmth, trust, faith and empathy. This type of relationship appears to act as a nonspecific therapeutic factor (placebo effect) and facilitates the specific effects of the various techniques used by the therapist to help the client in developing and maintaining the habit of reflexive thinking.

The two techniques used in verbal therapies to focus the client's attention on his problem behaviours, and emotions, thus developing his awareness of himself and enabling him to make reasonable choices and decisions, are accurate empathy and concrete confrontation.
empathy helps to clarify the client's understanding of himself by serving as a mirror to his emotional and phenomenological self. The therapist also tries to move beyond what the client actually verbalized by clarifying and expanding on that which was hinted at by the client's voice, posture, and content cues. Concrete confrontation, on the other hand, focuses the client's attention on the various kinds of discrepancies which exist in his problem areas. The aim here is to get the client to describe the various aspects of the problem situation in specific terms and in great detail, and then to help him to reflect on the situation, especially on the discrepancies or contradictions which are inherent in the situation. This, of course, includes the client's own cognitive structures, feelings, thoughts, behaviours, expectations, the motives imputed to significant others etc.

The above two approaches appear to be effective where the client's cognitive strain was the result of the way in which he was structuring the incoming ecological information together with the interpretations and implications arising out of his structuring, but where he already has, within his repertoire, the behaviours required to implement those courses of action which his insights lead him to believe are most likely to lead to a more constructive adaptation. This is because the two approaches lead to an awareness of, and insight into, the reasons for the client's experience of cognitive strain in the problem situation. The result may be that the client either becomes aware of ecological information that he is distorting or ignoring and so leads him to take account of it in the future, or it may result in him altering his cognitive structures so as to have them reflect reality more accurately. Most likely both outcomes will occur.

If, on the other hand, the experience of cognitive strain was the result of deficits in the appropriate behavioural responses available in the client's repertoire, then insight may not be enough. The client will have to
learn new behaviours which will facilitate his making a maximally effective adaptation to the anxiety arousing situation. Although insight may increase the probability that related behaviours will occur, this will by no means necessarily take place. Systematic training in following through on insights has been shown to be highly successful in alleviating cognitive strain.

It would appear, therefore, that a successful therapeutic outcome is most likely to occur against the background of a facilitative relationship, where the client is involved in the examination of, and reflection upon, his difficulties and the circumstance, or context, within which they occur. These associated factors include the client's cognitive structures, his feelings, thoughts, behaviours, and his relationships with significant others. This procedure develops within the client an awareness of all of the various relevant factors involved in his problem, and enables him to cognitively organize, or reorganize, the factors in such a way as to more accurately reflect the circumstances of the situation as they actually are. Once the client is aware of all the factors involved he can carry out cognitive operations on the available data and so develop an insight into, and an understanding of, the cause-effect relationships which are operative. As a result, he is then able to propose various possible courses of action, examine these choices and their outcomes and so arrive at a rational decision as to the most effective, for him, course of action to take. He can then either take the necessary action, or, if the required behaviours are not already within his repertoire, he can decide to acquire them. In this way the client learns "how to minimize, with his finite, cognitive capacities, the strains produced in his efforts to find himself in a complex, changing, and often contradictory world." (Sarbin 1964).
It seems therefore that the only necessary condition for successful therapy is that the client become involved in self-reflection, and so become more aware of how he, himself, is behaving in the problem situation. Without this activity, which is a cognitive one, change cannot occur. All other factors seem to play a facilitative role with respect to self-reflection, and are, thus, contributory conditions. The necessity for their presence seems to be dependent upon the etiology of the difficulty causing cognitive strain. Thus under some circumstance self-reflection alone may be both a necessary and a sufficient condition for therapeutic change to occur, whereas in other circumstances some of the facilitating conditions may have to be present before the client will allow himself to reflect upon his behaviour. But unless he does reflect upon his behaviour therapeutic change will not occur. That is, the client will not learn how to minimize the strains produced in his efforts to find himself in a complex, changing, and often contradictory world by action resulting from his own volition. Specific behaviours may be changed, as in classical conditioning, but unless the person was aware of what was happening, new strategies for responding would not be developed.
4 - PIAGET'S MODEL OF COGNITIVE DEVELOPMENT

4.1 Introduction

The traditional theories of psychotherapy have not been able to cope with the therapeutic methods used by behaviour therapists and by many practitioners in the encounter group movement. The reasons for this seem to be that:

A basic premise held by most insight-oriented therapists is that manipulation of a patient would probably either adversely affect the outcome of therapy, or it may have adverse consequences upon the patient's long-term ability to adjust. Or possibly both negative outcomes.

Another basic assumption is that overt disordered behaviour and bodily states are only symptoms, or reflections, of some underlying disordered process. They do not, in themselves, constitute the disorder or illness. Thus the valid and constructive focus of therapy is that involving the exploration and correction of the underlying process. The presumption being that only after the successful modification of the disordered underlying process has been achieved will any improvement be possible in the problem behaviour. Any attempt to treat the symptoms is generally viewed as only a palliative, it being highly likely that symptom substitution would occur and so necessitate further therapy. A corollary of this is the assumption that cognitive and affective changes are antecedent to, and are the causes of, changes in overt behaviour. This relationship
is seen as being unidirectional only, there being no possibility of a change in behaviour influencing a change in cognitive or affective states

Now Gestalt therapy, psychodrama, behaviour therapy, play therapy, primal scream therapy, the encounter group movement are some approaches which view the body and overt behaviour as primary targets in the treatment of psychopathology. These therapeutic approaches subscribe to a reciprocal relationship between cognitive and emotional states on the one hand, and behaviour on the other. Thus they view bodily states as important reference points against which to verify insights. Many of them also hold that only constant monitoring of our bodily states will enable us to maintain a reasonably valid contact with reality. They also subscribe to a unified theory of man. Thus, for example, Schutz (1969) says: "Following the idea of the unified man, it would seem that maximum change would occur when the body, the feelings, and the intellect have all undergone the same alterations. One without the others is incomplete. In addition, I feel that the deepest level of change is in the body, the next deepest is with the feelings, and the least so in the intellect. Put another way, if a body change is not accompanied by parallel changes in the feelings and thoughts, the change is still real but there is the danger that the body will eventually return to its former condition because the original cause of the body aberration still exists. However, intellectual insight not accompanied by emotional and body changes is really not a true insight and will lead to minimal change if any at all. Furthermore the accuracy of insight is confirmed by bodily reactions and emotions in that tensions and unpleasant feelings are dissipated and the person feels freer, more at ease with himself, more whole. Thus by constant reference to the body, insights can be discriminated as valid or intellectualized."
Thus we see that psychotherapy at the moment covers a broad range of activities from traditional insight oriented to behaviour therapy and the encounter group movement to primal scream therapy. All of these approaches seem to result in some degree of positive therapeutic outcome. But it seems that no current theory within the area of psychopathology can adequately account for the success of these various approaches.

It would appear that some theory of the "unified man" is required. Thorne (1971) offers an integrative approach. He strongly argues for this type of approach, and has concluded that the concept of integration is apparently the only one capable of incorporating the diverse practices and phenomena found in the many different approaches to psychotherapy. But even his is a general approach which does not go into detail regarding the interrelationships which exist between the cognitive, affective and behavioural facets of the unified man. Neither does he try to explain the underlying processes and mechanisms involved in effective therapy: processes such as insight, the development of awareness, and the function of conceptual organizers.

On the question of theory Rogers (1951) had this to say "There is no need for theory until and unless there are phenomena to explain. Limiting our consideration to psychotherapy, there is no reason for a theory of therapy until there are observable changes which call for explanation. Then a unifying theory is of help in explaining what has happened, and in providing testable hypotheses about future experiences. Thus, in the field of therapy the first requisite is a skill which produces an effective result. Through observation of the process and the result a parsimonious theory may be developed which is projected into new experiences in order to be tested as to its adequacy."
The theory is revised and modified with the purpose - never fully attained - of providing a complete conceptual framework which can adequately contain all the observed phenomena. It is the phenomena which are basic, not the theory. With these words in mind it appears to me that Piaget's theory of cognitive development does offer an adequate explanatory conceptual framework capable of subsuming and integrating the diverse practises of psychotherapists.
4.2 Overview

As has become evident from the studies reviewed above, the development of awareness is important in any theory of psychopathology. It is also important for a theory of cognitive development. Piaget's account of the development of this uniquely human experience is in terms of assimilation - accommodation equilibration. Thus each individual develops from a state of egocentrism, that is, from a cognitive state in which he sees the world from a single point of view only - his own - without knowledge of the existence of other viewpoints, and thus, without awareness that he is a prisoner of his own. This development occurs as the individual applies the operations of assimilation and accommodation to incoming ecological information.

This development from egocentrism to awareness occurs throughout each individual's life and is repeated each time he moves into a new and untried field of cognitive action. Piaget technically refers to this process of development as vertical and horizontal décalages. Major instances of movement from egocentrism to awareness occur as the person progresses through the four broad periods of cognitive development identified by Piaget. These periods are:

. Sensory motor period
. Preoperational thought
. Concrete operations
. Formal operations.

Décalages occur within the context of these periods.

Developmental progress occurs as the individual's cognitive structures, or schemas as Piaget calls them, develop from the simple reflex systems of the new born infant to the highly complex structures of the aware adult.
A person develops his schemas through assimilation and accommodation. Now the primary function of schemas is to assimilate ecological information. That is to bend incoming information to the template of the existing cognitive structure. Assimilation is conservative. It is responsible for the maintenance of stability. Adaptation is the process whereby the schema is adjusted so as to reflect reality more accurately. Accommodation is innovative. It introduces change and instability or flexibility. No intellectual development can occur unless the individual does accommodate his structures to reality, at least to some extent. In those instances where the mismatch between existing structures and the event is only moderate, a satisfactory adjustment of structure can be made. But if the mismatch is too severe, negative intrinsic motivation results, with consequent avoidance of the event. Structural change is slow and gradual. The relationship between assimilation and accommodation can fluctuate quite markedly. A person could use assimilation mainly, or accommodation mainly, or a balance of the two. Using a balance of the two is the optimum way of adapting from the point of view of maximizing the possibility of future development.

Schemas, or cognitive structures, can be changed in two broad ways. Either by accommodating to reality, as indicated above, or through internal integration and reorganization. The latter process can occur in three ways: through generalization, when the field of application of the schema is extended to cover other material which now becomes related; through discrimination, or internal differentiation, enabling more refined classifications to be made; this process is similar to nuclear fission; or through fusion, by two or more schemas uniting, or being subsumed by a higher order schema.
Piaget views each schema as an equilibrated system characterized by

1. A certain field of application. This refers to that ensemble of objects or object-properties which the equilibrated system accommodates to and assimilates.

2. Mobility, or the amount of itineration which occurs between individual object-properties.

3. Permanence, or the amount of resistance to changes of value which the schema exhibits.

4. Stability, or the capacity of the system to reassume a state of equilibrium after undergoing an accommodation.

The process of development or differentiation of a schema is seen as going through the following stages.

1. Initially, the individual can centrate or focus on only one property of an object or event.

2. Then he is able to centrate on a number of properties, but only individually.

3. Later he is able to centrate on conjunctions of properties. The initial attempts at this stage are characterized by noticeable hesitation and conflict.

4. Lastly he is able to notice patterns in successive properties.
Piaget sees actions, thought processes, values, attitudes and emotions as being all subject to the same formal organization. Emotions express the interest and value given to actions and also influence the selection of the reality content upon which the schemas, or cognitive structures, operate.

Piaget sees the organism as being in control of its behaviour. Control never shifts from the subject to the object. Thus the individual is seen as an active organism who both selects and incorporates stimuli in a manner determined by his structures, while at the same time adapting, or altering, his structures to more accurately represent the event, and so be able to more adequately assimilate it. This means that if a person cannot be influenced by a particular stimulus at a given time, then he must lack the structural system with which to assimilate it. But if environmental pressures become such as to make it important for that individual to be able to cope with the situation which produced the stimulus, then he will begin to develop schemas, or adapt existing schemas, so as to enable him to meaningfully assimilate the stimulus, and so cope adequately with the situation.

As Bruner (1959) and Elkind (1961) point out, this is a new perspective on intellectual development, in that development is conceived as a challenge-response affair. At various stages throughout his life, the individual is thrust into new roles, new situations, with new and different sets of cognitive demands. The individual can respond to the challenge by acquiring the new cognitive structures needed to cope with these demands and so adapt and survive, or he may refuse to do so.

Learning is viewed by Piaget as the process by which information is acquired, categorized and stored. Thus a conceptualization of the problem of psychopathology could be based on the idea, supported by the research
reviewed earlier in this paper, that what is learned is a set of central strategies (programs or schemas) which guide the individuals adaptations to his environment. Within this system neuroses would not be viewed as symptoms (responses) but as strategies of a particular kind which are manifested by certain types of observable overt behaviour and certain other less observable, covert phenomena such as, for example, feelings of depression.

Also the conscious-unconscious (aware-unaware) question is viewed differently by Piaget than it is by traditional theorists. Awareness is seen as a special case, the end product of development, the rule being unawareness of the mediating strategies. There is no more reason to assume that a person must be able to give accurate descriptions of the central strategies mediating much of his behaviour in order to function at a minimum level of effectiveness, any more than it is necessary for a child to be able to give a description of the grammatical rules which govern his understanding and production of language. Thus it is consciousness which is seen as in need of explanation, rather than unawareness.
4.3 Basic Principles of Piaget's System

The basic principles of Piaget's systems, based on Furth (1969) and Flavell (1963) are as follows:

Piaget distinguishes between the content of cognition which refers to the data input into the individual's cognitive system; its functions, or the manner in which the individual makes cognitive progress and cognitive structures which change with developmental level. Structures are the organisational properties of intelligence. They are created through functioning and are inferable from the behavioural contents whose nature they determine. Structure thus refers to the inferred organizational properties which explain why this content rather than some other has emerged.

The system has two basic functional invariants, organization and adaptation. Piaget sees cognition as an organized affair with every act of intelligence presuming some kind of cognitive structure or organization within which it proceeds. The apprehension of reality always involves multiple interrelationships among the concepts and meanings which these actions express. An act of intelligence, be it a crude motor movement in infancy or a complex and abstract judgment in adulthood, is always related to a system or totality of such acts of which it is a part (Flavell 1963).
4.3.1. Adaptation and Assimilation - Accommodation

Adaptation involves assimilation and accommodation. Assimilation refers to the fact that every cognitive encounter with an environmental object necessarily involves some kind of cognitive structuring (or restructuring) of that object in accord with the nature of the organism's existing intellectual organisations. Every act of intelligence, however rudimentary and concrete, presupposes an interpretation of something in external reality, that is, an assimilation of that something to some kind of meaning system in the subject's cognitive organisation. Piaget's argument is that intellectual assimilation is not different in principle from a more primary biological assimilation. In both cases the essential process is that of bending a reality event to the template of one's ongoing structure.

In even the most elementary cognition there has to be some coming to grips with the special properties of the thing apprehended. Reality can never be infinitely malleable, even for the most autistic of cognizers, and certainly no intellectual development can occur unless the individual in some sense adjusts his intellectual receptors to the shapes reality presents him. The essence of accommodation is precisely this process of adapting one's cognitive structures to the requirements or demands which the world of objects imposes upon one.

