CAN A TEACHING APPROACH BE THERAPEUTIC?

by

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CAN A TEACHING APPROACH BE THERAPEUTIC?

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The educational techniques of Caleb Gattegno, his basic philosophy known as 'The Subordination of Teaching to Learning' and its related methods, are predicated upon many of the same assumptions as found in psychotherapeutic work. The success of Gattegno's techniques may be seen as a function of the way in which his methods address the primary processes of learner development.

After a brief overview of Gattegno's primary educational philosophy and the related approaches to specific subjects - mathematics, reading and foreign languages - the processes of early infant development are explored, and possible failures that may hinder cognitive and emotional development are examined. Analogies are drawn between good parenting and good teaching, and between psychotherapeutic rehabilitation of emotionally damaged children and the educational nurturing and reparation of intellectually thwarted children.

The infant's early perceptual organization and his gradually developing cognitive awareness is seen to have a parallel in the student learner, and Gattegno's lesson organizations for teaching foreign languages are shown to be patterned according to this assumption. Positive teaching practices that are seen to use the same qualities displayed by the average good mother towards her child in the initial developmental stages are shown to be essential qualities needed in teachers in all subsequent learning experiences, qualities which Gattegno's methods enhance. Just as the child's resulting ability or inability to play is a good measure of these nurturing traits in both mother and teacher, so the teaching environment established by Gattegno is seen to be essentially playful in nature.

Phenomenological and behaviorist approaches to learning, and their consequences for the classroom are contrasted and Gattegno's use of Gestalt psychology is discussed. The gestalt concept of figure/ground perceptual organization finds parallels in Gattegno's instructional techniques and these in turn are seen as similar to meditative frames of mind in the way they facilitate transformation and change. Further, Gattegno's way of tailoring instruction to student need, because it uses complete gestalts of experience, is accessible to more than a cognitive level.

Just as healing or reparation, as explicated by Melanie Klein, Margaret Mahler and R.D. Laing, is an essential step and goal in psychotherapy, Gattegno's lesson presentation style replicates in the educational environment, those conditions which precipitate a healing experience.

Finally, specific examples of Gattegno's teaching approaches are offered as concrete evidence of the theories proposed, and future avenues of study for furthering an understanding of holistic and healing educative processes are suggested.

"All the humans, like the honey bee...
are pre-programmed with...intuition,
curiosity, hunger, thirst, and an urge
to demonstrate competence".

Buckminster Fuller, And It Came to Pass - Not To Stay, (New York: McMillan, 1976), p. 66.

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I am also grateful to my children whom I consider to be my best allies and personal critics and who, I'm certain, have no illusions about the glories of "higher education".

I would also like to express my deep appreciation to my friend, Trudianne King, for her loyal and articulate assistance and to my mother, for, without her labor I could not have completed this on time.

Rhea Kikkert

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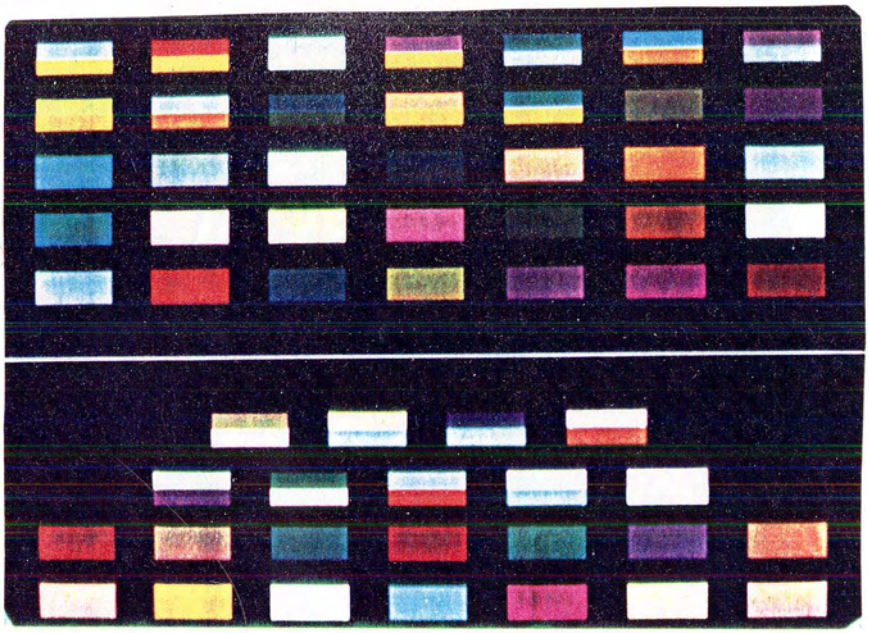

FIG. 1 COLOUR-KEY CODE

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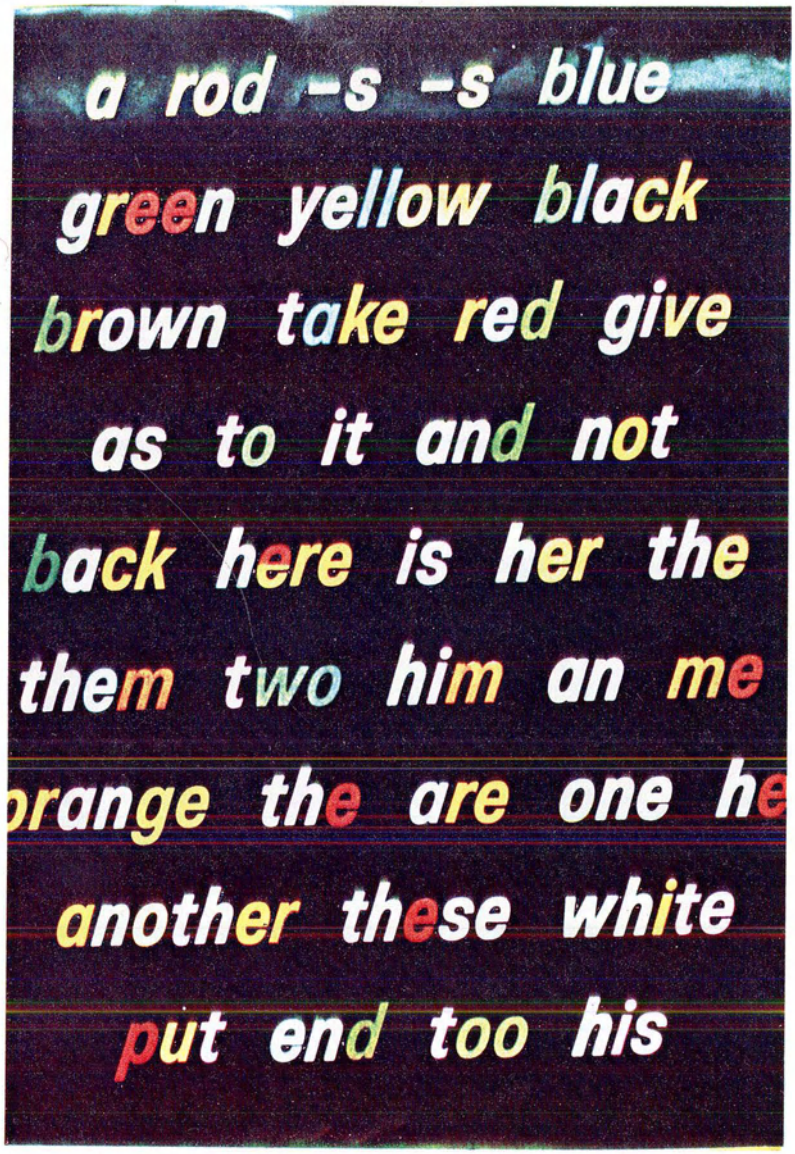

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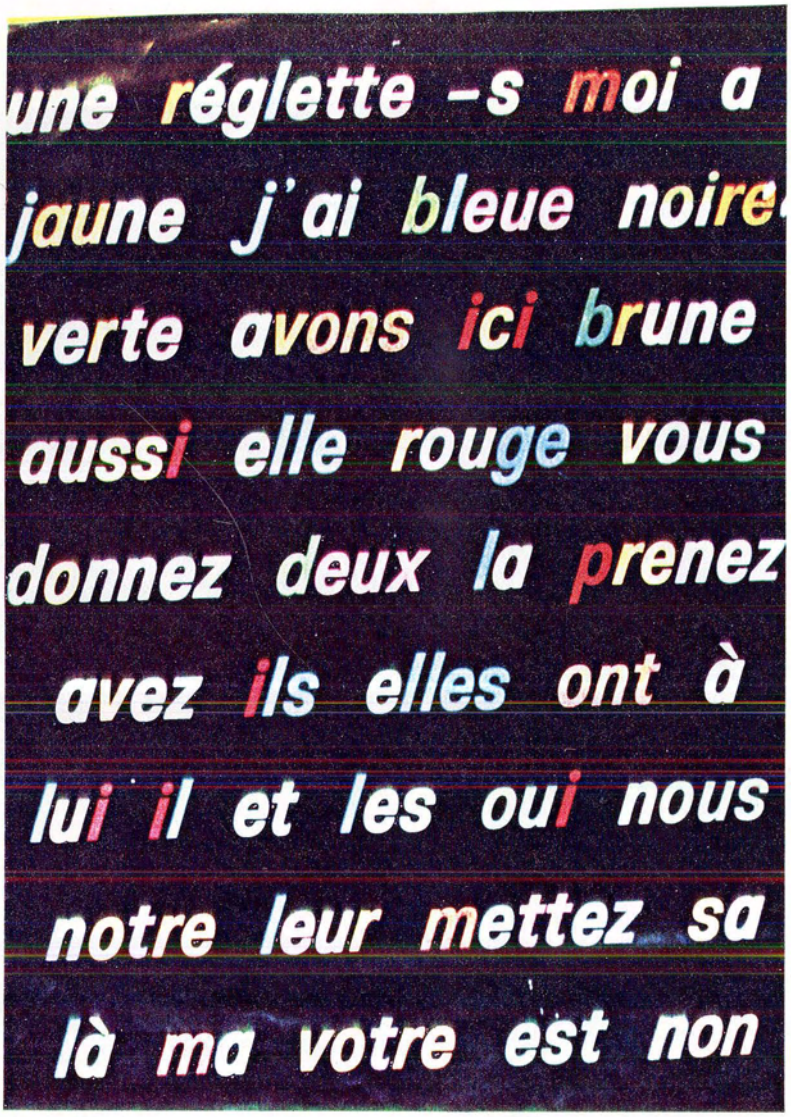

