T H E   P R O C E S S   O F   T H E R A P Y:

A Cognitive Approach

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.

C O N T E N T S

ABSTRACT

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 practioners 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 practioners 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 practioners.

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 then 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. Never-
theless 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 practioners
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 practioners 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 dem-
onstrates 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 under-
standing 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 experie-
nce 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 parti-
cipant 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 <u>reflection</u> 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, <u>thoughtful</u> stance toward what is
occuring 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 <u>think</u> 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.

2 - TWELVE APPROACHES TO THERAPY

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
practioners 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 resistances the patient brings up which contravene the treatment process.

- From the patients 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 resistances. The resistances 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 resistances 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 experi-
  ences 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 child-
hood 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 trans-
ferrance (negative transferrance also occurs), it seems
to be a compulsive act. It happens regularly in psychana-
lysis (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 them-
selves 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 experien-
ces 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 occuring.

"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 situat-
ions 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 intergrated 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 AT PAGES 16&17
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 mean-ingful and more whole."

Again, the comments made concerning the under-lying process of therapy in the case of Psychoanalysis AT PAGES 16 & 17 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-reflection occurs and the patient learns a conceptual framework which he uses to organise and give meaning to his behaviour. Also the therapeutic relation-ship 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 unders-
tanding) 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 intellec-
tual 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 psychoana-
lysis 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:

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

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

> . 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.

> . 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 facili-
tating 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 confront-
ation, 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 (committment) 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 situa-
tion; 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 ommitted when
their decision-making doesn't sit right...feel comfortable
to them."

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-consc-
  ious 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 experien-
  cing. 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) occuring
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 portra-
yed 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 individu-
al 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 experiental 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.

2.9. Experiential Psychotherapy - Attachment

Quoted from Gendlin (1971).

"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 one. Let yourself feel "all
that" for a moment.

2) Without deciding what is most important, ask your-
self 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 remem-
bered? 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 clari-
fying 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 glad-
ness 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, obvi-
ously 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 persons 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 occuring 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 persons 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 accom-
panied 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 it's 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 experi-
ence 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 integrati-
onal terms.

. Integration is defined as the level of organization
at which the organism is able to mobilize all it's
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 suffici-
   ent condition for successful outcome.

. The theoretical framework in which the patient's
   problems are cast is derived from experimently deduced
   "law of learning" which have led directly to thera-
   peutic 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), <u>when</u> they occur
and <u>what</u> elicits the unadaptive behaviour. The in-
formation 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 interper-
sonal 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 under-
  standing 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 import-
ant 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 feed back]
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 practioners 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 equivalance 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-instruc-tion, 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 physiologi-cal 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 condi-
tion 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 extin-
ction, but no systematic relaxation training or counter
conditioning.

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 experimen-
tal 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 desensi-
tization 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 dese-
nsitization 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 simulus 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 experie-
nces. 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 provi-
ding, 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 essentia-
lly 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, <u>at a maximum</u>, 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 function-
ing is inadequate." [They consider level 3 as represen-
ting 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 Jongeward (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 identi-fication 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 elses
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 suffici- ent 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 inclu- ding 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
improvished 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 eidectic 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 occurrances 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 even being aware of doing so. Thus Abercombie (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 challanged 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 daren'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 the 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 cla-
ssifying 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 resistence to change.
"An example was frequently provided in the discussion on
classfication, 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 preconcep-
tions. 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 ambi-
guity, 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 impor-
tance. 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 media-
ting 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 <u>an item of
generalized information</u> and all subsequent reactions depend
more on the <u>system</u> it is taken into, than on its physical
properties.

"The complex and indirect nature of temporary links in man means <u>a considerable modification in all their</u> laws of evolution.