Assimilation and Accommodation are simultaneous and indissociable processes as they operate in a developing cognitive system. Adaptation implies an assimilation to structure and an accommodation of structure.

Cognitive progress, in Piaget's system, is possible for several reasons. First of all accommodatory acts are continually being extended to new and different features of the environment. To the extent that a newly accommodated-to feature can fit somewhere in the existing
meaning structure, it will be assimilated to that structure. Once assimilated, however, it tends to change the structure to some degree and, through this change, makes possible further accommodatory extensions. Also, assimilatory structures are not static and unchanging even in the absence of environmental stimulation. Systems of meanings are constantly becoming reorganised internally and integrated with other systems. This continuous process of internal renovation is itself, in Piaget's system, a very potent source of cognitive progress. Thus, both kinds of changes - reorganisations of a purely endogenous origin, and reorganisations induced more or less directly by new accommodatory attempts - make possible a progressive intellectual penetration into the nature of things. Changes in assimilatory structure direct new accommodations, and new accommodatory attempts stimulate structural reorganisations.

It has been well established empirically by Piaget's coworkers that this progress is typically slow and gradual. What prevents the organism from mastering, in one step, all that is cognizable in a given terrain is that it can assimilate only those things which past accommodations have prepared it to assimilate. There must already be a system of meanings, an existing organisation, sufficiently advanced so that it can be modified to admit the new data for assimilation which accommodation places before it. There can never be a radical rupture between the old and the new; events whose interpretation requires a complete reorganisation of the existing structure simply cannot be accommodated to and hence assimilated. As Piaget states (1954) assimilation is by its very nature conservative, in the sense that its primary function is to make the unfamiliar familiar, to reduce the new to the old. A new assimilatory structure must always be some variate of the last one acquired, and it is this which ensures both the gradualness and continuity of intellectual development.
Thus the functional characteristics of the assimilatory and accommodatory mechanisms are such that the possibility of cognitive change is ensured, but the magnitude of any given change is always limited. The organism adapts repeatedly, and each adaptation necessarily paves the way for its successor. Structures are modifiable only to a limited extent at any particular time, with the individual able to assimilate only those components of reality which his structures can incorporate at that time without drastic change.

An exceedingly important relationship in Piaget's system, is that between the processes of assimilation and accommodation in any act of adaptation. While both functions are present in every intellectual act of whatever type and developmental level, the relationship between them can fluctuate quite drastically, resulting in important consequences for the quality of intellectual functioning which takes place.

The ideal situation in Piaget's system is for an individual to achieve a balance between the two aspects of adaptation. Thus optimal intelligent functioning results in both a realistic (accommodation) and meaningful (assimilation) rapport between subject and object.

Piaget distinguishes two distinct types of cognition which do not display a balance between assimilation and accommodation. These are play and imitation.

The term play is used in its broadest sense to include all forms of dreams and dream-like activity as well as various kinds of play and make-believe. In play the primary object is to mold reality to the whim of the cognizer, that is, to assimilate reality to certain existing schemas with little concern for precise accommodation to that reality. The term imitation is used to cover all copying or imitative behaviour performed either overtly or internally. In imitation the person takes great care to copy as precisely as possible the structural niceties of the reality he is imitating and in dovetailing his schematic repertoire to those details.
4.3.2. Actions

It is important to understand what Piaget means by his concept of an "action" since actions performed by a person are said to constitute the raw material of all intellectual and perceptual adaptation. The concept covers both overt acts and mental acts such as thinking and imagining. The developmental sequence joining one extreme with the other occurs as follows. In infancy actions are relatively overt sensory motor sequences such as the grasping and suckling of objects and the carrying out of visual searches. With development many actions become progressively internalized and covert, increasingly schematic and abstract, broader in range, reversible, and organised into systems which are structurally isomorphic to logico-algebraic systems. Thus the overt slow paced actions of the infant eventually get transformed into high speed, highly organized systems of internal operations. However, despite the enormous differences between simple sensory-motor adjustments and the abstract operations which characterize mature, logical thought the latter are as truly actions as the former.

Thus for Piaget an image is an internalized or "deferred" imitation and hence rooted in motor activity. That is, an image is the consequence of an internalized action, namely a covert accommodation or "tracing out" by the subject of the object or event imagined. Also new and more complex forms of intellectual organisation are seen as actions which have been abstracted from earlier simpler organizations and then changed in some way e.g. have become increasingly internalized and mobile, become further equilibrated in relation to reality and other actions etc., "in short, no structure is ever radically new, each one is simply a generalization of this or that action drawn from the preceding structure (Piaget 1957)."
4.3.3. The Development of Awareness

As mentioned above, the development of awareness is important in any theory of psychopathology. Piaget's account of the development of this uniquely human experience is in terms of assimilation-accommodation equilibria. The fundamental transformation from egocentrism to awareness occurs initially during the first two years of life. Development proceeds from a state of profound egocentrism in which assimilation and accommodation are undifferentiated from each other and yet opposed in their functioning, to a final state of objectivity and equilibration in which the two functions become separate, distinct, coordinated and complementary.

The infant begins life with certain elementary schemas which soon begin to stabilize, differentiate, and generalize through repeated applications to the immediate environment. In this early period assimilation and accommodation are both undifferentiated from each other and yet opposed in their action. They are undifferentiated in that an object and the activity to which the object is assimilated constitute for the infant a single indivisible experience.

Thus the act of assimilating an object to a schema (the sensory motor equivalent of making sense out of the object) is hopelessly confused with, and undifferentiated from, the accommodatory adjustments intrinsic to this act. It is not that the infant fails to take account of objects, that is, accommodate his movements to their specific contours. This he does, and these clumsy accommodations produce changes in the assimilatory schemas. Rather, the infant has no way of distinguishing his acts from the reality events which these acts produce or the reality objects upon which they bear. The result is that agent and object are inextricably linked together in every infantile action, and the distinction between assimilation of objects to the self and accommodation of the self to
objects simply does not exist.

The opposition between assimilation and accommodation stems from this very undifferentiatedness. Since the infant cannot distinguish his actions from their environmental consequences, the necessity to make new and difficult accommodations in order to assimilate novel objects to already established schemas can only be experienced as frustrating. Thus there is a fundamental antagonism during this and similar developmental periods discussed below, between assimilation to the familiar, which is essentially conservative, and accommodation to the novel, which is inherently progressive.

"A new, exploratory accommodation instead of constituting a welcome foray into the unknown which will result in a differentiation of existing schemas, is at first experienced simply as a troublesome obstacle to habitual assimilation and is performed, as it were, only under duress:

"In their initial directions, assimilation and accommodation are obviously opposed to one another since assimilation is conservative and tends to subordinate the environment to the organism as it is, whereas accommodation is the source of changes and bends the organism to the successive constraints of the environment." (Piaget 1954).

This state of undifferentiation and opposition between assimilation and accommodation essentially defines the concept of egocentrism which denotes a cognitive state in which the cognizer sees the world from a single point of view only - his own - without knowledge of the existence of other viewpoints and thus without awareness that he is the prisoner of his own.

"Through an apparently paradoxical mechanism whose parallel we have described appropos of the egocentrism of thought of the older child, it is precisely when the
subject is most self-centered that he knows himself the least, and it is to the extent that he discovers himself that he places himself in the universe and constructs it by virtue of that fact. In other words, egocentrism signifies the absence of both self-perception and objectivity whereas acquiring possession of the object as such, is on a par with the acquisition of self-perception." (Piaget 1954).

For example pre-operational egocentrism is a very general characteristic with numerous consequences. Firstly, the child repeatedly demonstrates a relative inability to take the role of the other person, that is, to see his own viewpoint as one of many possibilities and to try to coordinate it with others. Then, lacking this other-role orientation, the child feels no need to justify his reasonings to others nor to look for possible contradictions in his logic. He also finds it very difficult to treat his own thought processes as an object of thought. He is, for example, unable to reconstruct a chain of reasonings which he has just passed through.

Why does the child find it so difficult to observe his own thought processes? It is Piaget's contention that thought which proceeds from a single point of view, and without orientation towards, and coordination with, the thought of others, is necessarily unreflective. "Consciousness of ones own reasoning processes arises from the disposition to prove and justify to others what one has asserted. In order to do this one must be able to reflect upon ones own thinking critically and with the eyes of an outside observer."

The individual cannot free himself from the grip of egocentrism with its inherent absolutism, lack of introspection, disinclination towards logical-causal justification etc. through experience with objects and events in the real world. This is because he can and does
readily distort physical experience to fit his preexistent schemas. Rather, says Piaget, social interaction is the principal liberating factor, particularly social interaction with peers. In the course of his contacts (and specially his conflicts and arguments) with others, the individual increasingly finds himself forced to reexamine his own percepts and concepts in the light of those of others, and by so doing, gradually rids himself of cognitive egocentrism. This, of course is the ideal outcome, not necessarily the actual outcome.

As a result of this need for justification and verification, in order to overcome doubt and to prove statements to others together with the consequent reflections, fine grained accommodations to the nuances of things come to be made and experienced as interesting pursuits in and of themselves, pursuits now distinguished from the assimilations (meaningful interpretations of stimuli) that these new discoveries make possible. Thus the network of assimilatory schemas slowly becomes so rich and complex that it can, with relative effortlessness, extend itself to encompass and interpret the reality products which accommodation presents to it. A further result of the growing complexity of the individual's schemas is that they begin to provide a guiding framework of meanings which can explicitly direct accommodatory exploration further and further into the unknown.

With the gradual separation between self and world as a result of this increasing differentiation and equilibration of the assimilation-accommodation processes during the sensory-motor period, comes a development of great significance for intelligence. The development takes place simultaneously in two opposite directions with a centrifugal process of gradual objectification of external reality and a contripetal process of developing self-awareness with the self coming to be seen as an
object among objects. Initially the infant knows neither self nor world as distinct and differentiated entities. He experiences only a mélange of feelings and perceptions concomitant with what an adult observer would label as contacts between his actions and outside objects. Cognition really begins at the boundary between self and object, and with development invades both self and object from this initial zone of undifferentiation. Piaget describes it as follows:

"Thus it may be seen that intellectual activity begins with confusion of experience and of awareness of the self, by virtue of the chaotic undifferentiation of accommodation and assimilation. In other words knowledge of the external world begins with an immediate utilization of things, whereas knowledge of self is stopped by this purely practical and utilitarian contact. Intelligence thus begins, neither with knowledge of the self nor of things as such but with knowledge of their interaction, and it is by orienting itself simultaneously toward the two poles of that interaction that intelligence organizes the world by organizing itself.

A diagram will make the thing comprehensible. Let the organism be represented by a small circle inscribed in a large circle which corresponds to the surrounding universe. The meeting between the organism and the environment takes place at point A and at all analogous points, which are simultaneously the most external to the organism and to the environment itself. In other words the first knowledge of the universe or of himself that the subject can acquire is knowledge relating to the most immediate appearance of things or to the most external and material aspect of his being. From the point of view of consciousness, this primitive
relation between subject and object is a relation of undifferentiation, corresponding to the protoplasmic consciousness of the first weeks of life when no distinction is made between the self and the non-self. From the point of view of behaviour this relation constitutes the morphologic reflex organization, in so far as it is a necessary condition of primitive consciousness. But from this point of junction and differentiation, A, knowledge proceeds along two complementary roads. By virtue of the fact that all knowledge is simultaneously accommodation to the object and assimilation to the subject, the progress of intelligence works in the dual direction of externalization and internalization and its two poles will be the acquisition of physical experience (→X) and the acquisition of consciousness of the intellectual operation itself (→X)" (Piaget 1954).

This process of development in which a gradual change occurs from a state of profound egocentrism in which subject and object are indissociable to an articulation and objectification of outside reality, and a parallel differentiation and objectification of the subject himself is repeated in post-infantile developmental periods (vertical and horizontal décalages).

Piaget has shown that egocentrism and phenomenism increase whenever, as development proceeds, the child begins to cope with a new and untried field of cognitive action. The early egocentrism slowly subsides as the child progressively masters the new field, only to reassert itself when still another new domain is approached. Thus in the early stages of progress in the new field the child cognizes only what is immediately apparent and obvious in things, just a few surface characteristics (phenomenism) while at the same time being unable to assess the contribution of his own perspective to the way things appear. He finds it difficult to turn his intellectual
instruments back upon himself so as to make his own cognitions an object of critical inspection. Given time and experiences and interactions of the right kind the phenomenism gives way to a progressive construction with the child penetrating more deeply and more extensively into the object of his cognition. Also egocentrism begins to be replaced by reflection enabling the child to rethink and restructure aspects of an object of thought constructed earlier, and critically reanalyze his initial assumptions about these aspects; that is, generally to submit his earlier cognitions to a searching scrutiny.
4.3.4. Periods of Cognitive Development

Piaget postulates four broad periods or levels of development, each having its stages and substages. Each period is characterized by a reasonably coherent and generalized orientation towards problem solving. The periods are:

1. Sensory - motor period
2. Preoperational thought
3. Concrete operations
4. Formal operations.

The infant at the sensory-motor period is limited to the reflexes with which he was born. Thus he can only react to his environment. Gradually the child begins to broaden the field of application of his reflexes: he starts sucking at the sight of a bottle; he begins to follow objects with his eyes, seeing as well as looking. However he is limited to reacting to environmental or sensory stimuli. In the absence of particular input, the object is not remembered, since there is no action occurring (e.g., an internal mental response) to remember it by. Thus up to the age of six months or so if an infant is playing with a toy and is momentarily distracted while the toy is removed from his field of vision, he will commence playing with something else and does not appear to notice the absence of the object. For him the world exists only in so far as it is perceived.

Not long after this age the beginning of true abstraction occurs and after eighteen months or so the child is able to construct images of objects. At this second period the images are static representations of reality bearing an exact 1:1 relationship. This period continues up to the age of 6 years during most of which time the child is capable of only transductive thinking, that is, proceeding from the particular to the particular
(as opposed to deductive or inductive reasoning). In the absence of any general logical rules, this is the only way in which thinking can proceed. The direction of thinking is determined by the current needs and desires of the child. Abstraction of parts is not possible and so the child cannot subject his images to logical operations such as classification, seriation, reversibility etc.

During the third period of concrete operations the child begins to structure and organise his activity, although this activity is oriented towards concrete things and events in the immediate present. Some extension towards the nonpresent or potential is possible although any such movement is of limited scope and consists mostly of simple generalizations of existing structures to new content. But the starting point for concrete operations, as for preoperations, is always the real, rather than the potential. The person at this third period acts as though his primary task is to organize and order what is immediately present.

Here the child begins to be able to operate upon the raw data of the stimulus-bound, detail-rich, image. He is able to single out, to abstract, attributes from the total stimuli complex and use them as a basis for operations such as putting objects into classes, seriating them or setting them into correspondence. He is able to covary dimensions. Thus, although the child at this level is a much more efficient data-processor than the preoperational child because he can deal with the world on a more generalized basis, he is, as pointed out above, limited to performing his operations on data derived directly from the real world as he perceives it.
The child at the next developmental level of formal operations is not so limited. The most general property of formal operational thought is its ability to consider both the real and the possible. The person at this period is no longer exclusively preoccupied with stabilizing and organizing what comes directly to the senses. He has, through this new orientation, the potentiality of imagining all that might be there, both the very obvious and the very subtle, thus increasing the possibility of finding all that is there.