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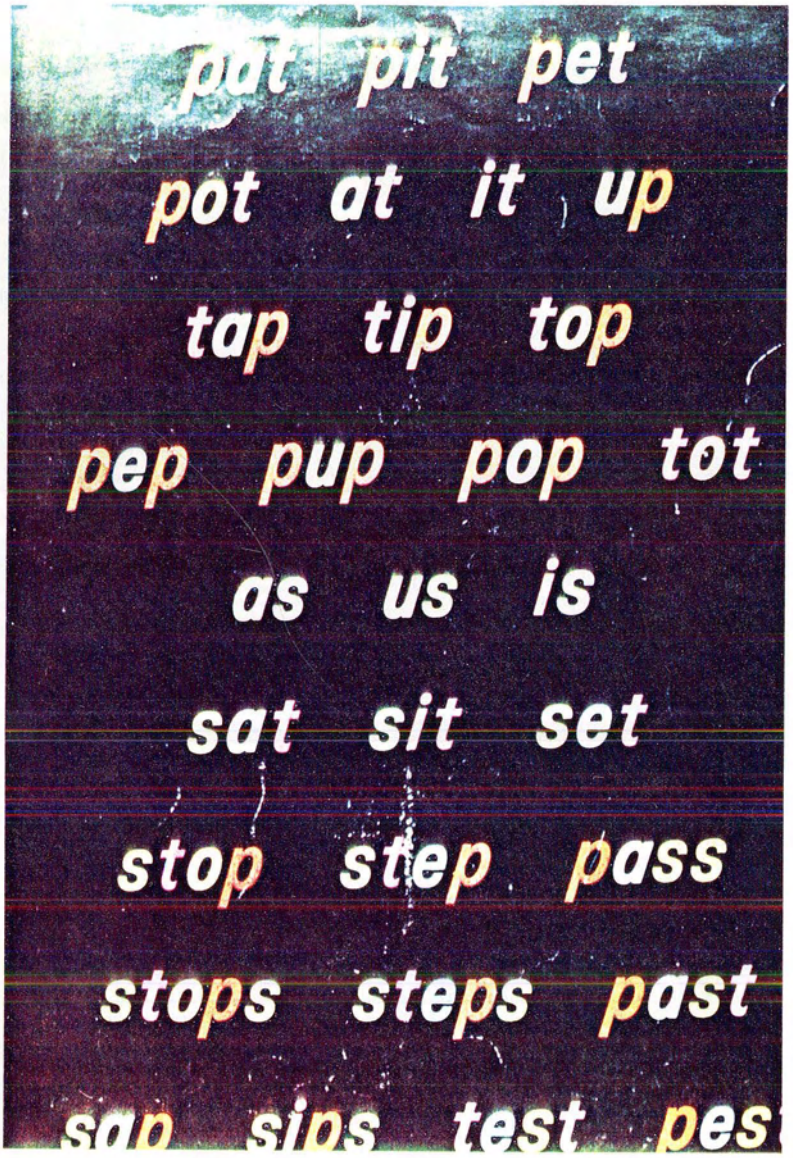

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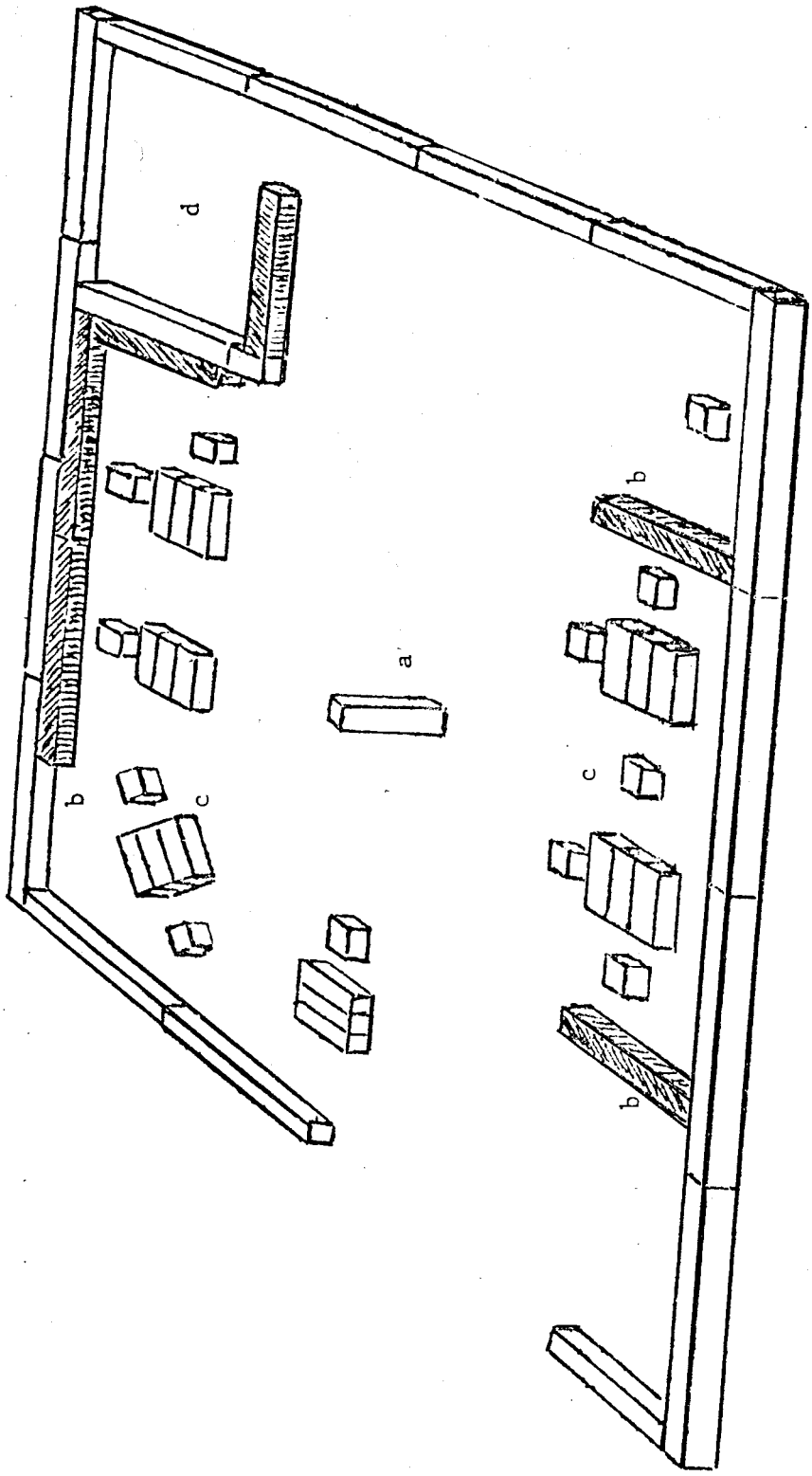


Fig. 10

Legend:

a. waiter

b. benches

c. tables and chairs

d. kitchen

CHAPTER ONE: INTRODUCTION

There was a time in the history of thought and scientific development when men believed thought was split from reality. It was believed everything could be known in terms of subject and object. At this point that view of the world breaks down.

> "A careful analysis of the process of observation in atomic physics has shown that the subatomic particles have no meaning as isolated entities, but can only be understood as interconnections. Quantum theory reveals a basic oneness of the universe. It shows that we cannot decompose the world into independently existing smallest units. As we penetrate into matter, nature does not show us any isolated building blocks, but rather appears as a complicated web of relations between the various parts of a whole. These relations always include the observer in an essential way. The human observer constitutes a link in the chain of observational processes and the properties of any atomic object can only be understood in terms of the object's interactions with the observer. This means that a classical ideal of an objective description of nature is no longer valid. In atomic physics we can never speak about nature without, at the same time, speaking about ourselves".[1]

The impact of physic's radically altered perception of the universe gradually began to register in neighboring disciplines. Whereas, prior to the Relativity theory "..psychologists and biologists move(d) toward reducing their disciplines to the physical sciences.." with the scientist in the role of impartial observer"..the mind of the observer emerged as a necessary element in the structure of (their) theories".[2] Indeed, the line between the physical event and the content of the mind was now found to be theoretically imperceptible. Investigative focus for the study of reality shifted from a point of assumed permanence to a study of changes affecting the interpretation of events, that is, "the science of consciousness".

Although Einstein's theory altered the way reality was perceived, the fundamental changes that might logically have developed in disciplines other than physics have been slow to materialize. In Education for example, a clinging to explanations and research that gives no evidence of a "search",

of openness to speculation, is more the rule than the exception. The question remains, "what prevents this paradigmatic switch from taking hold in every field and provoking immediate, radical change?"[3] In "Insight, Knowledge, Science, and Human Values", David Bohm describes how, because Newtonian thought was based on previously existent knowledge that had worked so well in the past, "the entire structure of Newton's thought on the subject (was deemed) an absolute truth".[4] It appears a human proclivity to lean toward simple solutions. The premature closure of this tidy world view, which guarantees a measure of psychological security, was threatened by the new paradigm promising uncertainty. As Bohm says, we form mental barriers in our thinking which "..hold us in rigid compartmentalization of functions and ideas, and make us extremely reluctant to give up our beliefs in certain universal notions of order".[5] Often we become increasingly attached to our theories, constraints, explanations, that eventually bind our ongoing experience. Only a dramatic, spontaneous mental event, "insight", can dissolve these barriers, by letting in an expanded awareness of reality. The only way to sever these perceptual constraints is to prepare, through some form of education, the ground for a spontaneous, revelatory experience, for, "like the gestalt switch..the new paradigm is not 'figured out' but suddenly seen".[6]

According to Pelletier, it is the failure of classical physics and modern behaviorism to appropriately include aspects of mind in their study of reality that has necessarily led to the burgeoning interest in "consciousness". In contrast to the reductivist practices of both the classical and behaviorist modes, this new science, he adds, needs to draw from other disciplines in order to meet the challenges of the now expanded reality concept.

Reluctance to exchange a compartmentalized perspective for a dynamic,

transformative interpretation of life has been all too apparent in areas of therapy and education. A blurring of subject/object distinctions is still apparent in practitioners of both fields who don't allow the influence of their own process to affect evaluation of their work with others. Psychotherapist Jay Haley notes that evidence of an emphasis on dynamic reciprocity in human relationships is relatively new in the field of psychotherapy. He says:

> "Only recently have psychiatrists begun to include themselves in their description of a patient. Obviously they base their diagnosis upon how the patient responds to them, yet the report they write will only include inferred processes within the patient".[7]

In the spirit of a more inclusive outlook Haley asks, "What was the psychiatrist doing when the patient behaved in such a way that the psychiatrist inferred he was delusional?"

A similar reluctance can be observed in teachers who do not admit to the possible influence they have on their students. To exemplify, using an experience related by educator Constance Kami:

> "I have observed many first-grade classrooms in which the children were working on arithmetic worksheets. When I stopped to ask individual pupils how they arrived at particular answers, their typical response was to reach for an eraser and start erasing madly, even when their answers were perfectly correct!"[8]

Prof. Kami is concerned that arithmetic programs pretend to teach problem solving skills, while the behavior evidenced in the above reported experience indicates students are not working on their own answers to problems but are working instead on the riddle "what does teacher want?" If behavior in the above example is a norm, then the functional definition of learning in this and similar instructional situations obviously excludes the necessity of engaging childrens' minds. In her summary comments, Prof. Kami suggests that a "..fundamental reconceptualization of objectives" be undergone in education

"based on a scientific theory that recognizes logico-mathematical knowledge as being constructed from within".[9] Professor Kami's conclusions reflect, in a specific form, Gattegno's general conception of learning, which says, in essence, that all learning exists only as an inward process, an in-forming. To Gattegno this inner process is the learning, instruction is not part of the definition.