"Whereas temporary links evolve gradually in animals, in man they areasarule 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 function-
al 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 develop-
ment of personality has not been validated. It is interes-
ting 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 psychoana-
lysts, 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 occurrance depends heavily upon the meaning
it has for us; upon what we see as being appropriate or
inappropriate behaviour in respect of such an occurrance;
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 occurrance 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 interna-
lly. It would also appear that the physiological feedback
system is such that it either cannot or does not discrimi-
nate 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 impossi-
ble 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 after-
ward 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 its artillery observers to
utilize their capacities to the utmost. The observers
must always call the position of a shot as quickly as possi-
ble - 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 per-
formance 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 beha-
viour. 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 cogni-
tive 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 irrelevent 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 pre-
supposes 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 multifa-
rious 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 signaller 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 discrepencies result in the person experiencing
severe cognitive strain. (The anxiety is situational
if its occurance 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 opera-
tional 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 theo-
rizes 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 ± 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 out-patients 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. Further-more 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 parti- cularly alert to finding and stamping out the evil that he denies in himself. Similarly, in the case of projec- tion, 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 sensiti- zation 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 affe-
cted 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 less easily recogni-
zable 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 accompany-
ing 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 equiva-
lent 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 hyperaes-
    thesia.   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 extro-
version, 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 subjec-
tive evidence alone - that augmenters and reducers may
differ not so much in the way their nervous systems
trasmit stimulus energy but in the way they choose to
observe and report their sensory experiences. The neuro-
physiological evidence places the source of these per-
vasive 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 interpretaion.

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 behav-
iours, 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 distur-
bance verbally but reveal it autonomically, 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 exisiting 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, impor-
tance, 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 ecolo-
gical 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 considera-
bly 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 thera-
pist 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 inten-
sity 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 remedi-
ed 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 inter-
nalizes 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 malad-
justed group of male, hospitalized vetŗans 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, pschopathic 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 conclu-
ded 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 unfavou-
rable 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 favoura-
ble 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. Similar-
ly, 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 indivdual 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 superi-
or 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 individuals self-concept. He found that the greater the accurary of an individual's self-perception the less perceptual defense the individual used against threatening stimuli. Furthermore, judges' estimates of each individuals 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 individuals 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 individuals 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 incon-
sistent 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 "dissa-
tisfied" 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 (un)realistically 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 behaviour which will either mitigate or
control them. These people have probably experienced
very little straight forward positive regard from signi-
ficant 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 embarrasingly
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 manouvers in order to minimise it.

Sarbin's (1964) second condition for the
generation of cognitive strain seems to provide an ade-
quate 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 effected 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 consti-
tutes 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
interdependance 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 posi-
tive 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 indivi-
duals ability to achieve, nevertheless have an effect
upon that individuals 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 expla-
nation 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 (GoinYamamoto 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 infl-
uence. 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 prestructing 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 then 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 through-
out 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 out-
come 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, socioeco-
mic 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 characteris-
tics. 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, socio-
economic 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 under-
lying causal factor in its success.

He defines a placebo as any therapy, or compo-
nent 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 psychochemo-
therapy, 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,
committment, 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 worth-
lessness, 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 psychogical 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 <u>nonphony</u>, <u>nondefensive</u> and authentic or <u>genuine</u> 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 <u>nonpossessive warmth</u> for the client.

3. An effective therapist is able to understand, be with, grasp the meaning of, or have a high degree of <u>accurate empathic understanding</u> 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 helpers 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 some-
one 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 adversly 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 free-
dom 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 instrumen-
  al 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 determing 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 contro-
lling 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 condi-
tionality, 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 inaccurary 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 empa-
thy 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 is 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 behaviours. 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 psychonoxious 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 discrepencies 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 con-
frontation 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 emotion-
ally 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 meaning-
ful 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 reorga-
nizing 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 envolved 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 experien-
ces 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 discrimina-
tive 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
insighted-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 occurrance of symptom substitution.

From this it would appear that, as far as
observable behaviour change is concerned, both the non-
specific 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 discrepency 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 categorise it, would cause cognitive strain.

Cognitive strain seems to occur under the following conditions:

a) When we attempt of 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 seems
to be more truely representitive 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 ± 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 psycho-pathology. 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. 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 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 deve-
lop 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, contri-
butary 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 suffici-
ent 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 practionners 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 adversly effect 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 only 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 the-
rapy, 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 para-
llel 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. How-
ever, 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 practises 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 intergrating 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 equilibra. 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 individuals 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

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

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

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

. Stability, or the capacity of the system to
reassume a state of equilibrium after under-
going an accommodation.