What is achieved in the third period is the organized cognition of concrete objects and events per se (i.e. putting them into classes, seriating them, setting them into correspondance, etc.) The person at the fourth period of development performs these first-order operations too, but he does something else besides, a necessary something which is precisely what renders his thought formal rather than concrete. He takes the results of these concrete operations, casts them in the form of propositions, and then proceeds to operate further upon them by making various kinds of logical connections between them (implication, conjunction, identity, disjunction etc.). Formal operations, then, are operations performed upon the results of prior (concrete) operations.

As can be seen, this period of formal operations is an extremely important one from the point of view of therapeutic intervention, for it is the stage at which the individual develops the ability to perform operations, not only on the data available to him through his senses, but also upon the end products of other operations. That is, he not only thinks, but he can now think about his previous thoughts. It is at this stage that a reflexive turning back upon already constituted operations occurs, making possible their combination and separation as well as the possibility of seeing how they relate to one another.
A very illuminating account of how these stages function is everyday life is given by Revans (1971) in the context of management decision making. A lengthy extract is quoted as an attachment to this sub-chapter.
In a primitive condition the organism may respond involuntarily to an unusual input as early as at stage one; a strange signal entering the existing store of knowledge (consciousness) is likely to produce some kind of response. The Roman Senate, observing unusual movements among the jackdaws on the Capitol, would at once renew their persecution of the Christians; the traveler with the ill-omened horoscope will forthwith change to a flight number not divisible by seven. No attempts need be made, as in stage two to relate the new input to existing or stored patterns, nor to find structure, even apparent structure, common between the new and the old knowledge; the reaction may also, of course, be instinctive, as in the blinking of the eyelids when the subject is threatened by a blow, or it may be of confusion, as when a bishop might be unexpectedly corrected by a child on a point of theology during his sermon in the cathedral.

In general, however, direct response to the first input, is confined to primitive cultures, to children, or to nonliterate adults. At a level above instinctive withdrawal, the response, however arbitrary it may seem, is probably assimilated to animism, in which for different individuals specific inputs invoke specific responses. A poor sales return is seen (with hindsight) as obvious because the promotional campaign opened on the thirteenth day of the month; the brave spirit of the machine is seen as fighting unsuccessfully with the demon of the metal and, sinking in the exhaustion of defeat, is driven into producing spoiled work; the retailer runs out of British-style sherry on Christmas Eve, in a commercial world of pure chance and of sheer luck, where the statistical relations between demand and supply are yet unknown, and would, if proposed,
at once be ridiculed. The Stock Exchange was once rich in its individual signs and systems; different speculators were guided in their sales and purchases by the movements of a wide variety of leading shares, sometimes those whose names had the same initials as their own. Guidance by tea-leaves was reserved largely for wives and for typing pools. This immediate and unreflecting response can be called "action under magic," with every different magician secure within the secrets of his own repertoire.

At a slightly more mature level, the response of the subject may follow the exploration of stage two. The new input is now seen as related to other patterns held within the memory, or it produces new patterns that bear a stimulating relation to patterns already known. Beyond this, however, the response does not go. The introduction of stage two suggests the use of imagination, the capacity to stimulate or to argue by analogy. The savage who encourages his corn to grow by continuously jumping off the ground in front of its emerging shoots, and the theorist who makes of marginal analysis (a self-evident proposition in the differential calculus) a sufficient key to his understanding of the business world, are alike frozen at stage two. They equally display imagination, but they do not pause to ask whether what they have imagined bears any correspondence to reality. They remain artists, not rational action takers, expressing the imaginative patterns of their inmost thoughts, and it is hardly for others to evaluate that to which they have no access.

It is evident that many decisions are taken at or directly after stage two, wherein the manager has envisioned a plausible but untested similarity between the present situation and some recollection of his past experience. Time and again superficial resemblance is accepted as adequate ground for decision. This might be described as "action under analogy", a classical example is
Aristotle's teaching that bodies fall at a speed proportional to their weight, and, even at the level of scholarship, the Greeks hardly passed beyond analogies. One may search the majority of their works in vain for references to controlled experiment; not until the thirteenth century was the notion of objective test sufficiently diffused to offer a threat to a culture of scholarship based on the authority of elaborated logic. Most Eastern, and not a little Western, philosophy is still argument under analogy. Most formal education does not go beyond it, and it is often understood in university circles that the "intellectual" treatment of a topic is completed when a convincing logical (or even verbal) analogy has been established.

The addition of stage three is the tribute of empiricism, the acceptance of the specific practice that manifestly works. When it is discovered, after the imagination has suggested that the grove of trees may be simulated by the leaping arches of the Gothic nave, that such and such architectural constructions tend to stay aloft while others tend to fall to the ground - or that, in response to the insistent necessities of military success, the critical choice lies between the long bow and the cross - then it is not the general laws of statics nor of dynamics that are put to the test of practice. Specific answers are sought for, and are sufficient to, specific questions; there is no rigorously designed test of any general hypothesis, only a pragmatic solution for a solitary need. No variation of limits, no optimization of costs, no interaction between intermediate stages are demanded, so that the total situation might become more fully understood at depth; the yes or no of final consequences is outcome enough. Thus action under magic and action under imagination are succeeded, in the scale of increasing sophistication, by "action under empiricism." Note the progression from the individual choice or belief of magic, through the social or collective agreement of
imagination, to the objective if limited demonstration of the empirical; these reflect the three natural stages of human development: the magic fairylands of childhood, the permissive unanimity of adolescence, and the pragmatic sanction of maturity.

When the cycle is fully extended to include stage 4, and the action is designed in a rigorous and self-questioning detail against a coherent fabric of already tested laws, it then becomes possible to trace precisely where the results of the action diverge from those forecast. The ambition of the audit is not confined merely to noticing whether one arch will stand rather than another, nor whether the second bow will outshoot the first; it sets out to observe, under a variety of conditions, to what extent and in what particulars their respective performances may compare. The simple satisfaction of finding out whether the response is the one or the other has given way to a detailed search for their inner structure; cause and effect interactions are now invoked to determine how far measurable changes, in particular input variables, produce effects upon the output. We have reached the sophisticated levels of Fisher's "Design of Experiments" when we enter fully into the spirit of stage four; we have passed from sailing vessel to hovercraft; from balloon to helicopter; from woodworker's lathe to computer-controlled profiling cutter, after we have added stage four to the previous three. It is a long step from accepting the collapse of the cathedral spire as a warning of God's displeasure. We may suggest that, when stage four is observed, we are promoting "action under design," and learning, not by magic, not by analogy, not by empiricism, but by the scientific method in all its completeness.

In this recapitulation of the cycle, the significance of stage five - control, namely, the incorporation or rejection of the action pattern - is universal. The arbitrary response directly to stage one will reinforce an existing belief in magic, or in the influences of particular tutelary spirits watching over particular events.
If a vivid response ensues, the spirit is in a good humor; if it does not, the spirit must be propitiated. The imaginative decision taken after reflection during stage two will be recounted to and (perhaps) approved of by others; there will be inscribed some new chapter in the folklore, the old wives' tales will be retold anew and the case study leaders will rack their brains for similar anecdotes to lend still further support. The engineer's solution stumbled upon after stage three will be demonstrated on the visit to the mine. A long paper showing exactly how the new airway was constructed and specifying exactly the horsepower of the motors, the angle of the fan blades, and many other technical details, will appear in the Proceedings of the Institution of Mining Engineers; from this it will be copied in exact detail, even to the point of such irrelevancies as the exact color of the paint on the guard rails and the exact gauge of any tracks that run into the workings. It is this emergence of stage 3, as the mimesis of successful empiricism, or copying without insight, that makes it possible for a British steam locomotive to end its days on American tracks. The modern gauge of 4 feet, 8\(\frac{1}{2}\) inches can be traced back to the eighteenth-century horse-trains of a colliery in Durham.

Finally, not only the demonstration of the particular example, but also the proof of the general law, that is implied by stage four, leads to the structured extension of theoretical ideas. The report of the scientist on his experiment is rich in references to other work, to opposing theories and, distinctively, to the outer unknowns; it will suggest not only what has been proved by his experiments, but also what is yet needed to be proved, and it is the incorporation into the literature of what has been done in the first four stages that is now truly stage five. Thus there are a priori reasons for suggesting that action, or creativity, can depend - and, in its evolution through both the individual and the culture,
will so depend - successively upon magic, imagination, empiricism, and design. In trying to assist the creative potential of managers, a theory of learning based on the last of these has been chosen.

In practice, any given manager is normally in the course of handling many decisions over the same period. One hundred is the order of magnitude of the total problems currently engaging the manager of a medium-sized factory. Some of these may call for a long series of interlocking decisions, and any given manager may treat any of these by magic, imagination, empiricism, or design. What would seem important is that the manager's most precious asset, his time, is effectively allocated; if magic is speedy, let it be used often on the decisions that do not matter, such as the precise aroma for the canteen and kitchen aerosols; if imagination is also speedy, let it be freely used where, on the average, no particular harm is done, such as in making a rule that, on Monday, Wednesday and Friday one week and Tuesday and Thursday the next, the works radio is on the program plugging one kind of dog food, whereas on Tuesday and Thursday of the first week and Monday, Wednesday and Friday of the second, it is on the program that plugs the competitor brand. Action under empiricism and action under design are thus reserved for the decisions of operational and tactical importance. It is in their use that learning may arise. Given a little practice, a manager will soon recognize for which occasions they may be reserved.
4.3.5. Décalages

Another important concept in Piaget's developmental system is that of the décalage. This concept was introduced to take account of the various recurrent patterns in development. That is, the occurrence of similar cognitive developments at different ages across the ontogenetic span. Two general classes of such occurrences are distinguished, these are horizontal and vertical décalages.

Horizontal décalages occur within a single level of development. The repetition which occurs involves a cognitive structure characteristic of a particular level which could initially be successfully applied to task X but not to a similar task Y. At some later date the structure can be successfully extended to Y, with the developmental process whereby the structure came to be successfully applied to Y being essentially the same as that which characterized the mastery of X.

Cases of repetition occurring at distinctly different levels of functioning are referred to as vertical décalages. For example a child can cope with task X only at the sensory-motor level. As he develops he becomes able to cope with task X on a symbolic-representational level. In this case there would be a formal similarity between the structures at the two levels together with a similarity or identity in the contents to which the structures were applied. For example the child, late in the sensory-motor period, gradually develops a precise behavioural map of his immediate surroundings. Although he can find his way around and make detours when obstacles block his path, he cannot at this stage represent the terrain and its relationships symbolically. Only several years later will he be able to draw a simple map of his immediate surrounds or even correctly fill in objects on a map drawn by someone else.
A good example of the flexible and deliberate application of décalage-type functioning in everyday life is given by Revans (1971) in the last paragraph of the attachment to sub-chapter 4.3.4 above. Here a formal operational thinker, in applying action under design (formal operations) to his situation had decided, given the constraints and demands of his situation, that the most efficient and effective way of performing his functions is to analyse and classify the various types of decisions which he had to make taking into account the various risks and payoffs involved; survey the various different decision making approaches available to him and match problem-type with most appropriate technique. Thus awareness and reflexive thinking combined to produce a maximally adaptive response to environmental pressures.
4.3.6. Schemas

In Piaget's system the cognitive structures which are modified by the adaptation process are called schemas. Flavell defines a schema as "A cognitive structure which has reference to a class of similar action sequences, these sequences of necessity being strong, bounded totalities in which the constituent behavioural elements are tightly interrelated." He goes on to stress that although schemas are named by their referent action sequences, "to say that a grasping sequence forms a schema is to imply more than the simple fact that the infant shows organized grasping behaviour. It implies that assimilatory functioning has generated a specific cognitive structure, an organized disposition to grasp objects on repeated occasions. It implies that there has been a change in overall cognitive organisation such that a new behavioural totality has become part of the child's intellectual repertoire. Finally, it implies that a psychological "organ" has been created, functionally (but not, of course, structurally) equivalent to a physiological digestive organ in that it constitutes an instrument for incorporating reality 'aliments'."

Although schemas vary in complexity they have a number of characteristics in common.

a) The behaviour sequences to which they refer constitute organized totalities. The action sequence, if it is to constitute a schema, must display a certain cohesiveness and must maintain its identity as a quasi-stable repeatable unit. Its component actions must be tightly interconnected and governed by a core meaning. No matter how elementary the schema, it is a schema precisely because the behaviour components which it sets in motion form a recurrent and identifiable figure against a background of less tightly organized behaviours. Piaget says that "As far as 'totality' is concerned, we have
already emphasized that every schema of assimilation constitutes a true totality, that is to say, an ensemble of sensorimotor elements, mutually dependent or unable to function without each other. It is due to the fact that schemata present this kind of structure that mental assimilation is possible and any object whatever can be incorporated or serve as aliment to a given schema" (Piaget 1952).

b) Flavell indicates that "a schema is a kind of concept category, or underlying strategy which subsumes a whole collection of distinct but similar action sequences. For example it is clear that no two grasping sequences are ever going to be exactly alike; a grasping schema - a "concept of grasping" - is nonetheless said to be operative when any such sequence is said to emerge. Schemas therefore refer to classes of total acts, acts which are distinct from one another and yet share common features."

c) A schema, being a cognitive structure, is a more or less fluid or plastic organization to which actions and objects are assimilated during cognitive functioning. As Piaget expresses it, schemas are mobile frames, successively applied to various contents. The fact that schemas accommodate to things (adapt and change their structure to fit reality) while assimilating them attests to their dynamic, supple quality.

d) Schemas are both created and modified by intellectual functioning. They may be envisaged as the structural precipitates of a recurrent accommodatory activity. The fact that schemas are created by functioning and are highly mobile and plastic is repeatedly stressed by Piaget. Just how great an emphasis is placed on the role of functioning in cognitive change is indicated by Piaget (1964) when he says that "Experience is always necessary for intellectual development, but I fear that
we may fall into the illusion that being submitted to an experience (a demonstration) is sufficient for a subject to disengage the structures involved. But more than this is required. The subject must be active, must transform things, and find the structure of his own actions on the objects." That is, the person must be involved in active thinking rather than in just passive looking and listening. He must operate on the input.

e) It is indigenous to schemas that once constituted, they apply themselves to all assimilable aspects of the environment.

f) In the course of this repeated exercise schemas are transformed in a number of ways.

i) by generalization: Schemas are forever extending their field of application so as to assimilate new and different objects.

ii) by discrimination: Schemas undergo an internal differentiation. For example the infant gradually discriminates objects which can be sucked to appease hunger from the general class of suckable objects. An elementary "recognition" of certain objects is the consequence of this differentiation within an initially undifferentiated schema. The result being new schemas with a sharper, more discriminating focus on reality.

iii) by uniting to form a single, supraordinate schema. Schemas may undergo separate developments up to a point and then unite to form more complex and interlocking relationships with other schemas.
Pascual-Leone (1970) indicated that "The Schemas intervening in human processes are of many content-defined sorts: perceptual, cognitive, behavioural, motivational, etc. Independently of content, it is important to emphasize the recursive character of the scheme's structure: it is possible to have schemes constituted by schemes constituted....The schemes capable of functioning as releasing responses of other superordinate schemes are called figurative schemes or schemas (Piaget and Inhelder, 1966); The schemes capable of functioning as effecting responses of superordinate schemes are called operative schemes (Piaget and Inhelder 1966). A superordinate scheme or superscheme is analogous to a computer program which uses subroutines (ie. subordinate schemes or subschemes) which are stored elsewhere in the subject's memory....This concept of superscheme is recursive so that it is possible to have superschemes constituted by superschemes constituted by superschemes constituted.....Wellknown compound cognitive superschemes of this type are the operational structures responsible for the logical operational thinking which have been studied by Piaget and Inhelder.