Teaching which trains students to look outside themselves for the means to answers, restricts developing potential; capabilities never become abilities because students' resources are never tapped. Exclusive reliance on pre-defined teaching strategies fails to reflect the shift from absolute to relative thinking implied by Einstein's findings, and produces students who are ill-prepared, even misguided, by this educational process which would make certain what is not. In an article written in 1958, Gattegno embarked on the inadequacies apparent in education at that time "..the (educational) methods we have inherited in the West succeed in making the intellect sharper and more penetrating", they don't facilitate what is needed to meet the challenge of a complex and uncertain future. Western educational methods provide the means to attain a "..greater awareness of what constitutes the mind and of how to master the dynamics of thought, of the emotions of creativeness".[10] It was obvious then, that although the challenge in education had changed, the methods needed to meet this challenge had not been realized. Gattegno embarked on his quest to rectify education's inadequacies initially by promoting the use of Cuisenaire rods in the classroom. Use of these objects, having neutral value and appearance, was a start in allowing complexity to invade heretofore rigid ways of looking at subject material.

While in the West "knowledge" was commonly equated with the reality known, a dissection of certainties, through an altered perspective on the

constituents of reality, this definition of "knowledge" was gradually replaced by persons like Gattegno, with a growing tolerance for the process by which knowledge is obtained. The functional process involved in "coming to know" seemed a more useful form of knowledge in the long run than set information or factual material that grows obsolete with passing time. But to shift from a focus on product to a focus on process implies a shift in not only what is observed but how it is observed. A focal shift from the known to the process of knowing is a shift from an exclusively physical mode of observation to a reflective mode. Pelletier refers to physical observation as a limited tool which, when exhausted, allows the "..subtle ability of the mind to reflect upon its own processes".[11] The ability of the mind to reflect, to become aware of its own processes is the cornerstone of Gattegno's approach to learning, just as it is for the practice of therapy. For both the therapeutic and educational enterprise Gattegno's assertion that "..only awareness is educable.." applies.[12]

However, this does not mean that Gattegno prescribes a complete substitution of inner for outer criteria. Marilyn Ferguson, speaking of the past, says "..we were not so much wrong as partial, as if we had been seeing with a single eye.."[13] The new paradigm is a model of reality that represents a balanced approach embodying the rational focus of the West with the intuitive focus of the East, the synthesis of conscious with the unconscious, and ultimately, a new definition of learning whose nuclei address the intrinsic potentialities of man.

Historical perspectives in Psychology, particularly the early epistemological positions from 1800- , reiterate throughout Gattegno's writing. This is especially evident when Gattegno is read alongside the works of William James (1842-1910), Edmund Husserl (1859-1938) and

John Dewey (1959-1953). James was admired for his daring choice of subject matter, areas of human functioning not investigated by other scientists, and for his provocative, detailed descriptions. James' descriptions were meant to provide a functional, demystified understanding of human processes that Gattegno appears to replicate in style and intent. Compare, for example, an excerpt from James' Habit:

> "The 'strength of early association'..precisely accords with the physiological principle that, during the period of growth and development, the formative activity of the brain will be most amenable to directing the influences. It is in this way that what is early "learned by heart" becomes branded in (as it were) upon the cerebrum so that its 'traces' are never lost, even though the conscious memory of it may have completely faded out. For, when the organic modification has been once fixed in the growing brain, it becomes a part of the normal fabric..so that it may endure to the end of life, like the scar of a wound".[14]

with Gattegno's description of self:

> "We must begin our description of the 'thing' we are studying by stating that the self, endowed with awareness and will, engages itself in a dialogue with its awareness to uncover its contents and make it explicit. It then reapplies awareness to that content which thus gains the label of 'knowing' and, when retained, of 'knowledge'. We can therefore say that knowing generates knowledge".[15]

Gattegno does not explicitly acknowledge an influence from any particular person or school of thought, and only occasionally makes a favourable comment about James or the phenomenologists. Yet it seems possible and probable that they had impact on the formulation of his approach to learning. To investigate the theoretical connections between Gattegno's learning approach and psychology may lead to understanding of healing effects precipitated by Gattegno's teaching methodologies. It may also help clarify some of his philosophical premises if teachings within this approach can be compared with established, more traditional schools of thought.

Gattegno appears to make assumptions: concerning human nature, the

process of learning, what is needed to be done educationally to prepare man for the future, that are seldom accompanied by traditional frames of reference--authors, philosophical orientations, historical events are rarely mentioned in the context of his writing. For example, in his book the Mind teaches the Brain he says, "The instruments of man are only the tools he makes. Before tools can be invented man must be vulnerable to some aspect of reality".[16] His philosophical style seems to require much thought to grasp. In the absence of specific, titled, known persons or reference points, Gattegno's words are best understood in a classroom where the predominant approach is "The Subordination of Teaching to Learning" (Sub.T.Le.)[17], the subtitle of his book What We Owe Children. However, a few comments comparing Gattegno's work with historical positions on learning might shorten the apprenticeship and lessen the preliminary confusion.

Gattegno is clearly aligned with the phenomenological approach to learning:

> "Phenomenologists were..philosophers concerned with how we know but ready to allow a more flexible relationship between the mind and knowledge, giving the first a place in the generation of what is called phenomena. They were also ready to consider that knowledge is generated by an interaction of the mind and a hypothetical reality outside, progressively known through what the mind does with itself and through the inputs from outside it".[18]

This active learning process is therefore defined as an increased awareness of the mind in constant intercourse with its surrounding environment. Knowledge generated through an interaction of mind with reality describes a movement, a description of learning quite in contrast to behavioral or structuralist descriptions. According to Gattegno, knowledge is what one "has" but essentially as an open-ended commodity, subject to being altered the moment new information is encountered.

As a science phenomenology is grounded in experience, deriving its

information directly from what is happening in the moment, a practice methodologically opposed to the early structuralist position which enlists an introspective but highly analytical approach.[19] Structuralists tend to grapple with information abstractly, after the "moment" has passed. James R. Barclay describes Edmund Husserl's nineteenth century viewpoint on the structuralist position in psychology:

> "Science remains essentially unclarified ie. unaware of its own epistemological foundations. A philosophy based exclusively on scientific findings then becomes a philosophy on abstractions several stages removed from the primary world of lived experience".[20]

In contrast to abstract methods Gattegno's approach to phenomena is empirically based on the learner's experience. Excerpts taken from Sub.T.Le. lessons describe a teaching process that progresses according to phenomenologically perceived material occurring in the moment. For example, in a primary English as a Second Language (ESL) class of Chinese and Vietnamese children, each child was given a handful of Cuisenaire rods of varying shapes and sizes and asked to make a sentence using rods. Some children made "trains" of rods completely joined. Others placed gaps between rods to indicate word separation. One student used red rods whenever a space between words was indicated. And some children arranged their sentences in a vertical fashion. All noted each other's efforts. The teacher asked each student, in turn, to read their sentence tracing the direction of their speech along the rods. When he heard the vertical grammarians he said "Oh, but that's not English", and proceeded to physically move their "sentences" into a linear arrangement.[21] This method uses an unbiased description of immediate experience or feedback, which is shown when a teacher demonstrates unconditional acceptance of a student's work even if it is a mistaken response. An intellectual interpretation of what did or did not occur has no place in

Sub.T.Le. practice. Similarly the Sub.T.Le. teacher makes use of group feedback, reflects what she sees or hears in the student's response, and remains silent so that the student is free to apply his own intelligence to the task of self-correction.

Dwayne Schultz describes the application of phenomenology as resulting in "..the almost naive experience of common sense"[22] on the part of the learner, rather than "..an experience as reported by a trained (professional) with a special systematic orientation".[23] The naivete of a Sub.T.Le. participant, far from having the perjorative connotations of an ignorant or immature perception, describes a courage to receive subject material in a manner that opens doors to the subject's complexity. The atmosphere engendered during Sub.T.Le. lessons can be seen to provide the intellectual and emotional support necessary for this courage to develop, while it technically provides the raw materials and fundamental experiences for a naive understanding to be pursued.

Therefore, in addition to offering a dynamic description of experience we see that phenomenologists and Gattegno interpret the teaching process so as to include an acceptance at face value of what is presented by the learner. If such acceptance is to be practiced, then the teacher must restrain herself from the compulsion to correct students' work. Suspension of judgements and an attitude of personal restraint are basic operating tenets for teaching according to the Sub.T.Le. approach.

In Counselling and Philosophy[24] phenomenology is referred to as a descriptive-empirical method to the approach of phenomena, whereas science generally relies on the hypothetical-deductive approach to phenomena. Descriptive-empiricists in education make their laboratory the classroom, while hypothetical-deductivists situate their research in the laboratory,

marked evidence of the divergence in beliefs about how learning can best be studied. The former demands a consideration of context, implicit to the understanding of the information received, while the latter is satisfied with the examination of abstracted, isolated concepts which can be applied as explanations of human learning situations. Gattegno would say that educators using the classroom for their laboratory are concerned with knowing.[25]

One's method of approaching phenomena in education seems a strong indication of one's interests and values regarding the study of learning. The empirical approach of phenomenologists and Sub.T.Le. practitioners demands an openness to the unknown and a willingness to be surprised. By contrast, persons having a hypothetical-deductive orientation seem reluctant to abandon the security of proven theoretical constraints. We can see this contrast when we examine better ways of teaching English as a Second Language, where the values and preconceptions of many cultures are melded in the service of learning a new cultural point of view. Unclarified assumptions concerning the interpretation of experience should have no place in the average ESL classroom, yet ESL methodologies still couch life situations within predetermined script that allows little student bias.[26] A way must be found in this complex situation for students to begin at a personal, albeit culturally determined reference point, which can then be transcended to embrace the values of their adopted culture. It will be seen in the developing discussion that the provision of simple, manipulative materials in conjunction with certain teacher behaviors outlined in Gattegno's Silent Way approach, is the valuable key to facilitating this cultural transcendence.[27]

The Silent Way techniques are tailored around a focus on wholes or gestalts. Silent Way lesson sequences are described as

"links-by-transformation", a description that achieves cogency in the subtle, accumulative aspects of lesson procedures which can only be progressed as students attain competency through their experience of themselves learning. Each progressive lesson sequence implies a deepening level of awareness reached through insight into one's own experience. That insight--or inward sight--appears to be a major point of change according to the Silent Way technique; a catalyst leading to transformative experience. Transformation via the Silent Way is thus dependent on increasing awareness of oneself as a learner in and during the learning process. The Silent Way philosophically reflects and technologically assists this deepening awareness.

While a phenomenological approach allows one to approach lessons with an unbiased theoretical perspective the learning, following a deepening awareness by each learner of his functioning in the learning process, rests on the development of the intuitive capacity. In a Silent Way workshop for ESL teachers held in New York (1980) Gattegno said it is the intuitive capacity that enables one to identify a part and make it a whole, and that this identification consists of a recognition sparked by insight, not by recollection or memory recall. The principle of learning through recognition and insight is the main tenet held by traditional Gestalt psychologists and Gestalt psychotherapists. Wertheimer, in his posthumous Productive Thinking, suggested that creative thinking could best be facilitated by presentation of problems in terms of wholes. Wertheimer's work is discussed by Dwayne Schultz, saying:

> "Wertheimer demonstrated that if a teacher arranged problems so that elements of classroom exercises were organized into meaningful wholes, then insight would occur. He also demonstrated that once the principle of a problem's solution had been grasped, it was readily transferred to other situations".[28]

Without elaborating here I will just suggest that a correspondence exists

between Wertheimer's "Gestalt" principle of classroom lesson arrangements and the principles and practice of the Silent Way. This "Gestalt principle" will become manifest as our discussion of the Silent Way develops.