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

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

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

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

. 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 environ-
ment. 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 grammati-
cal 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 <u>content</u> 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 <u>cognitive structures</u> 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
absense of environmental stimulation. Systems of meanings
are constantly becoming reorganised internally and intergra-
ted 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 reorgani-
zations 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 perfor-
med 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 sequen-
ces 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 structu-
rally 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 equilibra. 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 equilibrium 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 coor-
dination 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, discinclination 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, or 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 effortlesness, 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. Cogni-
tion 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.
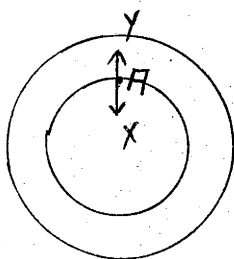
A diagram will make the thing
comprehensible. Let the organism
be represented by a small circle
inscribed in a large circle which
corresponds to the surrounding
universe. The meeting between
the organism and the environment takes place at point A
and at all analogous points, which are simultaneously 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 consci-
ousness. But from this point of junction and differen-
tiation, A, knowledge proceeds along two complementory
roads. By virtue of the fact that all knowledge is
simultaneously accommodation to the object and assimila-
tion 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 ($\longrightarrow$Y) and the acquisition of consciousness of
the intellectual operation itself ($\longrightarrow$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 articula-
tion 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 extensive-
ly 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, reversability 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 stimulus 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 then 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 (implica-
tion, 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.

Attachment to 4.3.4. Periods of Cognitive Development

Extract from Revans (1971)

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 persecu-
tion 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 prag-
matic 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 parti-
culars 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 signifi-
cance 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, 8½ 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 occurrance of similar cognitive developments at different ages across the ontogenetic span. Two general classes of such occurrances 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 seperate
        developments up to a point and then unite
        to form more complex and interlocking relation-
        ships 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 capa-
ble 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. subordi-
nate 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 activiation 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 equili-
bration 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-operatio-
nal and formal) and whose attributes as systems are
describable in equilibrium terms. Although the equilibra-
tion 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
counteracted 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 reversable 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 preceeding 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 culmunating 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 proba-
bilistic 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 interac-
tions 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, inter-personal 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 secon-
dary 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 conceptuali-
zations 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 perpuate 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
fundamently 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 formu-
lated 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 occurrance. 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 décalages 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 décalage). 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 décalage).

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 prepondrance 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 assimi-
lable 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 anothers 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 discrepencies between these high
level structures and actual behaviour. Thus overt behavi-
our 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 experien-
cing 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 construc-
tive 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 betwen data)

    c) A rigid, inflexable 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 hesita-
       tion 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 appli-
cation 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 intras-
chema 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 construct-
  ive 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 conceptua-
    lize, 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" descri-
bes 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 discre-
pancy 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 labled aspect accounts for. This is done by itinerating between the original feeling and conjunct of feeling aspect - construct. If the labled 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 struc-
ture 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 intergrational 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, mathe-
matics, 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, L_{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 to 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 adequ-
ate 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 assimi-
lation - 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 impor-
tant 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 environ-
ment will probably be created in which any individual's
defensive reactions can be examined constructively. Unfor-
tunately, 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 prepondrance of assimilation or a prepondrance 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 prepondrance of assimilation, elasticity being equivalent to a prepondrance 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 tanacious 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 on 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 improve-
ment, and this dodge alone gives the apportunity 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; where-
as 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 contri-
bute 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 environ-
mental 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 accommo-
dations 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 experien-
ces 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 accommo-
date 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 super-ficiality."

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: intellectualiza-tion, reaction formation, projection, regression, identification compensation, rationalization and dis-placement, 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 relation-
ship 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, tempera-
ment, 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 direction-
ality 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 indicies 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 then 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 develop-
ment can be explained within the terms of Piaget's
model. It would appear that augmenting or reducing
has a straight forward 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.

Note: Pages 240 - 245 have
been deleted

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 child-
hood, 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 em-
phasis 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 the 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 complex-
ity 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 verba-
   lization 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 attemp-
ting 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-presenta-
tion 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 structu-
res and 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 exis-
ting 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 opera-
tions 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 intergrated into higher level and other
associated structures but the establishment of a super-
schema 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 discrepency between his actions as performed and his
actions as insight indicates that they should have been

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 associa-
tion) 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,
ie., 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 diffe-
rent 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 through-
out 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 similar-
ities 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:

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

- Accurate empathic understanding,
- Concrete confrontation, and
- 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 develop-
ment of self-reflection are:

- Genuineness (the absense of defensiveness and
  phoniness), and
- 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 environ-
ment 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 motiva-
tion. 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 Piagentian 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 intergrating 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. Particular-
ly 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 environ-
mental 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 struc-
tures (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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