"Note that for any ordinarily learned super-scheme (ie. for superschemes which have not been overlearned, C.F. Mandler, 1962) the actual use of its subroutines requires the simultaneous and/or serial activation of the corresponding subordinate schemes stored elsewhere in the repertoire...."
4.3.7. Equilibration

The person's development, his transition from one ontological state to the next, which is the process of bringing assimilation and accommodation into balanced coordination, is governed by the equilibration process. This process operates continuously in all exchanges between the person and his environment and is the propellant for change and transition. This continuous process of equilibration gives rise to successive, essentially discontinuous equilibrium states or levels of development characterized by schemas having certain formal logical properties in common (sensory-motor, pre-operational, concrete-operational and formal) and whose attributes as systems are describable in equilibrium terms. Although the equilibration process itself is homogeneous across development, the equilibrium states which it generates are not. That is, there are different kinds of equilibrium states, the differences specifiable in terms of a common set of dimensions along which the states vary. Moreover, these differences are ordered differences. Thus one state may be said to be better equilibrated than another. An equilibrium state in Piaget's system always refers to an equilibrium system of relations between subject and object, and hence a relation between assimilation and accommodation.

Essentially, a system in equilibrium is one which possesses some sort of balance or stability (fragile or secure, temporary or enduring) with respect to the forces acting upon or within it. Forces or perturbations which if unopposed, would lead to a change of state, are countereacted in an equilibrated system by equal and opposite forces which guarantee the status quo.

The systems involved in Piaget's model are systems of actions, either externalized or internalized, which the person carries out in the world of objects and events.
Since it is the actions themselves which form equilibrated systems, Piaget speaks of a dynamic equilibrium. These states can be compared and contrasted along the four major dimensions of their field of application, their mobility, their permanence and their stability.

Firstly, since psychological systems in equilibrium are comprised of actions applied to reality they can be distinguished in terms of the size of their field of application, that is, the ensemble of objects or object properties which the equilibrated system accommodates to and assimilates.

Secondly, psychological equilibria can be distinguished according to the spatiotemporal distances which the actions of the system traverse in the course of their operation. Piaget supposes that the mobility of a single, brief centration (focusing) is null (even if the subject is centering on, say, two stars objectively separated by millions of miles). Mobility becomes non-null, however, as soon as the subject starts to itinerate, whether perceptually, motorically, or conceptually, from datum to datum.

Thirdly, psychological equilibria can be distinguished according to the resistance of systems to changes of state, as a function of input changes. A system is said to be in permanent equilibrium if the elements (objects, attributes etc) on which the subject's actions bear do not change their subjective value (good, bad, less than, greater than etc) or status when new elements are centered. A system which is not in permanent equilibrium, that is, one in which the elements change their values with changes of input, is said to be subject to displacements of equilibrium. In the ethical or moral field the distinction would be between an absolute value system and a relativistic one.
Finally the stability of a system refers to its capacity to compensate or cancel perturbations which tend to alter the existing state of equilibrium. Stability implies the possibility of reversible operations being carried out.

Thus the process of development is conceived as a succession of structures coming into equilibrium, with the form of equilibrium varying from structure to structure along the above four dimensions. But how do psychological action systems, at any level, come into equilibrium, of whatever degree?

Piaget states that the process whereby schemas become equilibrated consists of a series of steps, each step comprising in itself an equilibrium state. The steps, in general, are as follows:

Step 1. The person attends to or centrates upon one of the properties of the problem situation.

Step 2. The person centrates another property of the problem but does not maintain his centration upon the previous property.

Thus in a haphazard way the person surveys the problem field centering properties singly, either one alone or first one than another. While centering on one property he forgets or does not take into account his previous centration on the preceding property.

Step 3. The person begins to apprehend both properties within a single cognitive act. Thus a cognitive conjunction of properties is achieved. The typical result of this conceptual coordination being a noticable hesitation and conflict.
Step 4. Here the person notices that successive conjuncts of properties (A1 and B1) (A2 and B2) form meaningful patterns. Thus he is able to shift his conceptual focus from states alone to relationships between states, to the transformations which lead from state to state.

As the schema develops from step 1 to step 4 a progressive increase in size of field and mobility takes place together with an increase in stability and permanence. The move is from the static and deforming centration of step 1 to a beginning decentration in step 2 moving into semireversible regulations in step 3 and culminating in the complete and permanent reversible compensations of step 4.

In explaining why the equilibration process develops in the way described above Piaget uses a probabilistic argument. This involves showing that certain behaviours appear more probable than others for a given complex of subject-object interactions, that these probabilities change in predictable ways as the interactions continue, and that the fixed sequence of equilibrial states (the steps) is the direct consequence of these probability changes.

An interesting point to note here is that this sequence of focusing is very similar to that described by Gendlin in chapter 2.9 above (Page 39).
4.3.8. Emotion

Despite the impression that the above exposition may convey Piaget does not believe that cognition is the sum total of human activity or that all cognition is of the cold, "pure reason" type. He, in fact, sees cognitive and personal-emotional reactions as interdependent in functioning, being essentially two sides of the same coin. Thus he says:

"Affective life, like intellectual life, is a continual adaptation, and the two are not only parallel but interdependent, since feelings express the interest and value given to actions of which intelligence provides the structure. Since affective life is adaptation, it also implies continual assimilation of present situations to earlier ones - assimilation which gives rise to affective schemas or relatively stable modes of feeling and reacting - and continual accommodation of those schemas to the present situation." (Piaget 1951).

Also cognitions with primary affective, interpersonal content function like those of a more purely intellectual type:

"It must be pointed out first of all that this generalized application of initial affective schemas raises no particular problems with regard to the mechanism of assimilation which is necessarily involved. It is the same as that of sensory-motor or intuitive assimilation. Actions related to others (people) are like other actions. They tend to be reproduced (reproductive assimilation) whether it be the case of an affection, an aggressive tendency, or any other. It is the same assimilation because personal schemas, like all others, are both intellectual and affective. We do not love without seeking
to understand, and we do not even hate without a subtle use of judgment. Thus when we speak of "affective schemas" it must be understood that what is meant is merely the affective aspect of schemas which are also intellectual." (Piaget 1951).

Thus, although affect and cognition can be separated for discussion purposes they are indissociable in real life. Both, like assimilation and accommodation, are necessarily involved in all human adaptation. The affective-motivational aspect provides the "energetique" of behaviour while the cognitive aspect provides the structure. Affect cannot of itself create structures, although it does influence the selection of the reality content upon which the structures operate. Thus alongside the development of intellectual structures from birth through adolescence, are found parallel structures which bear primarily on persons rather than objects.

Piaget's treatment of emotion thus runs counter to the treatment that this area of experience receives in other systems. Emotion is usually viewed as being of an order of psychological reality quite different from that of cognitive processes. This has shown not to be the case in much of the research cited in chapter three, above. This previously supposed difference between cognitive and affective aspects of behaviour has had a long history in psychology and has been especially well accepted in the area of psychotherapy. It finds its classical expression in psychoanalytic theory in the distinction which is drawn between primary and secondary processes. Primary processes are said to be alogical, instinctual and emotional in nature; developmentally more primitive, and very much more powerful than the secondary processes. The latter being the logic-dominated strategies which the individual brings to bear in coping with reality. Psychological "breakdown" is viewed as being
the result of a victory for the primary processes with therapy consisting of bringing the individual to accept, control and adapt to the primary processes. Thus implicit in this conceptualization, is that there are two essentially conflicting systems which obey their separate laws. This is not held to be the case within Piaget's system.

Such views of emotion also involve conceptualizations of motivation which are different to Piaget's.
4.3.9. Motivation

Piaget states that there is an intrinsic need for cognitive structures, once generated by functioning, to perpetuate themselves by more functioning. Schemas are structures with the built-in property of repeatedly assimilating anything which is assimilable in the environment. That is, schemas, once created, maintain themselves by assimilatory functioning. As Piaget repeatedly states, assimilation is the dominant component of intelligence, and the principal attribute of assimilation is repetition, the intrinsic tendency to reach out into the environment again and again and incorporate what it can. But this repetition occurs only up to a point.

For Piaget, then, the need to cognize is not fundamentally an extrinsic motive separate from intellectual activity. It is an intrinsic property of assimilatory activity itself. The advantage of this formulation is that intellectual performance which occurs in the apparent absence of basic need tension (hunger etc) needs no complicated secondary reinforcement model to explain it.

Other theorists have relatively recently formulated positions where a distinction between motivation and cognition is not made e.g. Kelly (1955), Taylor (1960), Prentice (1961), Simon (1967), there apparently being little need for the distinction in information processing models.

The difference between an information processing approach to motivation and a tension reduction one seems to lie in the difference between the concepts of intrinsic and extrinsic motivation. It has been traditional in laboratory studies using animals to make them hungry, thirsty or to electrically stimulate them, etc., in order to get them to perform the required tasks; it being considered that a well-fed rat was not likely to oblige the experimenter by running a maze or pressing a lever.
From such studies it was found that level of activity and rate of learning had a very strong relationship with motivational level. This led to the idea that some primary drive, no matter how irrelevant it was to the task in hand, was necessary before behaviour could occur.

After a while it became obvious that behaviour did occur in the absence of primary biological drives. Hull (1952) in a rigorously presented theory, suggested an explanation by the use of the concepts of secondary (acquired) drives and secondary reinforcers. Anxiety as a general acquired drive was also postulated.

This approach has become less and less plausible and Breger and McGaugh (1965), after a review of the evidence, stated that "Briefly, it is worth pointing out that the concept of drive reduction, the distinction between primary and secondary drives, as well as the early thinking about the uniquely persistent qualities of fear-motivated behaviour have had serious difficulty within learning theory (Watson, 1961; Solomon 1964). The use of these concepts to explain clinical phenomena thus rests on an exceedingly shaky foundation."

Harlow (1953) was one of the early American researchers to stress curiosity as an intrinsic motivator. He stated that rhesus monkeys solved puzzles better when replete than when hungry. The only effect primary drives had was a distracting one with hungry monkeys being more concerned with food seeking than with learning puzzles.

Both Harlow and Koch (1956) discuss behaviour which is self maintaining, that is, which continues for no reason beyond its own occurrence. Koch distinguishes State A, which occurs when he is doing some daily task for the sole reason that he has to do it to achieve some
other goal e.g., it is part of his job as an academic to wade through an amount of administrative trivia, or to read some book that he "ought" to read. Such tasks are easily motivated by anxiety he says, and indeed this is often an essential part of them otherwise they wouldn't get done. State B, however, is quite different. This grips him when he is involved in some complex research problem and may keep him going far into the night. The last things that are important are, he says, the practical consequences involved.

Koch indicates that intrinsically motivated behaviour appears to be pleasant and relatively complex. If it appears to be too difficult it will be avoided and if it is either too easy or over learned it will only be performed if it is made worthwhile, for some extrinsic reason.

Hebb (1946) reported a number of experiments involving fear provoking stimuli in which he found evidence for what could be called intrinsically negatively motivated behaviour. He found a class of stimuli that created intense fear in chimpanzees even when there had been no opportunity for these stimuli to have been associated with fear or pain previously. This finding initially seemed to suggest that many fears such as the fear of death or of the unknown are innate. He found, for example, that when chimps saw a decapitated chimp torso, they would squeal in apparent terror and withdraw to the far corners of the cage. However he also found that the same result could be obtained by dressing one keeper in the jacket habitually worn by another keeper.

This could hardly be an example of an innate fear. It could not be fear of the unknown as both the jacket and keeper were familiar. It seems, rather, that it was due to an unusual mixture of two well known (or the mixture of a well known and some unfamiliar) elements that provoked the intense fear.
Hunt (1966) in discussing Piaget's theory and motivation suggested that it was the degree of accommodation required which determined the kind and extent of intrinsic motivation. An event or object is centered. One possibility is that data may match existing structures exactly, or there can be any degree of mismatch right up to complete irrelevance. In the last case the data would be meaningless. The first case usually occurs in automated or very well learned behaviour (over learning). Thus no accommodation is required. Assimilation would take place a certain number of times, but as psychological tension fell below a certain threshold level, this varying from individual to individual, motivation would have to become extrinsic if behaviour were to be maintained in the face of boredom. Next, existing structures may be somewhat appropriate to the input data and can, upon receipt of further information, be transformed or extended, that is, accommodate themselves, to cope with the new situation, that is, to assimilate it. Thus where the mismatch is only moderate a satisfactory re-adjustment of the structures (accommodation) can be made, thus facilitating the accurate assimilation of data. This is the situation providing the conditions for positive intrinsic motivation. But if the mismatch is too severe then the conditions for negative intrinsic motivation would result. Thus little, if any assimilation could take place validly. Finally, where the relationship between input and existing structure is largely one of irrelevance, as, for example, in learning nonsense syllables, extrinsic motivation would be required as very little assimilation would occur. If the relationship was one of complete irrelevance the person would not "see" it at all unless definite extrinsic cues were operating to draw his attention to the data. This formulation is similar to that of Sarbin (1964) mentioned previously.
The two extreme cases mentioned above cover much of the classical laboratory work on motivation in which behaviour must be set going for some reason that is irrelevant to the task itself. If a rat is to run a maze then, somehow or other, he must move out of the starting box. This may be achieved simply by depriving him of food for some period. The animal's behaviour will then be directed towards finding food. If the environment is so arranged for the animal that a maze is interposed between it and food, then it must run the maze. When, by chance, it arrives at the food box it will have learned that there is food available at the end of the run.

The next and greater problem is to learn how to get there. Thus the "getting there" behaviour is learned because it is instrumental in achieving the goal of food. The important thing here is that arriving at the food provides the animal with the information that his sequence of left-right turns are correct as measured against an external end result. This end result must be noticable and important. If the animal was not hungry or if the reward was inappropriate to his physiological state, then it would not mark the end of a sequence of goal oriented behaviour and would not provide the animal with immediately usable information. Thus Annett (1969) points out that as far as learning is concerned, the importance of the motivational state and the reward is not that the latter reinforces in the sense meant by S-R theorists, but that it gives stimuli information value, and provides the organism with an ongoing knowledge of results. Luria (1961) points out that, besides using external checks a great deal of learning is carried out by making internal checks. This occurs when input is matched against existing structures rather than against environmental conditions.
4.3.10. Summary

1. The décəlages indicate that a person may be functioning at different cognitive levels in different areas of his life space. For example:

   a) A highly competent formal operational thinker in, say, science, may operate at a lower level (empiricism, analogy or even animism) in the area of interpersonal relations (horizontal décəlage). Another example of this would be a person who can generally apply, say, formal operations to his interpersonal relations and value systems may function at a lower level in the case of certain specific interpersonal situations, or

   b) A person generally functioning at, say, the concrete operational level may be faced with, for example, an interpersonal problem which can no longer be dealt with at that or a lower level of cognitive functioning. That is, action under animism has been found inadequate, as has action under analogy (state two) and action under empiricism (state three). The person is now faced with the challenge of developing cognitive operations at the formal operational level to cope (vertical décəlage).