In the Silent Way, for example, a foreign language is commonly introduced in "meaningful clusters". For example, the teacher:

> "..while sitting at his desk with the set of rods in front of him, picks up rods: very slowly--less slowly--faster--still faster--very fast--madly fast. Then he picks up some rods and drops them: continuously--sporadically--from time to time--one at a time--a few at a time with each hand--alternately--simultaneously--rhythmically. Alternatively he can pick up: first a blue--then a yellow--then three red--now an orange--later a black--still later two more black ones--finally a white one".[29]

Statements can be generated along with the actions, to indicate the spacing, timing, and groupings demonstrated, such as "To start with I took some red ones one at a time, then a white one, later four blue ones all together, then I dropped them slowly two by two into the box".

It is assumed that no two people in the class can or will approach the language or the learning of the language with the same background of information. Some may have had some earlier exposure to the language itself, some may be familiar with a similar language, but all will have an earlier experience in the learning of their mother tongue that can trigger recognition of the language learning process. This triggering is aimed for and facilitated by a teacher using the Silent Way approach. Following Wertheimer's principles, lesson materials are arranged so that a part sequence is couched in a whole concept. Students are surrounded with materials offering various perceptual, auditory and tactile experiences which are alternately explored in order to aid concept assimilation. In addition, some students may already have been introduced to aspects of the Silent Way previously. They may even be familiar with the sound attributions assigned

colours on the fidel (see appendix). For others it will be a totally new experience. The emphasis, however, is on the essence individually derived from the whole of the lesson experience, so a uniform understanding is not expected. Every student will be encouraged to draw from one another's understanding what they are missing in themselves and this will be facilitated by the Silent Way procedures and the students' heightened self-awareness.

Directing language teaching towards developing the intuitive rather than rational capacity, implies a personal interpretation of meaning; a rational emphasis would be expressed by breaking words up into impersonal, isolated units. Gattegno feels rational approaches to language teaching are unrealistic since "No particular word has an exclusive meaning of its own".[30] Elaborating he gives an example which shows how meaning is contingent on so many variables.

> "No one can retain a noun without making allowance for all the changes in lighting, distance, angle of vision, etc., which constantly accompany our constant displacements in the environment".[31]

Viewing words as having no fixed meaning implies that it becomes impossible to teach vocabulary apart from a personally relevant context. In Silent Way lessons, students' use of simple models and constructions to represent concepts, permits individually biased meaning to evolve and contextually appropriate language to be assigned.

Direct language teaching toward intuitive capacities is a practice additionally supported by findings in psycholinguistics. In his book The Universe Within Morton Hunt says:

> "Psycholinguistics--say that our minds deal with sentences in terms not of surface structures--schoolbook grammar, word sequence and such--but in terms of deep structure: an intuitive, possibly innate, recognition of the relationship among the things in the sentence, by means of which we easily and correctly shift not just words but related clusters of words and so reconstruct the sentence".[32]

What is implied therefore, is that there resides, in each of us, an abiding truth in whose consultation we realize a demonstrable linguistic competency. This competency becomes apparent in our intuitive ability to restructure a sentence so that it is grammatically correct. A sense of truth, Gattegno maintains, can be reached in all learning situations that are likely to trigger insight, insight which repetitively experienced, leads to a growing confidence in our ability to sense the truth in all learning situations.

Learning situations presented as wholes tend to foster a feeling of connection--the learner to the experience and one experience to the next--which ultimately prepares the learner to transcend the learning situation itself. The original learning is thus transformed to become the nucleus of a larger, interconnected whole comprising the totality of the student's experience. Fragmenting lesson material into isolated concepts, in contrast, traps the learner into the specificity of a narrow definition and severs each student's personal and individual link and sense of belonging to a much larger understanding of experience.

1. Fritjof Capra, The Tao of Physics, (Boulder, Colorado:Shambala, 1975), p. 68.

2. Harold J. Morowitz, "Rediscovering Mind", Psychology Today, (August,1980), p. 59.

3. Marilyn Ferguson, The Aquarian Conspiracy, (Boston:J.P.Thatcher, Inc., 1980).

4. David Bohn, "Insight, Knowledge, Science and Human Values", Teachers College Record, 82(3) Spring 1981, p. 386.

5. Ibid., p. 385.

6. Ferguson, Conspiracy, p.27.

7. Jay Haley, Strategies of Psychotherapy, (New York:Grune and Stratton,1963) p. 4.

8. Constance Kami, "Encouraging Thinking in Math", Phi Delta Kappan, December, 1982. P. 251.

9. Ibid., p. 248.

10. Caleb Gattegno, "The Cuisenaire Discovery", p.51. n.p.mimeographed sheet.

11. Kenneth R. Pelletier, Toward a Science of Consciousness, (New York:Dell Publishing Co., Inc., 1978), p.69.

12. Caleb Gattegno, The Science of Education, (New York:Educational Solutions, 1977), p.30.

13. Ferguson, Conspiracy, p.30.

14. William James, Habit, (U.S.A.:Henry Holt and Co., 1918), p.24.

15. Caleb Gattegno, Newsletter, (New York:Educational Solutions, December 1979), p. 9.

16. ———. The Mind Teaches The Brain, (New York:Educational Solutions, 1977). p. 239.

17. Throughout the text I shall frequently use the acronym Sub.T.Le. denoting the phrase "The Subordination of Teaching to Learning", the subtitle to Gattegno's book What We Owe Children and the title given his approach to learning.

18. Caleb Gattegno, Newsletter, (New York:Educational Solutions, December, 1979). p.3.

19. The early Structuralist position in psychology developed prior to the philosophical movement of the same name. In The Dictionary of Philosophy (New Jersey:Humanities Press, 1980), W.L. Reese refers to Structuralism as a "..psychology centering attention on the importance of structures of psychic phenomena open to introspection, presenting a structural (or fixed) approach to phenomena rather than a functional (subject to change through circumstance) approach". p. 553.

20. James R. Barclay, Counselling and Philosophy, (Boston:Houghton Mifflin Co., 1968), p.31.

21. These students had all had one year ESL in traditional classrooms, yet this most basic, structural concept had not been grasped.

22. Duane Schultz, A History of Modern Psychology, (New York:Academic Press, 1981), p. 243.

23. Ibid.

24. Barclay, Counselling.

25. "Knowing" is generally taken to mean "process" in educational literature, although Gattegno's meaning is much more specific, as will be seen in the developing discussion.

26. For, what I call, still-life examples see "Real-life situations"; an audio-lingual program described in David Davidson's Language in Education; Theory and Practice, "that demands students' active attention through pictorial aids and workbooks that serve as stimuli for choral responses." p. 4.

27. Here I am no longer talking exclusively about the application of Sub.T.Le. but about the application of specific techniques that are natural evolutions from the basic postures that Sub.T.Le. takes. Specifically, these are: Words in Colour for Teaching Reading: the Silent Way for teaching second and foreign languages; and Gattegno's mathematics. See appendix for description and examples.

28. Schultz, History, p. 253.

29. Caleb Gattegno, 'A cluster of expressions in Temporal Relations', The Common Sense of Teaching Foreign Languages, (New York: Educational Solutions, Inc., 1976), p.66.

30. Caleb Gattegno, What We Owe Children, (New York: Avon Books, 1970), p.25.

31. Ibid., p.26.

32. Morton Hunt, The Universe Within, (New York: Simon and Schuster, 1982), p. 70.

Central to any teaching strategy are theoretical biases, constraints which delimit the learning process, the functionings of the learner and the demonstrative results. Many learning theories popular today are cognitive; that is, they base their concept of learning on a study of thinking as a function of the brain. Such approaches contrast sharply to the perspective on learning of Caleb Gattegno. Central to Gattegno's concept of learning is his idea of the self, a psychophysical entity whose constituents work together synchronistically in a learning situation to synthesize and help integrate the learning experience. The relationship of the self to the brain is explicated by Morton Hunt, who presents the brain and the self in similar terms to those used by Gattegno. He says:

> "..the brain is owned by the self, rather than the other way around. The self is almost always active..The active, psychophysical self is the active programmer to the brain (which is the computer), it is the executant whose instrument is the brain."[1]

Although self, in Gattegno's concept, is postulated to be in and of the individual "bag of skin", therefore having personal parameters, the self is also said to be vulnerable to impacts far beyond an individual's personal psychophysical system. Ancestral, cultural, and cosmic elements are a few of the influences he believes help shape our human potential; yet it is an existential cornerstone of his vision of the self that we are capable of guiding the ways in which we use our potentialities. We choose to maximize or minimize the impacts we receive; consequently, self-responsibility is the core inner organizer and determining factor in all personal learning experiences.

Gattegno asserts that it is the self-reflecting attribute of human awareness that, alone, separate "human" from "animal" consciousness. Further, it is the ability of the self to be aware of itself in the learning situation which forms the basis for Gattegno's pedagogical approach which he calls

"the new epistemology" or "the science of knowing". Only man, he says, can become aware of what he is aware, and so make functional changes based on this awareness; but, in Gattegno's functional definition of learning, it is the changes in consciousness resulting from this reflective activity, more than the observed behavioral changes, which denotes proof of learning. Therefore, a study of consciousness is a study of learning. This definition leads Gattegno to explore the roots of consciousness development, beginning with the very earliest of human experiences. The roots can be seen in the progress made by babies (in coming to know what is needed to cope in their environment)". This kind of study of early infant learning provides "the guidance needed to grasp the workings of the self in the field of the intellect."

Gattegno focuses upon the very early stages of infant learning because these early stages contrast so radically to the structured situation found in later school learning situations. In examining school situations, Gattegno rarely saw the vital and necessary learning skills of infancy ever utilized. Curiosity and the natural inclination toward making sense of one's problems for oneself were sacrificed in traditional schools in favor of lofty educational objectives. A sign of this, he held, was the extreme effort exerted by most students to retain even a little of the information taught in the classroom, and the prodigious growth of error evident in attempts to apply this information to practical use. In contrast, Gattegno observed, infants seemed to exert little effort in accomplishing their goals, and their learning appeared free of the uncertainty and unreliability that marred the usefulness and future applicability of school learning achievements.

Traditional schools' concerns about the usefulness and future applicability of school learning material appear to be a misunderstanding of the nature of learning, when we assume Gattegno's position about learning.

A problem of utility, and hence lesson design, disappears, according to Gattegno, when learning is studied as a process parallel to the learning of those infants who had no trouble maintaining a high level of accuracy and functional appropriateness in everything they strove to accomplish.[3]

Another discrepancy which Gattegno noted between school and infant learning was that schools tended to direct their teaching strategies toward narrowly defined criteria of students' capabilities, mainly those which fostered skill in memory recall. Little of students' imaginations and feelings, essentially non-linear capacities, was engaged or considered vital and instrumental to the outcome of learning. This situation seemed very curious to him since so much apart from cognitive abilities is required for childrens' accomplishments in the early stages of life.

Teaching practices in language, for example, have made no allowance for the varied aspects inherent in challenges infants manage on their own, such as learning to manipulate their vocal musculature to produce varying sounds. Neither does language teaching generally acknowledge the autonomous aspect of the first language learning experience as a criterion for success: the individual decisions and manipulations imperative to produce language, apart from external influence. Only recently have language practices begun to "..encourag(e) greater student autonomy in handling the language".[4] But attention takes the form of "..help(ing) students move from 'pseudo-communicative'" drills unrelated to the students' experience"..to meaningful drills".[5] However, to Gattegno, even these current advances, in the direction of student autonomy fail to utilize the functional autonomy present in the primary language learning experience of infancy.

Conventional teaching practices are formulated to respect certain set developmental norms, norms based on criteria which assume that knowledge is

accumulated in a stepping stone fashion. They emphasize largely material criteria. Teaching has become an activity whose strategies reflect attention to external guidelines, while students' inner processes and the function of these inner processes during learning, are either not recognized at all, or are not considered important issues. A focus on knowledge predominates over a focus on learning. This is not to say that Gattegno's self is not a developmental concept, but it is less linear and fixed. Piaget, for example, sees capabilities realized only within fairly set time frames: a child, for example, only achieves the ability to think abstractly at some point during adolescence. Gattegno, in contrast, sees abstract thinking to be active in very young children, and this activity, he says, can be realized even more fully with adequate environmental provision and appropriate facilitation. Thus, Gattegno broadens the concept of the self's ability to learn beyond limits posed by existing developmental theories.

For all the limitations it entailed, the acceptance of developmental psychology in education was still a start towards letting more human considerations infringe on the scientific enterprise; however, theory still took precedence over the unique, inconsistent human variable. Gattegno countered the traditional views on learning he deemed "fixed" by saying students bring their "selves" to each new learning experience, implying a conscious involvement. He clarifies the process of "self" learning by saying that intellectual transmission of information does not lead to the development of skills nor does it ensure that one "owns" knowledge in a way that allows one to transfer to other related situations. Skill acquisition is contingent on "self" knowledge or self awareness.

In concentrating primarily on intellectual, and not other, aspects of the learning process, schools, generate "..false perceptions of what it is

to grow in experience.." Gattegno adds that,

> "..such false perceptions may generate psychic blocks which last all through life and falsify what it is to be a learner, to the point where we give up trying to know."[6]

To return to our original emphasis on Gattegno's concept of self we can see that the artificial structuring of experience found in most traditional schools helps people to lose themselves; for they lack a dynamic impetus to fuel, guide and give meaning to their experience. Consequently, they lack personal investment, and feel depersonalized: common contemporary complaints. Such persons, having lost their true selves, look to others to provide their motivation and meaning and, in doing so, sacrifice their own creativity.[7] This loss of connection with oneself described by Rollo May, leads to an inability to play, a pathological condition that most frequently brings people to therapy:

> "It is in playing and only in playing that the individual child or adult is able to be creative and to use the whole personality, and it is only in being creative that the individual discovers the self."[8]

To play is to open oneself to being affected and to affect others without censorship. Where one is conscious that all is not right with one's self, a constant vigilance replaces a relaxed openness to experience and play is self-conscious, spontaneity contrived, and the creative self, as such, ceases to grow.[9] A look at the early dynamic will help clarify the details attached to this progressive ability or inability.

At first:

> "Baby and object are merged in with one another. Baby's view of the object is subjective and the mother is oriented towards the making actual of what the baby is ready to find."[10]

Sufficient time must be given to the baby, at the very early stage, to allow the baby to develop confidence in mother. The quality of care during this time involves an almost complete adaption by the mother to her infant's

needs, so as to relieve the infant from energy draining "worries" about basic needs. The environment meets his needs so accurately that it actually reflects the infant. A feeling of omnipotence ensues, and confidence in mother develops which enables the child to relax. In the zone of comfort which develops between the mother's and child's intrapsychic workings, play originates, through an "idea of magic..since the baby does, to some extent experience omnipotence."[11] Winnicott stresses that babies who receive this ideal early care taking are able to:

> "..quickly establish themselves as persons, each different from any other infant that ever was, whereas the babies who receive inadequate or pathological (care) tend to be alike in patterns of behavior (restless, suspicious, apathetic, inhibited, compliant)."[12]

Thus conformity spells pathology viewed psychotherapeutically.

The area that develops between mother and child grows in trust. The mother offers enrichments according to her child's readiness to receive them. Through the mother's sensitive attending and through her provision of the necessary environmental supports--food, warmth, safety, transitional objects--the baby is able to enjoy experiences which unite his intrapsychic processes to the reality of this environment. These experiences are exteriorized and made actual by the baby through manipulations of a concrete medium.[13] The uniting of mind and environmental stimulation through this concrete medium leads, eventually, to an assimilating of the components in the infant's environment with his personality organization. And, out of this assimilation process grows the self to which Gattegno refers. But the developmental process leading to self formation does not proceed except where the quality of trust remains. That is to say where the baby does not emerge having a self trust has somehow been betrayed. Further, if the quality of trust is interrupted at any time during the self's development (which could be viewed

as a life-long task) the self's developmental progression could cease. It is the experience of trust gained in the intermediate area between mother and child that is transposed by the child to the area between himself and the world and it is this area of play that is a necessary prerequisite for all later learning experiences.

> "In fact, unless his gifts and his society have on each (developmental) step provided the adult with a semblance of an arena of free interplay, no man can hope to reach the potential maturity of (pre-senile) old age when, indeed, only the wholeness of existence bounded by death can, on occasion, dimly recall to him the quality of that earliest sensory matrix."[14]

Trust and an area for play are mutually reinforcing elements that obtain as conditions necessary for growth in all learning experiences to follow.

To perceive distortion in play is to conceive of a norm. From his observations of mothers and their children in set clinical situations[15] Winnicott was able to observe what physical and psychological conditions appear to be necessary for a creative ability to develop and, conversely, what conditions appear to hinder development. Results of these observations enabled Winnicott to develop an entire working theory on creative behavior in all stages of life, for Winnicott, like Gattegno and psychologist Erik Erikson, believes that "..whatever applies to very early stages also applies to some extent to all stages, even to the stage that we call adult maturity."[16] It is in the early relationship between infant and mother that the play capacity is first nurtured and grows as an ability. Therefore, the norm against which pathology is measured must consist of a fulfillment of certain conditions arising in and of this primal relationship.

One of the prime conditions essential for the child to function in the play space is the presence of transitional objects. Transitional objects, at a later stage called toys, initially serve to alleviate "..the strain

inherent in objective perception."[17] Infants need the opportunity to physically manipulate aspects of their environment as a relief from the tension wrought of trying to mentally assimilate inner and outer events. Children also need a means by which to make sense of their experience when language or sounds are not yet perceived as a possible means to this end. Manipulation of concrete objects provides a way to externalize inner tension and creatively work towards an understanding of intrapsychic contents: the central principle in play therapy. A sensitive mother attends to her child and, at times during this process, notes points where a child is ready or would seem to welcome further challenge to his creative efforts.

Mother's adaptability to her infant's needs has allowed the infant to forget himself, which frees the child to find his self through creativity or play. The child's self is thus further changed and clarified through creative expression, a process set in motion only as the initial conditional, supportive requirements in the environment have been met. Through play the child integrates aspects of his self that cannot be assimilated through objective means alone, that is, be totally moved by what is outside.

Indeed, baby's very first perceptual experiences do not yet allow for objective experience. These early experiences are described by Margaret Mahler as a:

> "..Gestalt kind of perception, that small part of external reality which is represented by the mother's breast, face, and hands, the Gestalt of her ministrations as such."[18]

So when it comes to learning a second language, the Silent Way lesson presentation styles suggest the opportunity for a reawakening, in students, of the early perceptual gestalt to which psycholanalyst Margaret Mahler refers. Students' first reaction to their exposure to Silent Way teaching materials resembles that of a child in the early stages of infant perceptual development. There is a subjective response to the colours and configurations

presented in the materials, but, initially, an objective evaluation cannot be made since students have had no previous introduction to either the approach or the materials. However, through the teacher's enthusiasm, interest, and concentration upon the lesson at hand, students become aware that there is something to be found in the materials.

According to Winnicott's mode of "good mothering" a Silent Way teacher facilitates learning for students in much the same way as a mother facilitates her child's. In a Silent Way workshop held in Arizona (see appendix) a participant describes the captivating experience she underwent when first exposed to a Silent Way lesson, where students who had never been exposed either to Silent Way materials nor to the languages, Arabic and Greek, being taught, were enabled by the teacher's presence and actions to become fully engrossed in the lesson. According to this participant's experience the concentrated attention spent on Silent Way lesson proceedings was rewarded when patterns began to emerge within and between the languages being studied, and she could make sense of her experience even when she had no meaning for the words studied. The Silent Way teacher is oriented, like Winnicott's model mother, toward making this sense actual.

The child's readiness to receive enrichments, a critical point that Gattegno says must be considered in all later teaching experiences, can be clearly examined in relation to the early nursing situation, where an overlap exists between what the mother supplies and what the child might conceive of. The observer, perhaps imagines that the child perceives what the mother actually presents, but Winnicott states that this is not actually the case: infant perceives the breast, "..only insofar as a breast could be created (by the baby) there and then."[19] The same need to be allowed to create persists for the child as student in the school learning environment, Gattegno says, and is met by the

Silent Way teacher with a sensitivity that parallels that of the average mother. The Silent Way teacher's challenge is one of invitation: how can she approach what the student brings--capability, curiosity, willingness to learn, knowledge--in order to invite him into a suitable activity in which the chances are high that he will encounter those things which she wants him to meet? If the teacher has the necessary attitude to address the child in the learning individual this will profoundly affect the way subjects and materials are presented in teaching. The fact that a teacher sees the need to invite, not coerce, determines the behavior with which the teacher approaches the students. Silent Way teachers can be seen to take time, ponder, and grope for a way to find the appropriate invitation. This cannot be done in the slick way many teachers feel they must present their material. Further, the invitation may not be accepted. The Silent Way teacher knows she can't make a student accept and she knows it's important that she let the rest of the students know that she can't. In this way it is certain that the student, as the infant, is an active willing participant in the learning process so that what he learns he has created and thus "owns".

Allowance for a student's readiness to learn requires a sensitive awareness of timing, the sensitivity a therapist must exercise before presenting an interpretation.[20] While these two roles are parallel in their attendance upon the client/student's mental readiness, the teacher's role differs because, given the structured nature of even the most informal classroom, she must more formally prepare the environment and present a matrix of possibilities as raw materials for the students' initial exploration.

Again, looking at this early mother/child relationship as a model for all other learning relationships we see that a teacher often faces students who

have received a less than sensitive attending at some point in their development. Some students approach lessons with defenses already intact. A Silent Way teacher works on re-establishing the same trust that, hopefully, the student, as an infant once felt for his mother. She approaches students' mistrust with the complete assumption that they have every intention of learning what she has to teach. An example might serve to clarify my point.

> In a primary ESL class (July, 1981) the teacher asked the students to draw a house.[21] Some children drew a house on the white sheet of paper in front of them while others drew something else. Two boys, twins, drew nothing at all. The teacher walked around the room commenting on everyone's picture. When he came to the twins, looking at one piece of paper he said "Oh, a white house." The class got excited and children pointed out that there was no house on the paper. The teacher said "Oh. Then it must be on the other side." Again there's an uproar from the class. "Well, now I'm confused" the teacher said, and says to the twins "which house do you want me to see, this house (one side of paper) or that house (turns paper over)?" Twins looked confused and a bit astounded. Later, when all pictures of houses were pinned up on the wall the two blank sheets were included. The teacher added looking at the two boys "these two houses look alike, but then, of course, you're twins!"