2. People may vary in the following ways:

   a) They may be aware of a feeling of cognitive strain (intrinsic motivation) or they may not.
b) They may be aware of what is causing the experience of strain or they may have little or no awareness of what is causing their experience of strain. That is, they may have symbolized (verbalized) their experience of strain or they may have not.

c) People vary in their general level of cognitive functioning, that is, the level they apply to most of their interactions with the objects and events in their environment. This is between-people variance as distinct from within-person variance where a person may differ in the level of his cognitive functioning in the area of interpersonal relations as compared with his general level of functioning (horizontal décalage).

d) People will vary in their habitual mode of adapting to their environment. Their mode of adaptation may be characterized by a preponderance of -

   a) Assimilation
   b) Accommodation, or
   c) A balance (or near balance) of the two.

e) The felt cognitive strain could be a result of
   i) An initial move to develop a more general schema through the process of mutual assimilation of schemas. (fusion)
   
   ii) Environmental demands for a greater degree of accommodation, resulting in a generalisation or discrimination (fission) of existing schemas, and thereby in a developing awareness.
iii) A combination of the i and ii (it must be remembered that the primary function of schemas is to assimilate. Accommodation will take place depending upon the degree of positive intrinsic motivation).

3. The structures under strain can be specified according to their:
   - Field of application
   - Mobility
   - Permanence
   - Stability

4. Changes can take place at a number of different levels:
   - Sensory-motor
   - Pre-operational
   - Concrete operational
   - Formal operational

5. Change is a slow and gradual process. It must be based on existing structures and proceed in assimilable stages.

6. Change can take place only as a result of functioning. The person must be involved in action, either overt or covert, behavioural or mental. ("The subject must transform things and find the structure of his own actions on the objects").

7. There is a four stage process of schema development which is very similar to the method of focusing on a felt sense described by Gendlin (1971).

8. People at an ego-centric stage of development (this stage occurring in each of the four levels of development) find it very difficult to observe their own
thought processes and are unable to view a situation from another's point of view. A person frees himself from egocentrism as a result of social interaction and the inherent demand for justification which this involves.

9. Awareness, involving reflexive thought, develops from a state of undifferentiated mélange involving reflex or habitual interactions between the most immediate appearance of things and the most external and material aspects of a person's being. It develops in two directions simultaneously, self-awareness and other, or object, awareness.

10. Emotional and purely cognitive aspects of action are parallel, but interdependant, modes of experiencing. Emotions give direction to cognition and are subject to its structure.

11. Feeling and thinking are indissociable. A person feels in a certain way towards an object or event because he has structured that object or event in a particular way. If cognitive and behavioural change is to occur, then one must think about, that is, carry out operations on, one's experiences while being guided by one's feelings.

12. The model places "intellectualizing" in a new light. It indicates that carrying out integrations and exploring relationships among high order superschemas (generalizations, theoretical constructions) is extremely important from the point of view of a fully functioning, highly integrated person. The model also points out that there may be significant discrepancies between these high level structures and actual behaviour. Thus overt behaviour and its accompanying emotion must also be examined for patterns and the necessary comparisons and adjustments made to the appropriate superschemes.
13. The model stresses the necessity for integration at all levels of structure. To the extent that new experiences are not integrated into existing structures and possible changes in relationships among structures explored and the necessary adjustments effected then change will be short lived.

14. The model gives a detailed account of the development of awareness and thus provides us with a better understanding of the unconscious as unawareness.

15. The model suggests that cognitive dysfunctioning (psychopathology) is not the result of the ecological information impinging on a person's sense/organs. Rather it is a result of the process of adaptation and of the person's cognitive structures. 'Anxiety', or cognitive strain' arises out of the person's attempts at assimilation. The experience of cognitive strain implies that a movement has occurred from unawareness towards self-awareness. Thus psychopathology can be viewed as arising out of the application of particular sets of central strategies which guide the individual's adaptation to certain areas of his environment. Cognitive strain occurs when the individual begins to realise, as a result of becoming at least marginally aware of his behaviour and of the aspect(s) of the environment where a mismatch between existing schemas and ecological information is occurring, that there is 'something wrong', that 'things don't fit' etc. But while he may see this he may not be able to see how to make things right or make them fit.

16. Cognitive strain may be the result of either positive or negative intrinsic motivation. Positive intrinsic motivation leads to accommodation whereas negative intrinsic motivation leads to avoidance.
17. The model presented concerns itself largely with the process of operating upon ecological information, and the structure of cognitive representations which both influence and develop from the operations, rather than with any particular method used to influence the individual to carry out the operations. Within the model any means would be effective as long as they resulted in the client focusing on some aspect of his experience and applying reflexive thought to his ongoing behaviour and the accompanying emotion or to a representation (image) of his ongoing behaviour.

18. According to Piaget's model, the greater the propensity of the system to utilise assimilatory procedures at the expense of accommodatory ones or vice versa the greater the likelihood of cognitive dysfunction occurring. Whether or not a person applied his schemas to particular stimuli, and which schemas he did apply would depend upon the amount of cognitive strain which he experiences. Interestingly enough the fact that cognitive strain is being experienced is an indication that the person is beginning to move away from a state of egocentrism and towards a state of self-awareness. The fact that the person's mode of adaptation is predominantly assimilatory (or accommodatory) in character makes such a move extremely painful. If information, objects, and events are interpreted using outdated, inappropriate structures, the world can appear to be a dangerous, threatening place and the person may find it impossible to be fully open to experience. The ideal progression is one in which a movement towards greater self-awareness is accompanied by a balanced use of assimilation and accommodation. If the latter doesn't occur than the former will be prematurely arrested.

19. Piaget stresses the necessity of interpersonal interaction and the role it plays in the development
of awareness. It is as a result of interacting with others that a person is forced to use reflexive thought, to examine his own behaviour vis a vis that of the other(s), and so he moves slowly towards greater self-awareness. Thus Abercrombie (1969), in describing the results of the interactions which occurred in the group she ran, says:

"The discussions were conducted in such a way that each student could test his own schemata against those of his colleagues. In the course of discussion some of the factors that had influenced the judgment of each person, many of them unconsciously, became apparent. Egocentric or autistic modes of thinking were seen to be inextricably mixed with reality-adjusted thinking and autistic elements could be brought under conscious scrutiny, to which they were not subject before.

"Thus, effectiveness of discussion in helping one to discover one's unrecognized assumptions was described by a student thus: 'Later in the discussion I find how many angles there are of looking at a problem which somehow do not occur to me. I tend to grasp a few angles and am inclined to cling to them until a few moments of heated discussion compel me to consider all the other many angles.'"

"Discussion in a group does for thinking what testing on real objects does for seeing. We become aware of discrepancies between different people's interpretations of the same stimulus and are driven to weigh the evidence in favour of alternative interpretations. Certain areas of one's private world are compared and contrasted with other people's, and in seeing differences between them it becomes possible to modify our own world if we wish to. Instead of seeing our own mistakes by contrast with the
statements of an unquestioned authority, as in the traditional pupil-teacher relationship, we see a variety of interpretations of the same stimulus pattern, and the usefulness of each must be tested in its own right."

The central role played by our cognitive structures in determining our behaviour in and subjective experience(s) of (emotional reactions to) the various events occurring in our environment was shown in chapter three. In this chapter we have examined the way in which our cognitive structures function in processing the ecological information which impinges upon our sense organs. In the next chapter I shall endeavour to show that the model discussed here adequately explains the data presented in chapters one and two.
5 - THE APPLICATION OF PIAGET'S MODEL TO THERAPY

5.1 Introduction

Gendlin and Tomlinson (1967), in summarising the client-centered position on psychopathology, state that "neurotic and psychotic difficulties are viewed as flaws in the wholeness of the organism, as resulting from "incongruences", estrangements between the experiencing individual and the cognitive maps - the self concepts by which he operates."

This conceptualization is consistent with the underlying theme of Piaget's model and with Sarbin's (1969) position on cognitive strain.

5.2 The Process Underlying "Experiencing", "Accurate Empathic Understanding", And "Confrontation"

Since the experience of cognitive strain arises when a) existing structures cannot assimilate ecological input validly and satisfactorily, and b) the degree of accommodation required of them to enable a valid and satisfactory assimilation to take place is beyond the individual's strain tolerance threshold, a constructive, or growth oriented course of action, would be to examine the structures under strain and devise an assimilation-accommodation-assimilation approach sequence which is within that particular individual's strain tolerance limits.

Thus for therapy to be effective, cognitive strain would have to be constructively reduced with the
object, event, or information initially causing the strain being assimilated as a result of the valid use of existing structures. That is, the person would have to develop and/or alter his structures and adopt a mode of adaptation such that a state of balance between assimilation and accommodation would be achieved. Such an approach would enable the person to maintain a continuous development of his cognitive structures in such a way that they would be capable of accommodating themselves to any appropriate input (the situation out there) and thus be capable of assimilating (making sense of, understanding) it by valid means. This process would result in an increasingly complex, better integrated, and more stable structure. In order to do this it may be necessary for the person to engage or bring other structures, quite different to those which initially failed to assimilate the original strain-producing input, to bear on the problem and develop and integrate them if necessary. In this way the person may find that a number of related structures activated in a given sequence may provide the required solution, or, possibly, a higher order structure may be formed which coordinates the problem solving and so facilitates constructive adaptation. Any change in existing structures or in the relationships between structures may necessitate changes in other associated structures so as to maintain the integration or equilibration of the overall system. This of course may involve quite a long chain of adjustments, that is, a series of actions consisting of an attempt at valid assimilation followed by an accommodation followed by another attempt at valid assimilation, with the cycle being repeated until a valid and complete assimilation of the ecological information can be made, (this being a series of small action-feedback-action steps.)

Piaget points out that the development of new structures must be based on the utilization of existing structures. He also indicates that changes can take place
only in assimilable steps which vary in size from person to person. There can be no radical change from the old to the new but rather a series of changes which continually modify existing structures.

For a person to be able to change his own structures he must be able to do two things.

a) Center (focus) on various aspects of his actions (both overt and mental) and
b) Operate on them

A structure unable to accommodate itself sufficiently to the ecological input to be able to assimilate the information satisfactorily would probably be characterized by:

a) A restricted field of application
b) Restricted mobility (itineration between data)
c) A rigid, inflexible and possibly unrealistic (overly permanent) structure resulting in
d) Poor stability (capacity of the system to reassume a state of equilibrium).

Thus even quite small amounts of input requiring accommodation would result in the person experiencing quite a high degree of cognitive strain especially if structural stability was low.

We also know that the process of schema development follows the following path:

i) Centration on one property only
ii) Centration on a number of properties, one after another, in isolation from those centered previously
iii) Centration on the conjunction of properties (this is initially characterized by hesitation and conflict)
iv) The noticing of patterns in successive conjunctions of properties.

We further know that cognitive and emotional reactions are parallel yet interdependent aspects of functioning, with the emotional aspect expressing the interest and value given to action and influencing the selection of the reality content upon which cognitive structures operate. Affective experiences are actions and are thus subject to the normal rules of cognitive functioning.

Now given the fact that

a) Emotional functioning is parallel to and interdependent with "pure" cognitive functioning and

b) That emotions influence the value given to, and the selection of reality content, it would be most important in any situation of cognitive strain to examine this, the emotional area of functioning, in conjunction with the reality content of the data. This would have to be done in assimilable steps with the persons present structures as a starting point.

Therapeutic movement resulting from the application of i-iv above, to ecological inputs and existing schemas, would occur as the person examined external reality and his internal reactions to, and overt actions on it, brought various pieces of data into conjunction and then examined the patterns in the various combinations of successive sets of conjuncts. As he centered and operated on this data his evaluations of it would change. The meaning of the data would change as it became structured by association with various schemata, and as these changed
in turn. The person's (internal) emotional reactions to the external data would also change as he came to see it from a series of different aspects with each aspect having its own meaning.

As the data was processed it would interact with a number of different schemas thus causing intraschema changes (until an equilibrium resulted). These various schemas would then interact with other schemas with resultant inter and intra schema changes until an equilibrium resulted and so on.

Here we have the process underlying accurate empathy and concrete confrontation. In Chapter three it was shown that

- Accurate empathy helps to clarify the client's understanding of himself by serving as a mirror to his emotional and phenomenological self. The therapist also tries to move beyond what the client actually verbalized by clarifying and expanding on what was hinted at by the client's voice, posture, and content cues.

- The outcome of therapy is significantly affected by both the average levels and the very highest moments of accurate empathy.

- There exists an optimum amount of empathy below which too little psychological tension will exist to initiate a process of constructive change. Too much empathy may create a level of tension which the client cannot cope with.

- Concrete confrontation, or the focusing of the client's attention on specific problem areas so that he reflects on them in a specific
and highly detailed way is a very effective therapeutic intervention.

That an effective interpretation is one which refers to just that datum on which the client's interest is centered, that is to the client's present experiencing. Thus, an effective interpretation names, or tries to conceptualize, or classify, the implicit meaning which, although now being felt by the client, and now trying to break through, has, at the time the interpretation is offered, not quite fully broken through in symbolic form.

On this point Gendlin (1961) writes:

"A fourth characteristic of experiencing lies in the client's use of it to guide him toward increasingly accurate conceptualizations. A client may feel a feeling and refer to it for quite some time before attempting a formulation of it in terms of concepts. When he has attempted such a first formulation he often considers what he has just said and then feels: "yes, that's it." or, "no, that isn't quite it." Often he does not know how what is said differs from what he feels, but he knows it differs. In these examples it is clear that the client refers directly to his experiencing, and is checking his first rough conceptual formulations against his present experiencing. In this way present experiencing guides conceptualizations."

Thus "experiencing" or "working through" describes a process very similar to that involved in the development of an equilibrated assimilation-accommodation system described above. As the person focuses on an object or (emotional) event and operates on (internalized) representations of it, bringing these into conjunction with
various schemas, the object's meaning for him and his evaluation of, and feelings towards it, would change. As he activates various schemas these would accommodate to the object and assimilate it. Such an accommodation in one schema may necessitate accommodations in other related, schemes and thus the person's meaning structure, his super-schemas, would change. This may necessitate the reappraisal of other objects and events. This process would continue until an equilibrium was achieved. The scope of the 'experiencing' process would depend upon the value to the person of the object or event initially focused upon, and upon the extent of each of the changes, accommodations, which occurred.

It may help to clarify this process if we saw it applied to a concrete example. A readily available example is that supplied by Gendlin and quoted at pages 39ff. There Gendlin indicates that he had decided to do 'X' which has something to do with his parents. Having made this decision he feels unresolved, uncomfortable, about it. He is experiencing cognitive strain.