Almost despite themselves the reluctant boys were drawn in as participants, and shortly they became actively engaged in classroom challenges. The Silent Way teacher displays an unfailing belief in her students' talents. Hence, through her belief and sometimes tricky facilitation she provides students with the opportunity to come to believe in themselves.

The mother's adaptation to her infant's needs is complete, at first. However, she must, at some point fail in her adaptability if the infant is to grow. Protection becomes stifling if prolonged. As time proceeds the mother "..adapts less and less completely, gradually, according to her infant's growing ability to deal with her (mother's) failure."[22] The infant's ways of dealing with these failures demonstrates the first inclination towards intellectual development. These early failures, after a

period of complete environmental compliance, lay the foundation for working through future challenges. Ways of coping with the mother's failures take the following forms: the baby develops a "..growing sense of process (and) the beginnings of mental activity"[23] plus an integration of past, present and future since failure in the present provokes the need to compensate through fantasy, dreams, and the reliving of experience.

These developmental phenomena delineated by Winnicott, are of particular interest because they appear in Silent Way presentations. At first the mother plays with the baby but is very careful to fit in with the baby's activities exactly. She follows the baby's lead so that the baby experiences an utter correspondence between his impetus in the environment and the environmental response. The baby, therefore, relaxes in trust. Sooner or later, however, the mother introduces her own ideas as she senses the baby's potential willingness to receive them. And, although "..babies vary according to their capacity to like or dislike the introduction of ideas that are not their own.."[24] her sensitive attending to the infant's readiness to receive new ideas ensures that the challenge will be met in a way that stimulates, rather than hinders growth.

Play includes the ability to use an object, whether it be a toy, teaching material, bits of paper or a pencil as a medium in the service of creative expression. Where inability to make use of an object medium exists, the inability to play is present.[25] In teaching Winnicott says:

> "..as in the feeding of a child, the capacity to use objects is taken for granted, but in our work (therapy) it is necessary for us to be concerned with the development and establishment of the capacity to use objects and to recognize a patient's inability to use objects, where this is a fact."[26]

Out of Winnicott's studies derived the research that forms the basis for his claim that the inability to play is a symptom indicating restricted

intellectual and emotional growth, while the recuperated ability to play is a sign that emotional and intellectual growth has been freed to develop. Feelings, tensions, non-intellectual capacities find their release in play, whereas, when they find no outlet they block creative expression. The ready compliance shown by students in conventional school settings may indicate an inability to utilize the teaching materials or medium but, if this is the case, the condition would go unrecognized as such since conventional teaching not only ignores teaching in ways that would recuperate the loss but they practice in ways that exacerbate the pathology.

If a child grows to be compliant in face of environmental demands it is a sign that demands on the child have been made prematurely, before the child has developed a confidence in his environmental support and/or before he has had much experience and freedom to play. A compliant child is a child grown away from his self, a child who patterns his behavior according to an outer, rather than an inner authority. Pathological results of premature impingement is discussed by Mahler, Winnicott and Laing in relation to the schizoid condition.[27] Winnicott's theory on the psychodynamics behind overly compliant behavior holds that a self, unwillingly exposed to forces originating outside of the personal self system, withdraws protectively. A false self is then formed to serve as a buffer or defense against an intruding world while the true self is hidden away.[28]

> "Hidden away somewhere there exists a secret life that is satisfactory because of its being creative or original to that human being. Its unsatisfactoriness must be measured in terms of its being hidden, its lack of enrichment through living experience."[29]

By being hidden, the true self is protected from possible intrusion, but this results in impoverishment because the true self is simultaneously shielded from the environmental stimulation needed for growth.

Perhaps the demise in students' creative ability, which Gattegno observed, is fostered by the conformist attitudes of many teachers; teachers placing more emphasis upon student conforming to a teacher's knowledge, than on teachers' respect for the students' learning. Students' needs then become secondary; relaxation, a prerequisite for play, is never achieved.

If schools do assume, as Winnicott suggests, that students are more able to handle instruction than they are, an inability to play presents problems that schools are not usually prepared to handle. Schools base their instruction on the assumption on the assumption that the child can manipulate the medium that leads to subject material. Math texts, for example, are notorious for their convoluted instructions, yet teachers do not usually assume that instruction is necessary to understand instructions. Further, inappropriate response in problem solving is considered error, not an inability to grapple with the medium itself. If the latter condition is recognized, however, a diagnosis is assigned that could result in a child's transfer to a specialist's care; a therapist perhaps. In contrast to a teacher, a therapist takes it for granted that his work is remedial, when it may be that the fundamental difficulty is one not of learning disability but teaching disability. A therapist looks for signs of arrested development and, together with the child, finds the means to ameliorate what has gone wrong. What was not heeded initially must be provided for in the end.

Even if a child enters school able to fulfill the school's expectation productively, somehow, in the course of most forms of schooling, the ability to approach problems in a creative, playful manner is sacrificed. Gattegno has remarked on this perceived loss many times throughout his work. He says a rational emphasis which neglects the capacities necessary for creative production is chiefly to blame. Hence, students slowly atrophy in their

ability to utilize capacities that would make diverse application of their school lessons possible.

There are many points on the developmental continuum where a self's growth can be interrupted and a false self created in its stead. I have presented the psychodynamic basis for the formation of a false self as a way to understand Gattegno's assertion that traditional teaching methods, in not achieving the engagement of children fully in learning tasks, encourage a false definition of experience. In his claim Gattegno appears to be saying that the processing that would lead to a natural response by students in a problem situation is short circuited. Children grow used to responding in ways that do not connect with a sense of truth for them and this disconnection is later evident in a diminishing creative capacity which can at some point appear as pathology.

In a discussion on the effects of a debilitating school experience Shakti Gattegno, Caleb Gattegno's wife, has written a soliloquy meant to depict a child's experience of authoritarian imposition. Her description corresponds to, and clearly elucidates, Winnicott's theory on the effects of premature intrusion on early infant ego functioning and thus underscores the conceptual alignment between Gattegno and Winnicott's perception on self. Shakti writes:

> "My inner dynamics are upset when people's attitude towards me is arbitrarily authoritative. This attitude conveys to me that they think they know best what is right for me, without having regard for what their actions and their attitude do to me. The impacts of authority which is indifferent to the truth of my existence, are felt as dead weight..my will is immobilized and does not act adequately upon such impacts. The inner processing is halted. The unprocessed impacts stay unintegrated as alien elements in my inner life. The authority imposed on me violates my inner being; it interferes with my contact with my own dynamics..the bonds of trust begin to sever..love for others based on trust is replaced by fear. Fear precipitates a dysfunctioning of the inner workings. My awareness and intelligence - those attributes of my self which in their clarity

> could help me make sense of the world - become obscured. My will becomes incapacitated, my actions become reactionary. I feel spiritually impoverished. I hope for a loving relationship to come my way and restore my spiritual well-being, a relationship which could let me be a loving, trusting self. I keep on learning to grow physically, and in some ways, mentally, as best I can but deep inside me I yearn to be in contact with my inner dynamics so that I can be engaged - as an integrated learner - in discovering the reality of the immense world I have entered, and in knowing the meaning of my existence in it".[30]

Correspondingly Winnicott says:

> "The potential space between baby and mother, between child and family, between individual and society or the world, depends on experience which leads to trust. It can be looked upon as sacred to the individual in that it is here that the individual experiences creative living. By contrast, exploitation of this area leads to a pathological condition in which the individual is cluttered up with persecutory elements which he has no means of ridding himself".[31]

There are many instances of intrusive practices in traditional teaching that are analogous to those found in the infant situations mentioned above. Teachers who rely on their own authority as a teaching guide in preference to students' contributions violate their students' autonomous investment in learning. Lessons taught repeatedly according to set criteria regardless of childrens' input, reflect an investment in an unchanging teaching process, not in maximizing learning to the greatest possible degree. How can lessons be assumed to be useful if the lesson recipients are never consulted? Teachers need to be sensitive to a child's need for challenge or they risk losing, in an invested sense, a child's interest. Conversely, teachers who impose challenges on students prematurely cause students to grow in anxiety, scanning their teacher's face for clues to guide their response without consulting their own critical criteria. Premature demands leave no time to relax, no room to play, and do not allow for a self-initiated response. Over a period of time, if a pattern continues of responding in an outer directed manner students stand to lose the uncomfortable feeling that could tell them

something is missing in their response. They only know it is difficult to apply their lessons from school to their lessons in life.

In her studies on the effects time limitations have on quality of students' responses Mary Budd Rowe discovered the typical teacher to wait only one second after posing a question for a student to respond. If the student does not answer or begin to answer after approximately one second the teacher either repeats the question or moves on to another student. Ms. Budd Rowe showed that when a teacher restricts the available time a student has to respond, students tend to develop an outer directed attitude. Scanning the classroom environment for behavioral clues becomes part of students' survival in an educational sense. However, Ms. Budd Rowe also found that when a teacher's "wait-time" was extended even three seconds longer, the quality of the students' speech changed to include more complex thinking. Students: "made better connections between evidence and inference",[32] and exhibited increased curiosity and confidence in giving their answers.[33] Where students are compelled to respond immediately a practice of second guessing is likely to occur and the opportunity to create and express a personally meaningful answer is lost. Most of us who have sought therapy have found very many people in our lives unteachable--they were not interested in learning who we were.[34] The evidence supplied by "Wait-time" research would seem to support this opinion.

A more insidious intrusion common in school settings is the frequent, unwarranted imposition of answers, perhaps revealing an educational bias valuing answering over questioning. Similarly, in therapy, consistently ill-timed interpretation is coercive in intent. It betrays a therapist's investment in his need to have the patient experience the therapist as "helping". Indiscriminate interpretation practices not only reveal a belief

in the patient's inability to help himself, but in the therapist's self-centered belief in his own power. Repeated interpretations made in this insensitive manner only serve to put the patient on the defensive, which condition we have seen is not optimal for growth. Psychoanalyst W.R. Bion remarked:

> "Experience brings it home to you that you can give what we call answers but they are really space stoppers. It is a way of putting an end to curiosity - especially if you can succeed in believing the answer is the answer..Even in the domain of mental activity, of wanting to know something about the universe in which we live, that hole can be blocked by premature and precocious answers."[35]

Appropriately psychologist Andrew Feldmar remarks "The mother doesn't give solutions to problems the child hasn't formulated yet. Naive interventionist-oriented therapists and teachers do."[36] As one pushes against a door, demanding entrance, one meets opposition, so the teacher finds that one student habitually opposes enrichment in defense against the possibility of further intrusion and loss.

Reacting against the world prevents acting in the world in a way that would facilitate learning. The results are debilitating. Jerome Bruner suggests that such a child manifests excessively reactionary forms of behavior, and habitually adopts a defensive posture when faced with a new learning situation.[37] If at a past time such defensiveness was appropriate, even essential, and the child has not learned the coping behaviors which are appropriate in a new situation Bruner shows, through his case examples, how intrusive teaching behavior can have a long lasting influence on later learning situations, and he suggests a combined therapeutic and instructional approach to successfully ameliorate the pathological effects. Although he does not explicate a detailed pedagogy to meet his criteria, the Silent Way easily provides an operational example of Bruner's advice.

To treat a child intrusively shows a lack of faith in the self-governing wisdom of the child. Some of the most impressive demonstrations showing a child's ability to work through his or her own difficulties can be found in play-therapy settings. Play provides opportunity for the child to communicate infinite subtleties to his experience not easily related when an insufficient command of language is owned. The therapist reaches for the child's message hidden in the communication of play. Handicapped in their use of language, children find verbal resolution of problems improbable and impractical to pursue. Manipulation of physical objects affords the opportunity for a child to express, often metaphorically, his relationships in the world and to work through the effects of unresolved conflict.[38] But in addition, play seems also "..dedicated to the exercise of growing faculties..and serve(s) the mastery of a complex life situation."[39] Play offers opportunity for the child to "..reinvent his own experience, to seek alternatives to that which he has known."[40] The "working through" to which Erickson refers is emotional. Piaget, on the other hand, speaks of play with reference to cognitive gains when he says that in order for a child to understand anything he must construct it himself. Piaget's conclusions seem to correspond very closely to Winnicott's findings and to Gattegno's functional approach to learning. Education precludes the need for therapy when the ways and means for a child's own expressions are provided.

The importance of the child's active involvement in learning is a point repeated throughout Gattegno's writing. Winnicott distinguishes between the noun "play" and the verb "playing"[41] in a way parallel to Gattegno's distinction between "know" and "knowing". Just as Winnicott says that psychoanalysts have long concerned themselves with the content found of play and not with the playing child, so Gattegno says educators have focused on

knowledge and not on the process of knowing or attainment. In play-therapy progress cannot be made unless the playing child is studied, not the resulting pathology.[42] Gattegno approaches learning with the same focus--study the learning student not his examination scores. This is constructive ignorance, or ignoring, which can hopefully lead us out of pathology.

FOOTNOTES CHAPTER 2

1. Morton Hunt, The Universe Within, (New York: Simon and Schuster, 1982), p. 40.

2. Caleb Gattegno, Newsletter, (New York: Educational Solutions, December, 1979), p.

3. Ibid, p. 9.

4. David Davidson, Language in Education, (Virginia: Center for Applied Linguistics, 1978), p. 12.

5. William R. Slager (1973) describes meaningful in essence as a union between context and grammar that reflects a student's knowledge of the world, and is relevant to a student's daily life.

6. Gattegno, Newsletter, December, 1979, p. 12.

7. Rollo May, ed. et al, Existence, (New York: Basic Books, 1958), p. 49.

8. D.W. Winnicott, Playing and Reality, (England: Penguin Books, 2971), p. 63.

9. Paediatrician and Psychotherapist D.W. Winnicott has shown, through case examples, how loss of self manifests in play therapy. See specifically the case of "Bob" in Therapeutic Consultations in Psychiatry, (Basic Books, Inc., 1971), p. 87.

10. Winnicott, Playing, p. 63.

11. Ibid., p. 55.

12. D.W. Winnicott, Family and Individual Development, (London: Tavistock Publications, 1965), p. 17.

13. D.W. Winnicott, Playing, p. 55.

14. Erik Erikson, "Play and Actuality", essay in Play, eds. J.S. Bruner, A. Jolly and K. Sylva (England: Penguin Books, 1976), p. 694.

15. D.W. Winnicott, "The Observation of Infants in a Set Situation", in Through Paediatrics to Psychoanalysis, (New York: Basic Books, Inc.) p. 52-69.

16. Ibid., p. 244.

17. D.W. Winnicott, Playing, p. 15.

18. Margaret S. Mahler, Infantile Psychosis and Early Contributions, Vol. 1 (New York: Jason Aronson, 1979), p. 170.

19. Winnicott, Playing, p. 13.

20. D.W. Winnicott, The Maturational Processes and the Facilitating Environment, (London: The Hogarth Press, 1979), p. 51.

21. These children could speak English to varying degrees of expertise, so the teacher was not required to be silent. Their difficulty was with conceptualization and sentence structuring. These areas were the main lesson foci.

22. Winnicott, Playing, p. 12.

23. Ibid.

24. Ibid., p. 56.

25. Ibid., p. 102

26. Ibid., p. 102.

27. See in particular, Laing's The Divided Self and Winnicott's Therapeutic Consultations in Psychiatry.

28. Winnicott's "False Self" theory preceded R.D. Laing's presentation of the same theory, which is explicated in Laing's The Divided Self, and is pertinent to our continuing discussion.

29. Winnicott, Playing, p. 76.

30. Gattegno, Newsletter, February, 1979, p.

31. Winnicott, Playing, p. 121.

32. Mary Budd Rowe, "The Pausing Principle - Two Invitations to Inquiry", Research on College Science Teaching, 1974, p. 259.

33. ———————— "Relation of Wait-Time and rewards to the Development of Language, Logic, and Fate Control: Part One - Wait Time", Journal of Research in Science Teaching, 11(2): 81-94; 1974.

34. Andrew Feldmar, Lecture "On Doing and Saying Nothing", June 12, 1980.

35. The Roland Harris Educational Trust, 4 Talks with W.R. Bion (Scotland, 1978), p. 2.

36. Feldmar, June 12, 1980.

37. Jerome S. Bruner, "On Coping and Defending", Towards a Theory of Instruction, (Cambridge, Mass.: Belknapp Press, 1967).

38. Erikson, "Play and Actuality", p. 690-1.

39. Ibid.

40. Ibid.

41. Winnicott, Playing, p. 16.

42. Ibid., p. 46.

Learning theories evolved as an attempt by psychologists to explain change; they pursued a theory that would account for "..the acquisition of knowledge and/or the emergence of new responses,"[1] a narrowly delimited area of concern. Fagan and Shepherd suggest that these psychologists either chose to admit what they did not know about the learning experience, and pursued such gaps; or exalted what they did know, and elaborated upon that, but in both cases ignored the possibility that their definition could lead to gaps of which they were completely oblivious. The latter are from the associationist tradition today referred to as behaviorism while the former are from "..the schools of introspection, functionalism, and Gestalt psychology, which may be grouped under the heading of phenomenology".[2]

Following the indeterminate, introspection of the Structuralist era behaviorists sought a means to account more consistently and visibly for phenomena. Therefore they chose to ignore what they could not objectively control and concentrate on what they felt they could: observable behavior. To acknowledge their structuralist forebears they closed the gap between visible and invisible realities by equating them as equal. Having eliminated subjectivity as a separate concern and being influenced by the preponderant mechanistic attitudes of the day, methods of approaching and interpreting behavior grew increasingly mechanical. As Joyce and Weil report, it was and is a common practice of behavioral researchers to isolate visible human phenomena into "small sequenced behaviors"[3] as if the packaging described the product.

However, researchers embracing subjective phenomena in their description of learning believed behaviorist methods to be reductionist, fragmenting phenomena and reducing man's experience until it bore no relation to the truth. Contemporary existential psychologists, like Rollo May, attributed man's alienation, where actions seem divorced from meaning, to

such reductionist practices. Phenomenologists, believe we are one step nearer the truth when we begin to perceive the world with less certainty as to what is really there. They choose to include the subjective in their description of reality, and acknowledge the uncertainty which results: "..existence.. assume(s) a new dimension, becoming 'incompletely intelligible, questionable'."[4]

Since behaviorists believe that the meaning to reality can be discerned operationally, it follows for them that the motivation to learn should also be a perceptible event; motivation is conceived as something inspired by outer sources in the environment. Phenomenologists believe that visible behavior is affected in unpredictable ways by unknown factors, and therefore is neither reliable nor predictable in terms of observable reality. However, viewing reality in indeterminate or relative terms does not mean it is a mystery minus guiding principles, but means that instead of placing the motivation for experience completely outside the human being as a behaviorist would do, phenomenologists place it within man: "The world originates in us..and within us acquires its habitual influence."[5]

The locus of control is internal, and even though our will to act can be engaged and provoked by outer stimulating events, ultimately we are moved to act by forces that reside in us. The decision to follow provocation with action remains with us. This claim, made by phenomenologists and existentialists, culminates in the practical tenets of gestalt psychology and psychotherapy, and is manifest in the techniques which gird Gattegno's teaching approach.

An analogy may clarify my point. In theatre our perception of an onstage performance is influenced by multiple background effects which have an impact on our experience. Atmosphere, tone, mood, pace, are intangible yet contribute to, and to some extent determine, the performance's overall

success, in the same way that our experience, viewed phenomenologically is comprised of intangible impacts on our consciousness which determine the "whole" of our experience. As in theatre, where the experience of a production cannot be reduced to isolated actors' behaviors, so it is with everyday experience.

Because of this perspective the tools phenomenologists use to study experience differ from those used by their behaviorist colleagues. Changes in consciousness often represent subtle shifts. Identifying these shifts requires a heightened sensitivity: the instrument used by all those who include consciousness in their definition of experience.

Therefore, how one defines experience; what affects, motivates, controls it, is more or less equivalent to how one defines learning. And, implicit in one's definition of learning are assumptions concerning the steps that can be taken and the means whereby one can ensure that something is learned. Behaviorist and phenomenologist schools of thought define learning to be, respectively:

1. information getting, usually involving an outside authority
2. discovering for oneself by "uncovering what is there".[6]

Fagan and Shepherd describe learning, from a gestalt standpoint saying: "When we discover, we are uncovering our own ability..in order to find our potential." In so doing we discover "..how we can enlarge our lives, to find means at our disposal that will let us cope with a difficult situation."[7] Gattegno voices a similar perception of learning when he says: "..only by becoming aware of the functional attributes of the self[8] will we develop the means to cope with the complexities of life."[9]

Within a phenomenological framework Gestalt psychology represents a limited science, concerned exclusively with external, visual and auditory

configurations. Academic Gestalt psychology is a behavioral science, including only what is observable in its description of experience and excluding the wide range of physical and psychological information that also comprises human experience. Gestalt therapy however, compensates for this deletion by including the entire range of human phenomena: thoughts, images, feelings, etc., along with perceptions as behavioral information. To the Gestalt therapist, behavior is thought to be a continuum expressing both subjective and objective events occurring according to the formation and destruction of "gestalts". But in contrast to the academic Gestaltist having an external locus of control, the Gestalt therapist places the control within. Divergence between the academic and practical fields of Gestalt can be noted as a distinction between an exclusive concern with what can be observed, in the former instance, and a concern for what can also be intuited, questioned, sensed and drawn out, in the second.

Dealing strictly in the present the Gestalt therapist "..attempts..to draw the patient's awareness to the discrepancy between his expectations and the reality setting there in front of him."[10] In health, experience is flow. There are no boundaries separating health from ill-health in Gestalt therapy save that which interrupts experience. As a healer, the therapist attempts to locate the source of interruption in the patient's experience. He heightens the patient's awareness of its existence which tends to make the reason for the interruption more visible or concrete, and therefore easier to work with. Ultimately, in a Gestalt therapy process the patient learns, not how to conform to some conventional standard of behavior, but how to stop interrupting his daily experience. The Gestalt therapist teaches and leads the patient in becoming aware of his own behavior, so that the patient's experience of himself is transformed from being a product to being a process.