Let us assume that Gendlin is fairly typical of the population when it comes to making decisions in the interpersonal area. Thus most of his decision making process would have occurred below the level of his awareness in a manner similar to that described by Stevens at page 88. Now, as Gendlin points out, on most occasions this procedure results in an acceptable outcome, however, on this occasion, one, or more, of the cognitive structures which were activated during the decision making process could not adequately assimilate the information being processed. A discrepancy exists. However on this occasion the discrepancy is not such as to constitute negative intrinsic motivation. The cognitive strain produced by the discrepancy is within Gendlin's strain tolerance limits and so a situation of positive intrinsic motivation is the result. Gendlin feels a need to examine and perhaps clarify the cause of his unresolved feeling.
In order to examine his rather diffuse, unresolved feeling Gendlin first focuses or centrates on it. As he does this he finds that the feeling involves many facets, thus if he is to accurately label that particular feeling he has to sift through each of the facets in turn and by using a process of elimination decide upon a label which most appropriately fits the feeling and captures its essence.

Now because Gendlin is involved at this stage not in the development of new schemas, but in searching through existing ones he can combine Piaget's steps i and ii into one operation and move from it into steps iii and iv.

As he centrates on the diffuse feeling, some one aspect of it, because it is more powerful in its impact (Luria 1961), is singled out. This aspect is now centrated on and Gendlin begins to itinerate between this aspect of the feeling and the various verbal constructs this feeling aspect activates. This itineration is done with the aim of finding the best fit between feeling and construct. When a satisfactory match is made it is then checked against the original unresolved feeling to determine how much of it the labeled aspect accounts for. This is done by itinerating between the original feeling and conjunct of feeling aspect - construct. If the labeled aspect does not clarify the diffuseness of the original feeling then it is discarded and the centration - itineration process is repeated. If, on the other hand, it does result in at least some clarification then the conjunct is grafted onto the structure undergoing strain. Thus the first accommodation of structure takes place. Another feeling - aspect is then centrated and processed in a similar manner. If it produces some further clarification of the diffuse, unresolved feeling then it too is grafted onto the structure under strain and a check is made to determine whether the condition
of strain still exists. If the newly accommodated structure can now validly assimilate the decision then this part of the procedure is finalized. If not, then another feeling - aspect is centered and so on. In Gendlin's case he did not continue on to fully resolve the cognitive strain; it seems that he reached a point at which negative intrinsic motivation began to operate. It may be, for example, that the structure as amended up to this point no longer fitted comfortably into the system of his self-concept and so a reintegration of the system would have to take place before any further work was done on the structure.

Having accommodated the structure so as to facilitate valid assimilation of ecological information, the next step is to check to see whether the amended structure is fully compatible with its associated structures. If it is, then nothing further needs to be done on that particular problem. But if the amendments have created strain with other associated structures then this strain must now be resolved so that the system as a whole remains well integrated. This exercise involves a procedure similar to that utilized in resolving cognitive strain within a structure. This integrational procedure would continue until that particular system was a unified whole and "felt right."

An important point to note here is that Gendlin is proceeding towards a resolution of the cognitive strain in a series of fairly small steps. Now if this was a therapist-client situation and if the therapist offered an interpretation of Gendlin's uncomfortable feeling as soon as Gendlin mentioned it Gendlin may have experienced resistance to it. The interpretation would of course, be based on a knowledge of Gendlin's dynamics acquired during their relationship.

Such an interpretation might be:
"It seems to me that you've decided to become independent of your father and to no longer seek his advice. You feel, however, that he won't understand your reasons for doing this and so he will feel very hurt. So one effect of your decision will be to severely damage your relationship with him. You feel that he will be hurt as a result and that it is wrong for you to hurt him. What seems to concern you is that it will be you who are doing the hurting and thereby putting that nice, safe, warm, dependent feeling, which for you characterizes your relationship with your father, out of reach in the future. Thus it seems to me that you are uneasy and have some misgivings about becoming independent, for in so doing you will have to change your self-image as well as your image of your father. You will have to relate to him on a person-to-person basis rather than on a son-to-father basis and maybe you feel apprehensive about your ability to do this competently. Is it this that's really worrying you? Have you ever really talked with him? Are you sure that he won't understand? And anyway, is the break as sharp as you imagine it to be, or are you overreacting?"

Now let us presume that the interpretation is based on a correct insight. If it was presented to Gendlin in one piece, as above, he may have rejected the whole lot outright or he may have disagreed about some details and then rejected all or most of it. Such a rejection would occur because Gendlin's existing structures would probably not have been able to assimilate it, and the accommodation required would be so great that negative intrinsic motivation would be produced. As it is, Gendlin decided that he had done enough for one day and stopped well short of resolving his uncomfortable feeling.

Thus it can be seen that Piaget's model adequately accounts for the process of working through, which is basic to therapy.
5.3 The Relationship Factor In The Facilitation of Reflexive Thinking

The problem which arises in therapy is that although people may be able to observe their own thought processes when engaged in areas such as science, mathematics, and various job related mechanical skills, when it comes to the field of interpersonal interaction these people may be unaware of their own emotional reactions. They may be incapable of observing their feeling processes and to see emotionally laden situations from the point of view of another person. They could be characterized in this area of functioning by the term "egocentric" as Piaget uses it.

Piaget lays great stress on the fact that the person "frees himself from egocentrism with its inherent absolutism, lack of introspection, disinclination towards logical-causal justification etc., in the logical field not through experience with objects and events in the real world but through social interaction and the demands thus placed on him for the justification of his statements." Even in a recognized "objective" area this process has variable results, as Abercrombie (1969) reported. Here Piaget's model says nothing about the quality of the interpersonal relationship necessary for a therapeutic encounter, it merely specifies, in detail, the interactions that are necessary if a growth experience is to result. On this point, the research evidence cited in chapter three strongly suggests that the quality of the relationship, its degree of warmth, does influence the client's and therapist's willingness to center on a referent event and apply reflexive modes of thought to it in the manner described. Thus we saw that the placebo effect is dependent upon a relationship characterized by rapport, warmth, trust,
faith and empathy. This type of relationship acts as a non-specific therapeutic factor, and facilitates the specific effects of various therapeutic interventions.

Relating this to Piaget's theory, nonpossessive warmth and genuineness provide the interpersonal conditions which facilitate the person's development from an egocentric state, to one of awareness, by allowing him to focus reflexively on his behaviour and accommodate his schemes to reality, rather than react in a reflex, defensive, largely assimilative manner when attention is drawn to his behaviour, or to discrepancies between his behaviour and accepted social standards of behaviour or criteria of excellence.

An example of an interpersonal interaction which would have, as one outcome, the further development of both parties and of their self-awareness is:

There are two different human beings, A and B, with different values and attitudes $V_A$ and $V_B$, different overlays of education and experience, $E_A$ and $E_B$, securing their data, $D_A$ and $D_B$, about their external world, $R$, through different channels, $C_A$ and $C_B$. It is here assumed that at any particular moment of any particular conversation, it is the same external world that interests them both. Let us also assume here that, however distracted either may be by other events, at the time of their meeting they do in fact succeed in directing their individual attentions significantly to the particular business in hand. Their differences in values and attitudes and of past experience will endow each with different mental sets, $S_A$ and $S_B$. These, together with their different information channels will lead them to different interpretations, $I_A$ and $I_B$, of what the external world, $R$, may be. Another assumption, a very important one, is that both are making on honest effort to grasp better this underlying and objective reality.
Now person A, in trying to control or come to grips with reality R, has formed an impression, $I_A$, of it. In discussion he compares this with the impression, $I_B$, which Person B has formed of it. This comparison provides both A and B with an opportunity to learn, $I_{AB}$. The honest and open comparing and contrasting of $I_A$ with $I_B$ will soon lead back, if there is a discrepancy, either to R or to more personal elements E and V which may be causing the discrepancy. If $I_A$ and $I_B$ differ significantly, then either the data on which each is postulated differ, or the same data is being differently processed by the two different sets of mental resources, or both sets of factors differ. If the two sets of data differ, then a discussion about where they come from may be helpful; the two sets of communication channels may be compared and some instructive lessons may be learned. If the two mental sets, $S_A$ and $S_B$, differ it may be found on examination that this is due to differences between $E_A$ and $E_B$. Again, a discussion of these differences, their relevance to the current situation etc, may clarify the discrepancy and result in learning for both. Differences between $I_A$ and $I_B$ may also spring from differences between $V_A$ and $V_B$. In such a situation there may be complete agreement about the facts of R; what would differ would be the implications drawn from the facts for action aimed at either maintaining or changing the situation.

Such a discussion may modify the views of both A and B, although not necessarily to improve their correspondence with reality. The test of whether an improved correspondence with reality has, in fact, been achieved lies in action and feedback. Thus as a result of the interaction between our action on the world and review of our internal, predisposing mental schemata, we continually, little by little, improve and expand our awareness both of ourselves and of the world. Crucial to this process is feedback both as the "facts" or "objective data" in external reality against which we can measure the success of our actions and as to the interpretations which others infer from our behaviour. (Adapted from Revans 1971).
Thus in the ideal case we receive input from a number of the ecological systems within our environment, and, because we are honestly trying to come to grips with the situation we try to assimilate the input validly. When the input has been assimilated we, knowing that there is always the possibility that an invalid assimilation may have occurred unconsciously, check out our interpretation of the input, either verbally or by direct action. We then examine the feedback which we get and compare it with our initial interpretation. If we find the fit to be adequate we can continue with the interaction, if, on the other hand, we find a mismatch, then we have to examine the mismatch.

We may find that the mismatch raises no negative feelings in us. That is, a situation of positive intrinsic motivation exists and we feel drawn to solving the problem. Thus we will survey those of our cognitive structures which were activated by the input, and the input itself, and try to make such alterations to our structures as will enable us to more accurately assimilate the input. This is done in a series of successive approximations involving assimilation - accommodation - checking action - feedback loops until an adequate match exists between the sender's intended meaning and our interpretation of the input.

If we become aware of negative feelings in relation to the input and of a tendency to avoid or ignore the situation, then the mismatch between the input and our cognitive structures is such that it lies outside our limits of tolerance. This negative intrinsic case is most important from the point of view of psychopathology. Here the object or event is sufficiently similar to existing structures for it not to be considered irrelevant but the mismatch between the two is too great to be easily bridged. The usual way of coping with negative intrinsic motivation is
to react to the stimulus which seems to be causing the feeling in a self-protective, defensive way, rather than to reflect upon the input and our reactions to it with the aim of coping constructively with the reality event evoking our negative feelings. Now given an honest attempt by all concerned to come to grips with the situation, an environment will probably be created in which any individual's defensive reactions can be examined constructively. Unfortunately, as shown early in chapter three above, a facilitating environment rarely exists, with people generally being more concerned with getting their own way, with power and face saving, rather than with dealing constructively with any given problem situation. As a result, defensive reactions are the rule rather than the exception.
5.4 Defenses

Defenses can be viewed as systems of action schemas which a person uses in such a way as to minimise the need to accommodate existing structures to reality 'ailments'. This would be an invalid form of adaptation within Piaget's system, a form of adaptation which facilitates assimilation at the expense of accommodation and thus ensures the maintenance of the status quo. It is an anti-growth strategy.

Now assimilation and accommodation are two distinct modes of adapting to our environment, with the ideal mode consisting of an equilibrium between assimilation and accommodation. The two other possible modes of adaptation being a preponderance of assimilation or a preponderance of accommodation.

In discussing the modes of adaptation of organizations, Feibleman and Friend (1945) indicate that "The three dodges of the organization to survive are by tenacity, by elasticity, and by self-determination." These three dodges appear to be similar to Piaget's three modes of adaptation with tenacity being equivalent to a preponderance of assimilation, elasticity being equivalent to a preponderance of accommodation, and self-determination equivalent to a balanced use of assimilation and accommodation. The description which they give of the application of the three dodges is a very good illustration of the application of the three modes of adaptation.

"In order to illustrate the three dodges of the organization in response to the stimulus of the environment, we may take three examples which exist in the same general environment. The three examples are: a rock, some kelp, and a porpoise, and the environment is the ocean. The rock
neither gives nor interacts with the ocean any more than can be helped. Water wears it away and it does nothing to build itself back, and thus it relies merely upon its integrality to continue its existence. The rock therefore has taken the tenacious dodge. Although the kelp to some extent resists outside influences as does the rock, and although it is to some extent self-determinative, it relies mainly upon its elasticity to preserve its integrality. It allows itself to give and to yield to the conformations imposed upon it by the tides, the currents, etc., but it yet manages to interact with the ocean in such a manner as to preserve itself. It has taken the dodge of elasticity. Finally there is the porpoise which is able to control to a great extent its interactions with the medium in which it is bathed. It can go after food or not, it can swim against tide and current, it has an extrasurvival margin, i.e., its time and energy are not altogether exhausted in maintaining its existence. It has taken the dodge of self-determination.

"The dodges of tenacity and elasticity may seem to be at least as good as that of self-determination, in so far as mere continuance of existence is concerned. Indeed they may be better. But in terms of the perfect organization they have settled the problem of integrality at too low a level; they have compromised too soon. They have therefore no chance of ever becoming perfect. They can never grow in complexity and so their integrality has too little to integrate. Self-determination on the other hand is a dodge which seems indefinitely capable of improvement, and this dodge alone gives the opportunity for working toward the ideal.

"However, the self-determinative organization, by its very ability to grow, has to sacrifice a large amount of its integrality." The example given of the most integral of gross structures is a stone. That is, a simple (non-complex) unity. Thus it would appear that the self-
determining person, that is one using equal amounts of assimilation and accommodation is able to sacrifice a large amount of his integrality, whereas those using the dodges of tenacity and elasticity can't. On this point Laing (1965) writes.

"The individual, then, may experience his own being as real, alive, whole; as differentiated from the rest of the world in ordinary circumstances so clearly that his identity and autonomy are never in question; as a continuum in time; as having an inner consistency, substantiality, genuineness, and worth; as spatially coextensive with the body; and, usually, as having begun in or around birth and liable to extinction with death. He thus has a firm core of ontological security.

"This, however, may not be the case. The individual in the ordinary circumstances of living may feel more unreal than real; in a literal sense, more dead than alive; precariously differentiated from the rest of the world, so that his identity and autonomy are always in question. He may lack the experience of his own temporal continuity. He may not possess an over-riding sense of personal consistency or cohesiveness. He may feel more insubstantial than substantial, and unable to assume that the stuff he is made of is genuine, good, valuable. And he may feel his self as partially divorced from his body.

"It is, of course, inevitable that an individual whose experience of himself is of this order can no more live in a 'secure' world than he can be secure 'in himself'. The whole 'physiognomy' of his world will be correspondingly different from that of the individual whose sense of self is securely established in its health and validity. Relatedness to other persons will be seen to have a radically different significance and function. To anticipate, we can say that in the individual whose own
being is secure in this primary experiential sense, relatedness with others is potentially gratifying; whereas the ontologically insecure person is preoccupied with preserving rather than gratifying himself: the ordinary circumstances of living threaten his low threshold of security.

"If a position of primary ontological security has been reached, the ordinary circumstances of life do not afford a perpetual threat to one's own existence. If such a basis for living has not been reached, the ordinary circumstances of everyday life constitute a continual and deadly threat.

"Only if this is realized is it possible to understand how certain psychoses can develop.

"If the individual cannot take the realness, aliveness, autonomy, and identity of himself and others for granted, then he has to become absorbed in contriving ways of trying to be real, of keeping himself or others alive, of preserving his identity, in efforts, as he will often put it, to prevent himself losing his self. What are to most people everyday happenings, which are hardly noticed because they have no special significance, may become deeply significant in so far as they either contribute to the sustenance of the individual's being or threaten him with non-being. Such an individual, for whom the elements of the world are coming to have, or have come to have, a different hierarchy of significance from that of the ordinary person, is beginning, as we say, to 'live in a world of his own', or has already come to do so. It is not true to say, however, without careful qualification, that he is losing 'contact with' reality, and withdrawing into himself. External events no longer affect him in the same way as they do others: it is not that they affect him less; on the contrary, frequently they affect him more. It is frequently not the case that he is becoming 'indifferent' and 'withdrawn'. It may, however, be that the world of his experience comes to be one he can no longer
share with other people."

Thus he begins to exclude other people from his world. This process can continue until the person has cut himself off completely from others and from their world, a world which holds nothing but threat for him. This progressive constricting of awareness results in what is labelled a psychotic state.

As far as the development of awareness is concerned, Piaget indicates that the infant is born with certain reflex structures which function, in the very early stages, in a purely assimilatory manner. As environmental demands increase and the range of stimuli broadens, the infant is forced to accommodate its structures to reality ailments, to some extent at least. These accommodations are experienced as being very frustrating exercises. From this it would appear that the nature of the infant's environment in these early years of its life when it is learning how best to adapt to environmental forces, would have an important influence in determining which of the three dodges the child would adopt.

If the child generally experiences conditions of positive intrinsic motivation then he will develop a self-determining mode of adaptation (a balanced use of assimilation and accommodation). If he generally experiences conditions of negative intrinsic motivation then extrinsic motivation would be required to activate the child in the direction required by the significant others. If this extrinsic motivation was more often positive than negative, and if the negative intrinsic motivation was not too far beyond the child's threshold of cognitive strain, then, although he is likely to use a predominance of assimilation, he is also likely to be prepared to accommodate his structures to some extent. Although assimilation will be used relatively more often than accommodation, the
two themes represented in his identity would feel powerless in the face of social pressures from without, and powerless in the face of biological pressures from within. Both social and biological pressures would be considered independent variables, that is, variables that influence the behaviour of the person without themselves being influenced by him. As to the realm of action, activity level may be low to moderate, but more important than amount of activity is the introspective and objectively observable fact that activities are not chosen. There is little selectivity, it being immaterial to the person what if any activities he pursues. If there is any selectivity shown, it is in the direction of ensuring minimal expenditure of effort and decision making. The premorbid identity can be undermined, producing existential neurosis, by stresses such as threat of imminent death, social upheaval, and acute awareness of superficiality.

Here it seems we have a person who excessively accommodates or adapts his cognitive structures to the requirements or demands which the world imposes upon him. He fits in with the world.

Thus, from the descriptions given by Laing and Maddi, assimilation and accommodation (as described by Piaget) are in fact used by some people as a means of adaptation to anxiety (cognitive strain or negative intrinsic motivation). It also seems that the use of such a largely one-sided form of adaptation results in a far from adequate psychological development.

There are other means of protecting the self or ego from anxiety. These many well known defense mechanisms, some examples of which are: intellectualization, reaction formation, projection, regression, identification compensation, rationalization and displacement, fit Piaget's definition of a schema. That is,
they are organized totalities or underlying strategies which subsume a collection of distinct but similar action sequences. As such they can be dealt with within Piaget's model.

Armouring, (chronic muscular contractions) which develops as the somatic aspect of repression and always involves groups of muscles that form a functional unit (Baker 1967; Lower 1958; Reich 1945) and which is the basis of body-work therapies can also be viewed as a schema (see P175 and P195ff above). Thus these defences can also be dealt with within Piaget's system. A relationship between the physical and psychological defences can also be established by way of the action-image-schema sequence postulated within the system (175, 195ff above).

Other factors which influence an individual's attempts at adaptation are his bio-physiological system (e.g., physical health, psychosomatic standing, temperament, and somatic type; Thorne 1967), and his level of activity-passivity (Allports proactive-reactive distinction). Fiske and Maddi (1961) have developed an activation level theory in order to systematize the correlates of the latter dimension. They report that although, as far as the development of a characteristic mode of dealing with its environment is concerned, an infant's bio-physiological system is important in its influence on the nature of the transactions, it seems that the infants activation level is much more important. It also seems that characteristic activation level is influenced by cognitive factors, that is, that it is a schema as defined by Piaget.

Fiske and Maddi use Kleitman's (1939) work on customary levels of activation and the "cycle of existence" as starting points. They postulate the overall directionality of living as being a search for a match between actual and customary levels of activation. They assume that the coincidence of actual and customary levels of
activation is experienced as a state of well-being, whereas discrepancies between the two lead to greater degrees of negative affect the larger they get. It is to avoid the discomfort of negative affect that people attempt to reduce discrepancies between actual and customary levels of activation. Success in this attempt is experienced as positive affect. They also indicate that the customary level of activation can be both over and undershort by actual activation. Thus their position is very similar to the positive and negative intrinsic motivation derived from Piaget's theory and with Sarbin's conception of cognitive strain.

Fiske and Maddi do not consider the customary curve of activation to be present at birth, they see it as probably being formed out of experience. They do suggest, however, the possibility that genetic considerations, presently not well understood, may predispose the person to a customary curve of activation having a particular shape and height. But they consider the accumulated experience of particular levels of activation at particular times of the day to be the major formative influence on the characteristic curve of activation. So, the first importance of the environment for the person is as the major determinant of his characteristic curve of activation. This determination takes place sometime during childhood. Furthermore they state that it is the impact of early stimulation, not its content, that has a formative influence. Fiske and Maddi state that as experience accumulates, that is, as the stimulation patterns of successive days recur over and over again, the characteristic curve of activation begins to solidify. Once set, this curve tends not to change very much under ordinary circumstances. They state that this is because of the nature of the effects on personality and experience of the impetus to maintain activation at the characteristic level.
Thus a person's characteristic activation level together with his status on the augmenter-reducer dimension (Petrie 1967, see chapter three above) would have a significant influence upon the degree of cognitive strain which a particular person could deal with adequately. These indices could be used to determine any individuals' threshold levels and tolerance limits for cognitive strain. Thus if a person had a low characteristic level of activation and was an augmenter then he would be able to cope with relatively smaller discrepancies between his cognitive structures and ecological input than could another person who had the same low level but was a reducer. Since both characteristic activation level and the augmenter-reducer dimension seem to be mediated by cognitive structures, their functioning and development can be explained within the terms of Piaget's model. It would appear that augmenting or reducing has a straightforward defensive role. Characteristic level of activation, on the other hand, develops as a result of attempts by the child to adapt to the level of activation allowed him in his environment. It later takes on the status of a personality trait (schema) which itself can under certain conditions cause cognitive strain.
5.5 Reflexive Thinking and Therapy

Not all experiences of cognitive strain result in neurotic or psychotic behaviour. Taking a case in which a successful adjustment is made, how would a person functioning at a high level in both intellectual and interpersonal areas deal with an experience of cognitive strain. Bertrand Russell in his "The Conquest of Happiness" discusses his method for dealing with such situations.

"It is quite possible to overcome infantile suggestions of the unconscious and even to change the contents of the unconscious by employing the right kind of technique. Whenever you begin to feel remorse for an act which your reason tells you is not wicked, examine the causes of your feeling of remorse, and convince yourself in detail of their absurdity. Let your conscious beliefs be so vivid and so emphatic that they make an impression upon your unconscious strong enough to cope with the impressions made by your nurse or your mother when you were an infant. Do not be content with an alternation between moments of rationality and moments of irrationality. Look into the irrationality closely with a determination not to respect it and not to let it dominate you. Whenever it thrusts foolish thoughts or feelings into your consciousness, pull them up by the roots, examine them and reject them. Do not allow yourself to remain a vacillating creature, swayed half by reason and half by infantile folly......

"But if the rebellion is to be successful in bringing individual happiness and in enabling a man to live consistently by one standard, not to vacillate between two, it is necessary that he should think and feel deeply about what his reason tells him. Most men, when they have thrown off superficially the superstitions of their childhood, think that there is no more to be done. They do not realize that these superstitions are still lurking underground.
When a rational conviction has been arrived at, it is necessary to dwell upon it, to follow out its consequences, to search out in oneself whatever beliefs inconsistent with the new conviction might otherwise survive....What I suggest is that a man should make up his mind with emphasis as to what he rationally believes, and should never allow contrary irrational beliefs to pass unchallenged or obtain a hold over him, however brief. This is a question of reasoning with himself in those moments in which he is tempted to become infantile, but the reasoning, if it is sufficiently emphatic, may be very brief."

Now it is obvious that there are many people who are not capable of functioning at the high level required to perform the reflexive and integrative kinds of operations which Russell suggests are necessary for the maintenance of a stable equilibrium within the schemas effected by cognitive strain. For a person to be able to do what Russell suggests, he would have to be able to competently perform at the formal operational level upon subject matter relating to interpersonal relations and personal values by himself. The four steps involved in carrying out Russell's suggestions are:

1. That the person pull "the foolish thoughts and feelings up by the roots", that is, isolate and centrate, or focus upon them.

2. That he then examine them in great detail, conjointly with his value system both as it is and as he would like it to be. Then carry out the alterations and integrations which he finds necessary.

3. "When a rational conviction has been arrived at, it is necessary to dwell upon it, to follow out its consequences, to search out in oneself whatever beliefs inconsistent
with the new conviction might otherwise survive", with the aim of building a consistent and integrated belief system.

4. The person then must be on continual guard to make sure that the discarded values don't begin operating again. This he can only do by continually monitoring his emotional reactions and readjusting his values as he finds it necessary.

These appear to be steps followed in verbal psychotherapy where their implementation is, in the great majority of cases, far from easy.

Here we can have a look at the case of the ideal patient. In chapter three we saw that

- The ideal patient is intelligent, reasonably well educated, possesses a certain capacity for insight, the ability to communicate about his feelings, a more or less clear recognition that his difficulties are psychological, and a willingness to be helped via psychological treatment. He is not very "sick" to begin with.

- The successful patient spends much of his time in self-exploration, in attempting to understand and define his own beliefs, values, motives, and actions.

Here we have a picture of the successful patient as a person who generally functions at the formal operational level; who exhibits a minimum amount of cognitive strain; who is relatively non-egocentric in his interpersonal relations; that is, who can bring reflexive thought to bear on this general area of functioning at least, if not upon
the actual problem; who can center on the emotional aspects of his functioning and thus is capable of seeing the interdependence between thinking and feeling and whose schemes are generally well integrated. A therapist would find it relatively easy to facilitate movement from existing structures in such a way that a gradual accommodation would occur enabling the person to assimilate the problem event in a realistic way and still maintain an equilibrated system, probably at a higher level of complexity and integration.

The patient type once removed from the ideal can probably be characterized as follows:

1. A high level of cognitive strain.
2. He has a superficial, generalised verbalization of the problem.
3. His general level of functioning is at formal operations.
4. Exhibits a strong egocentrism in the area of interpersonal relations.
5. Rigid structures with a high degree of assimilation.
6. Structures in the immediate problem area have a narrowed field of application.
7. Itineration between data has been reduced.

Now within therapy it is the therapist's task to encourage this person to indulge in reflexive thought. Because of the person's general facility with formal operational thinking, together with his inability to apply reflexive thought to his own interpersonal functioning, and the negative emotional value this area has for him, the person will tend to indulge in generalizations rather than attempting to survey the problem field in detail. Slowly, and to the extent that the therapist is able to reduce the feeling of cognitive strain, (negative intrinsic motivation) and substitute positive intrinsic motivation by focussing the
person's attention on assimilable events and encouraging accommodation of structure, the person becomes better able to center on his reactions to various situations. As he centers on the basic data, on the pre-operational image (if the basic data was at the level of sensori-motor representation only, some acting out, role playing, psychodrama or similar activity would be necessary in order to obtain at least a pre-operational re-presentation of the event), and operates on it (e.g., operations of abstraction, classification, comparing, contrasting, etc.) he begins to find that it has implications in many areas, that accommodating one structure to the data has necessitated the accommodation of a number of other structures. In this way the meaning of the original image changes and with it the emotions which the person experiences. As the person examines a series of structures, integrates them, his feelings about himself and about the object or event would change.

If the person's defenses (action schemes set into operation by certain cues which remove the necessity of accommodating existing structures to the demands of 'reality') were such that there were many isolated (unintegrated) images around, then an examination of his defenses, a focusing on the actions involved, would probably bring these back to awareness, and by operating on them (Piaget's 4 step process plus concrete and formal operations) he would be able to integrate the images into existing structures and examine the various relationships between structures.

If the person's defenses were so strong that pre-operational images of many events had not been formed but all that occurred was a sensori-motor representation, or if the image was such that the emotional aspect was not included or if even the sensori-motor aspect of the person's reaction to an event was not admitted to awareness
then an examination of the defenses in similar situations would lead to "acting out" enabling the person to form a complete pre-operational image and then apply concrete and formal operations to it. The "acting out" is possible because, as pointed out in chapter three (Maddi 1972) "stimulation not permitted to pass (on to the central nervous system to be matched against the template existing in memory) would then be unconscious because it was not in the brain, even though in the organism at the level of sense organs."

Thus the important thing is to be able to evoke and center on the sensori-motor and / or pre-operational representation of an event, then to apply the 4-stage process together with concrete and formal operations to the image, then follow through with a readjustment and reintegration of structure.

The last aspect is important because conflict between schemas; a number of broadly similar schemas; or a few very general undifferentiated schemas; may result in an inability to appropriately classify information and thus lead to the person making inappropriate inferences and so taking inappropriate actions with consequent further cognitive strain.

This process leads to insight. That is, the person by carrying out the procedures described above becomes aware of relationships between various aspects of actions or schemas by examining their characteristics from many other points of view and in conjunction with many other actions and schemas. The insight initially is not experienced as a fact by itself. At the moment it is conceptualized it is experienced as something that follows from the characteristics of the events under consideration. It is usually the result of formal operations and so is a second order generalization. Once this
insight is formulated the person tends to focus on it. He has found an answer, or at least a possible solution. Unfortunately for him, Piaget indicates that his work is only partially done. Not only does this superscheme have to be integrated into higher level and other associated structures but the establishment of a superschema of this type does not have an automatic effect on lower order schemas and therefore on action. Pascual-Leone (1970) gives the following warning "Note that for any ordinarily learned superscheme i.e., for super-schemas which have not been overlearned, C.F. Mandler, 1962) the actual use of its subroutines requires the simultaneous and/or serial activation of the corresponding (subordinate) schemas stored elsewhere in the repertoire." A long process of integration must now follow all the way down to the sensory-motor level if action is to be effected. (This, of course, is the opposite of what has to be done in the case of behaviour therapy where we start at the level of sensori-motor change and have to move up the scale if we wish the changes to become integrated into existing structures.)

The person now has to use his self-awareness and his newly learned skill of reflexive thought to continually monitor his actions, examine them in the light of his "insight" thus providing himself with continuous feedback (knowledge of results Annett 1969) and in this way alter his behaviour (amend his sensori-motor schemas) in line with his generalized insight superschema and other higher level and associated structures. This in fact is the real test of his self-awareness and of his skill at reflexive thinking, because this process has to take place while he is interacting if it is to be of maximum benefit to the person in providing him initially at least, with continuous feedback. Thus the person now has to examine the discrepancy between his actions as performed and his actions as insight indicates that they should have been

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performed. He then has to accommodate existing sensori-
motor schemas (and related higher schemas) and proceed
again, continuing this process until the outcome of
action satisfactorily matches the insight superscheme.
Here we have the last aspect of Russell's exhortation
"Most men when they have thrown off superficially the
superstitions of their childhood, think that there is
no more to be done. They do not realize that these
superstitions are still lurking underground. When a
rational conviction has been arrived at, it is necessary
to dwell upon it, to follow out its consequences, to
search out in oneself whatever beliefs inconsistent with
the new conviction might otherwise survive."

There is of course the possibility of a person
who has achieved accurate insight coming to therapy
because the insight of itself, has made no difference to
behaviour. Or a person in therapy may block when on the
verge of formulating the insight, possibly because he
may be unable to accept the implications involved. Here
a careful scrutiny of other structures and of the general
level of integration may be of assistance.

A real problem arises when the person seeking
therapy has a level of cognitive functioning lower than that
of formal operations, or if there is a large component
of concrete or preoperational functioning apparent. In
such a case it would appear that, to the extent that
second order generalizations or theoretical constructs
are used in interpreting client varbalizations, or in
any other way in the therapeutic interaction, then such
therapy techniques would not be very effective because much
of this content would not be assimilable and thus would
have little meaning for the person, except possibly to
increase cognitive strain. Since a person at the concrete
operational level is still tied to a large extent to what
is before him he would find it difficult to generalise at
the level required to achieve insight. Thus the therapist would have to accommodate himself to the situation and work within its constraints.

For example Klein (1950), by observing children at play (assimilation with little accommodation, play being used as a substitute for adult verbal association) was able to analyse unconscious activity (schemas) in children as young as two years and nine months of age. Fantasies from even earlier ages became apparent in children's play, and Klein found that if a child could be helped to verbalize his fantasies he could come to terms with some of the conflicts which were troubling him.

It is important to note here that, in the case of individuals characteristically functioning below the level of formal operations in their general adaptation to their environment, rather than in a horizontal décalage, it is the therapist, functioning at the level of formal operations, who must look for, and find, the patterns and the cause-effect relationships which underlie the client's behaviour, and so develop an adequate therapeutic programme. If the client is functioning at the level of animism, analogy or empiricism then any solutions to his problems which he arrives at will be at these levels and so are unlikely to be adequate. In such a situation only the therapist will be able to develop an adequate solution to the problem by utilizing action under design, together with the use of feedback.

One of the important constraints which could lead to frustration in a formal operational thinker, i.e., the therapist, is the many horizontal décalages which are a feature of the concrete operational level of functioning. The client at this level may learn how to deal with a particular problem by applying a given set of techniques to it but he probably will not be able to apply the same or very similar techniques to a slightly different problem or the same type of problem in relation to
another person. He would have to repeat the steps of learning about the problem all over again. This is a characteristic of action under empiricism which is a result of the fact that the client, at this level of cognitive functioning, is incapable of learning and applying a general rule.

A similar situation should theoretically occur in the case of a client whose general level of functioning is formal operational but who functions at a concrete operational level (or lower) in the general area of interpersonal relations, or whose belief and value systems are structured at these lower levels. The advantage here is that the client may, given the right interpersonal environment, learn to apply the higher level operations to this area in a relatively short time, that is, before the therapist begins to feel and show his frustration.

It was pointed out above that action schemas are not automatically activated when higher order schemas are activated, but rather, that if action is to result from the activation of higher order superschemes then facilitative (action) schemes have to be activated separately, either serially or concomitantly with the superschemes. Thus an explanation consistent with Piaget's model would be that in behaviour therapy the patient accommodates his structures to the stimuli and thus changes them to reflect reality more accurately. Therapy is effective, and the effects generalise, in proportion to the extent that the information is integrated and schemas allowed to interact and influence each other. Thus instead of automatically assimilating information to existing schemas the patient, as a result of therapy, changes his schemas to more accurately reflect the real situation. On this point the research cited in chapter one on behaviour therapy and other uses of overt behaviour in therapy indicated that:
Action is mediated by central cognitive processes, and
the taking of action, as long as it is reflected upon and examined, also leads to constructive therapeutic behaviour change.

**CONCLUSION**

From the review of research findings on therapy carried out in chapter three it seems that self-reflection is the only necessary condition required for successful therapeutic behaviour change. Furthermore, it seems that the relationship factors discussed play only a facilitative role with respect to self-reflection. The need for their presence seems to be dependant upon the etiology of the difficulty causing cognitive strain. Thus under some circumstances self-reflection alone may be both a necessary and a sufficient condition for therapeutic change to occur, whereas in other circumstances some of the facilitating conditions may have to be present before the client will allow himself to reflect upon his behaviour. The degree of cognitive strain experienced by the client seems to be a crucial factor which must be taken into account throughout a therapeutic encounter.

In chapter one we saw that, despite the wide ranging differences in theory and therapeutic procedure which seem to be stressed by the various schools of therapy discussed, at a metatheoretical level they have certain basic operational themes in common. Thus, although at a content level of analysis there are important philosophical differences relating to the nature of man which are reflected in therapeutic methodology, nevertheless, as was shown, the various methods have a similar underlying formal structure; that is, at a meta-theoretical level, they all set out to do basically the same thing. These similarities lie in the operations (in Piaget's sense of the word) which the client is asked to perform during therapy. It
was shown that the operations involved fall into three categories:

1. The process of self-reflection whereby the client becomes aware of his own emotions and behaviours, especially those which contribute to his "problem". This is achieved by having the client examine, in various ways and in some detail, specific problem situations.

2. Encouraging a realistic adaptation to the environment by means of therapist feedback and/or the continual reality testing of perceptions and expectations both of himself and of the environment. (ie. a balanced use of assimilation - accommodation).

3. Continual efforts on the part of the therapist to keep the client's level of anxiety (negative intrinsic motivation) within those limits which the client feels he can tolerate.

The data in chapters two and three indicates that client self-reflection is encouraged by means of:

1. Accurate empathic understanding,
2. Concrete confrontation, and
3. The "working-through" process.

Now it has been shown in this chapter that the process of self-reflection, including the three modes identified above can be understood in terms of Piaget's model. It was also shown that the effectiveness of these modes of self-reflection can be accounted for in terms of the rules governing schema formation and change.

The review of the literature carried out indicated that the conditions which facilitate the development of self-reflection are:

1. Genuineness (the absence of defensiveness and phoniness), and
2. Non-possessive warmth (an acceptance of and respect for the client).
Both of these attitudes on the part of the therapist help to reduce the amount of anxiety (cognitive strain) experienced by the client, and in this way facilitate the production by the client of more and more anxiety laden material by means of self-reflection.

Another important factor in determining the degree to which the therapist-client interaction will be facilitative of therapeutic behaviour change and self-reflection on the part of the client (and which was also discussed in chapter three) is the degree to which client and therapist expectations match. If the degree of mismatch is such that an intolerable amount of cognitive strain is experienced by either or both then the prognosis for a successful therapeutic outcome is poor. The data reviewed indicates that mismatch between therapist and client expectations can occur in a number of ways, for example:

. It can occur as a result of differences in socioeconomic background.
. It can occur as a result of a lack of interest on the part of the therapist in the client's presenting symptoms, the client's personality, or the therapeutic technique(s) to be used.
. It can occur as a result of a lack of personal attraction on the part of the client for the therapist. Therapists rated high on interpersonal attraction by their clients tended to be more successful in producing therapeutic change than those who were rated as less attractive. This seemed to be because clients were more open to their influence and so more willing to indulge in self-reflection.
. It can occur as a result of a feeling by the client that he is being pressured. If a client
believes, rightly or wrongly, that his freedom of choice and/or action in a particular matter is being interfered with by the therapist then he is likely to resist therapist influence in that and possibly other matters.

As expectations are cognitive structures these aspects of the therapeutic relationship can also be conceptualized in terms of Piaget's model.

Now therapist-client interaction can be viewed from the point of view of Piaget's model as a particular class of individual - environment transactions. These interactions, like any other class of individual environment transactions, must meet certain minimum criteria if valid adaptive cognitive change is to occur in the client. These criteria, with an example, are discussed at pp226-230 and 246-256. Briefly, for valid adaptation to occur (ie. for the client to learn to use the dodge of self-determination and give up the use of invalid forms of adaptation) there must be social interaction aimed at developing self-reflection. The more that such social interaction is characterized by honesty and openness to experience the more successful the adaptation is likely to be. So any transaction between therapist and client which is thus characterized and which also adheres to the rules of schema development and change should, according to the model, be facilitative of "healthy" cognitive change in that it would create positive intrinsic motivation. If these criteria are not met then the transaction would result in negative intrinsic motivation in the client and so lead to an unbalanced form of adaptation. So, although the model does not specify a list of facilitative client-therapist transactions, it does specify a set of criteria by means of which it can be determined whether or not any particular transaction belongs to the class of positive change facilitating transactions.
From the evidence presented above it would appear that Piaget's model of intellectual development provides a framework in terms of which both therapeutic change within the client and client-therapist transactions can be conceptualized and so understood. It has also been shown that (a) the aim of at least those therapies reviewed in chapter one is the modification of the client's cognitive structures (schemas) in the direction which each therapeutic orientation considers to be ideal (b) the formal or structural characteristics of the methods used by the various therapies to achieve this aim are very similar and (c) that these structural characteristics can be conceptualized in terms of Piagetian principles. Thus it seems that Piaget's model provides a conceptual system in terms of which the process of psychotherapy can be understood. Although more work remains to be done on it, I think that Piaget's model has much to offer in integrating and further expanding research in the fields of psychotherapy and psychopathology.

The model also characterizes man as an open system and provides a rationale for the core characteristics of negative entropy, feedback, homeostasis, differentiation and equifinality which are shared by all open systems. Extending Von Bertalanffy's (1950) comments regarding biology to psychotherapy, "In biology, the nature of the open system is at the basis of fundamental life phenomena and this conception seems to point the direction and pave the way for biology to become an exact science", we may have a conception here which "points the direction and paves the way" for psychotherapy to become an exact science.
6 - GENERAL SUMMARY AND CONCLUSIONS

Much information has been offered in this paper indicating that an individual's emotions, behaviour and thinking are mediated by cognitive structures. Particularly in the case of emotions, it is important to realise that they are secondary constructions and not primary processes. It seems that these structures develop from a small number of reflex organizations with which the individual is born. Development being a direct result of social and environmental interaction. The dynamics of these cognitive systems was described in terms of Piaget's model.

An important aspect stressed in this paper is the fact that the individual plays an active role in organizing the information presented to him. It seems that what is perceived depends not only on what is being looked at, but also on the state of the perceiver and hence according to which schemata he happens to be using. Here a distinction must be drawn between descriptive statements and inferences. It is important to realise that it is inferences (not descriptions) that lead to action. Thus a person needs to know what predisposing cognitive structures (schemata) or library of conceptual subroutines he carries around ready to call into action. Some of the schemata which influence his interactions with his world are: His degree of willingness to take risks within the problem field; his system of beliefs and values; the degree of reliance his is willing to place on various sources of information; the payoffs, rewards or goals which he is seeking and his motives for seeking them; knowledge of how all of these factors influence his actions; knowledge of how he believes he should act; knowledge of how he does actually behave; knowledge of the discrepancy between the
last two factors; knowledge of his self and ideal-self images; knowledge of the sacrifices which he considers to be commensurate with achieving his goals.

It seems that an important factor in the etiology of psychopathology is the tendency that people have to ignore or reject what does not fit in with the expected or hoped for pattern. Thus psychotherapy is largely concerned with autistic (egocentric) thinking as it interferes with reality-adjusted thinking. The aim seems to be to facilitate the client's attempts at bringing the autistic elements of his thinking under conscious scrutiny. This is done by the therapist encouraging the client to talk and act in such a way as to focus on these autistic elements thereby enabling him to discover and test the schemata which he is using.

It also seems that an important requirement of any person in therapy is a frame of reference and a language facility for describing and communicating the subjective consciousness of personal experience and action. The person who wishes to examine reality must first ask "What view of the me-here-and-now is appropriate to using any of my knowledge and schemata." It is also stressed in the paper that cognitive functioning is basic to the therapeutic process. The development of self-reflective thought is the means by which the development of awareness, both of self and of the environment occurs. Thus the reflection on and examination of experiences and feelings are important in therapy, as are the cognitive symbolising processes without which these activities would be impossible. The interaction of these functions provides the individual with a conceptual framework which allows him to organize, and make sense of, his behaviour. All of this grows out of a focus on the individual's actions, with 'actions' understood in Piaget's sense of the term.
Thus in therapy the client initially produces material, either spoken, behavioural or emotional. He is then led by the therapist to reflect on this material, especially that which he is currently exhibiting. The aim of this seems to be to bring to the client's attention discrepancies which may exist between his overt and covert actions, and to develop in him the ability to act as his own observer. As a result of these self-observations, the client becomes able to state much more specifically and concretely just what it is that is bothering him. In doing this he is guided by a sense of whether his more specific formulations feel right when compared with his original, much more vague, feelings. As these more specific statements are developed, the client concurrently develops his cognitive framework. In many cases, as this cognitive framework develops, the client finds a solution to his problem. In other cases the client needs further assistance in developing a specific course of action, reflecting upon this action etc., back through the cycle. An important outcome of this cycle is a realization by the client that action arises out of some previous state of affairs and creates fresh situations in the future.

An important limiting factor as far as any structural alteration is concerned is that change will occur only if it is compatible with the client's existing schemata. Thus effective change usually involves a series of steps as a result of which the client's existing structures are 'shaped' or modified so as to ultimately be capable of incorporating the required information or producing the required adaptive actions. Growth enhancing structural change (accommodation) can occur only if discrepant ecological information is presented in validly assimilable amounts.
It would appear therefore that any therapist behaviour which has the effect of engaging the client in self-exploration will result in personality change. This can be either growth enhancing (facilitating the utilization of equal amounts of assimilation and accommodation - using the dodge of self-determination) or growth defeating (causing the client to use either the dodge of tenacity or of elasticity, depending upon which of them is his habitual mode of relating to his environment.) The client's reaction to input is dependent upon his interpretation of it.

Thus it seems that self-reflection and its concomitant, developing awareness both of self and of the environment, are the only necessary conditions for producing therapeutic change. Other factors contribute to their success and facilitate the client's implementation of actions which will result in his application of these growth enhancing conditions.

It is interesting to note that the conclusions reached in this paper are substantially similar to those reported by Lieberman, Yalom and Miles (1973) in their study of therapeutic groups entitled "Encounter Groups: First Facts." A summary of their findings is reported in the introduction to this paper.
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