Certain characteristics of the Silent Way process may be compared to changes incurred through a Gestalt therapy process, because change wrought by the Silent Way process is much more than cognitive growth. The Silent Way and Gestalt therapy overlap in philosophy and in techniques that enhance the possibility of change occurring: a transforming effect on the psychological health of the learner or patient. Silent Way workshop participants report that their experience of themselves as learners is changed;[11] they are transformed in ways that include, yet supercede, a cognitive definition of learning. Their experience of change is described as an expanding awareness that leads in turn, to changes in attitude, confidence, ability and self esteem.

In Eastern philosophy transformation implies a change in consciousness that is achieved through expanded awareness. By meditating or looking inward, it becomes possible to transform one's ordinary way of being through insight: a spontaneous occurrence facilitated through expanded awareness. Awareness, in Eastern philosophy and meditative practices, is the instrument which cuts through superficial consciousness to deeper, clearer states of mind and prepares the ground for insight to occur. Gestalt therapy and the Silent Way approach to teaching both use awareness as their main vehicle for change, aiming towards the actualization of human potential by heightening awareness. However, in these two processes, different methods facilitate awareness, and subsequently, the results are manifest somewhat differently.

Gestalt therapy consists of continually bringing the patient's attention to any incongruence evident between the patient's behavior and his reported experience. The therapist's task is to help the patient become aware of what the patient is not aware, in relation to a particular problem. Facilitation is primarily verbal, but the therapist does not say what a

patient could be encouraged to say instead. The therapist does not solve the patient's problems: "..but helps re-establish the conditions under which the patient can best use his own problem-solving abilities.[12] A Silent Way teacher's task is to draw the student's attention to details of the student's involvement in the learning process. The teacher provides a learning environment that holds the possibility for more of the student's learning capacities to be employed, but the teacher facilitates instruction silently, where possible, and through the use of mime. The learner develops a self knowledge that has a widening effect on his understanding of himself in all learning situations. But where the therapist's actions clarify only what is brought by the patient, the teacher also brings. While self awareness is the key emphasis in Gestalt therapy and in Silent Way instruction the latter also supplements its practice with enrichment. In the Silent Way classroom the individual's internal demands for coherence are met and become known to the learner not only through awareness but, additionally, through appropriate environmental stimulation a double movement, the prerequisite for change.[13]

The Silent Way teacher's ability to maintain a non-interfering attitude is largely due to the meditative stance she employs. Awareness requires a quietening of the mind, tolerance and an attitude of non-attachment to anything that presents itself: the stance a teacher must adopt to be the model of acceptance Silent Way practice demands. In a Gestalt therapy process the meaning of its goal "to become what one truly is" has largely affective connotations while the Silent Way classroom experience surrounds intellectual concerns but achieves the same end. Awareness, a practice in both processes ensures a high level of concentration which tends to push learning beyond rational constraints. Capacities are engaged that would not otherwise be tapped and this results in subsequent

knowledge being more broadly defined. Compared to a Gestalt therapy focus, in the Silent Way process emotional integration is a secondary by-product. But compared to a traditional teaching approach the Silent Way, as an instructional process, facilitates a process of self actualization that more closely aligns with successful outcomes of therapy. Students become more sure of themselves, take greater risks in exercising their mental abilities and are not content to stay within circumscribed subject limits. Correspondences between results of Silent Way and Gestalt therapy processes are well summed up by Carl Rogers concerning the outcome achieved by his client-centered therapy. To paraphrase Rogers he says that if we allow people to become themselves they will display:

1. an openness to experience
2. trust in themselves
3. an internal locus of evaluation
4. and a willingness to be a process rather than a product.[14]

Therefore, although differences exist in the emphasis and practice of Gestalt therapy and the Silent Way, both processes appear to facilitate a growing autonomy, self-responsibility and actualization of potential that it seems should be the ideal goal of instructional processes in general, and of therapeutic and educational processes especially.

The principles in common between the Silent Way and Gestalt therapy are seen in all Gattegno's approaches to learning. However, his techniques for facilitating various subjects are tailored to meet those individually unique subject requirements, such as, for example, Gattegno's techniques for teaching reading as opposed to teaching second or foreign languages. The approaches designed to facilitate instruction in reading and foreign languages are Words in Colour and the Silent Way, respectively. In comparing

these we see that the Silent Way allows us to avoid the usual confusion of most second language teaching approaches. Most language teaching seems confused between the needs of students learning to read and those of students learning a second language, in that they teach vocabulary. Further, we can see how, as the Silent Way meets the needs of the second language student, it also parallels the psychotherapeutic process.

Words in Colour, or the teaching of reading in an already known language, has a different emphasis than that of Silent Way. Since students of the Words in Colour approach have already much experience in their comparatively fluent use of the spoken language many criteria central to Silent Way lessons are unnecessary here. Word meaning, for example, receives relatively less attention. Instead, Words in Colour instruction is, "..based on links suggested by the phonetic structure of words, not their meanings."[15] In the Silent Way classroom however, students must be invited into situations which they can easily recognize in their present experience. Students in these classes are participants in the evolutionary aspects of language through direct involvement in lesson interactions while, at the same time, the content for this lesson material is composed of the interactions themselves. For example, in demonstrating the use of the words "take", "give", and "pick up", the whole class can be involved acting out these directives while accompanying their actions with appropriate imperative verbs. Increased ability is encouraged through progressively and gradually moving from singular to plural, introducing pronouns, indicating past and present, and so on. Therefore, where in Words in Colour language is generated according to peculiarities common to the language itself; script, phonemes, (see appendix) for example, in Silent Way language are generated along personal, referential lines.

The Silent Way always uses contexts having a simulated or symbolic framework in which to focus lesson interactions. Because the aim is to involve the learners in a rich use of the language, words and phrases are consciously introduced by the teacher, slowly. Later, introduction is apt to be more frequent as a greater command of the language is attained. In a recently observed Silent Way class for example, a student was motioned by the teacher to describe a manipulation of rods within a model restaurant. The student said "The waiter was on the table" instead of "The waiter was by the table." The teacher immediately placed the "waiter" on top of the "table" and everyone could see what was wrong with the student's choice of words. In a Words in Colour class, however, meaning is not explicitly depicted. Here, meaning is assumed and substantiated by the learner's proper use of tones and correct juxtapositioning of what is read.

In a Words in Colour lesson emphasis is placed on the creative production of words so that language achieves a non-threatening, versatile quality in the eyes of the learner, that tends to encourage a more courageous grappling with complicated texts. A means to this end is "Transformation Games", a Words in Colour technique used to stimulate creative vocabulary. Words are generated through phonetic patterning emphasizing the expanding interrelatedness of words, with the understanding that structure in language is the key to creative facility with words. Although creative word production is also stressed in the Silent Way its emphasis is auditory, with word design or visual script recognition being of secondary concern. In a Words in Colour classroom priorities are reversed.

Other differences between the two techniques are indicated by their initial method of presentation. Although Words in Colour and the Silent Way both employ the use of charts, the former begins with words immediately, while

Silent Way uses a chart replete with coloured rectangles for which sound equivalents are assigned (see fig. 1). The initial discrepancy in manner of presenting points to different learner capacities stressed. As mentioned, Words in Colour appeals primarily to the learner's visual or perceptive abilities, while the Silent Way requires an enhanced use of auditory and analytical abilities. In the former instance Gattegno advises written words be approached as designs, each with its own "..character which is derived from their form."[16] Concentrated, sensitive and enthusiastic attention by the teacher to the script conveys to the students that there is something to be found in the configuration before them. Gattegno further explains the rationale behind this perceptual focus:

> "When beginning to write, the learner must recognize the singularity of each word design, as when entering the realm of speech, a baby has to recognize that sounds have characters of their own, and through these (sounds) retains them."[17]

Silent Way lessons realize, in practical terms, the baby's initial struggle with speech by facilitating in the learner a heightened awareness of the distinguishing sound and sign characteristics of the new language. Active participation in Silent Way lessons requires a re-acquaintence with one's self in a singularily focused manner. Just:

> "..as babies we all constructed a very elaborate system of connections between our voluntary system of sound production and our analytic inner ear and our brain complexities of cells so that we know from the contact of the self at work in our vocal system and indirectly in the impact of these utterances upon our ears what we utter directly..hence our suggestion that we find a way of making students of a new language work first on their voluntary system and hear themselves producing sounds rather than a model."[18]

Further notable differences are apparent when one compares Words in Colour to the Silent Way. One of these appears in the alternatively important or relatively unimportant use of silence. In a Words in Colour classroom the

teacher does not face the difficulty of trying to convey feeling or expression through words that lack such qualities in themselves. Feelings and expressions are embedded in the language as the students already know it and can be evoked within an illuminating context, a story for instance, although what the students feel is subject to individual interpretation. This is not the case in a Silent Way classroom. Here the teacher must be very careful in her introduction of words to the classroom dialogue. Each word must be introduced in a way that will enable students to hold it in their minds, free from the distracting or contaminating influence of excess verbiage for which students have no understanding. And, although the teacher chooses words for which an equivalent can be found in the students' native language, a situation must be carefully constructed in the classroom for this meaning to be triggered. Meaning is not assumed. Therefore the Silent Way teacher must exercise a much greater control in monitoring what she says, always being aware of her students' current level of facility with the language. Also, feelings and inflections which are assumed in a Words in Color lesson are perhaps major points of emphasis in a Silent Way classroom. Feeling, inflection plus timing and rhythm, may generally determine the meaning of spoken sentences quite apart from the vocabulary itself. They cannot be described verbally, as in a Words in Colour lesson. Silent Way teachers typically convey this information silently and through the use of mime (see appendix for example). Silence is a chosen attitude of abeyance in a Silent Way classroom where it is recognized that the student's struggle with language requires detailed concentration to his own learning process and that a teacher's intervention could constitute a serious interruption to this necessary struggle.

From this comparative overview of Words in Colour and Silent Way

certain technical highlights and facilitative practices emerge as consonant with Gestalt psychology and therapy. A brief observation of Silent Way lesson materials immediately calls to mind the academic Gestalt psychologists's preoccupation with external criteria largely of a visual and auditory nature. In Gestalt psychology and therapy experience is spoken of either in singular or cumulative terms, the latter pertaining to a set of interlocking events called "whole experience" while the former refers to an exclusive focus. The "whole" experience called "field" in Gestalt recedes as background when a portion of the "whole", termed "figure", is isolated as a focus from the experiential context. Silent Way lessons are arranged so that a "field" of accumulating perceptions and auditory impressions impinge on the learner's consciousness. Amidst this field, composed in part by lesson materials, teacher's presence, students' experiences, what happened in yesterday's class, and many other factors, a figure emerges when the teacher wishes to highlight an aspect of the field. Generally, occasion to do so is precipitated by a student making a mistake; the student received the lesson's impressions in a poorly organized manner forming an inadequate gestalt as answer. Like the Gestalt therapist[19] the teacher attempts to break up the student's poorly organized field by directing the student's awareness to isolated aspects, figures, of the mistake. But it is important to remember that the figure is understood only through a complex interaction between figure and ground, or field. Although one comes to distinguish the figure from the ground the meaning of the figure is inseparable from the ground and receives certain levels of meaning from the ground in which it is embedded. Describing Silent Way lessons as interactions between figures and fields does justice to a complex system of instruction little understood otherwise. Additionally, since this instructional model appears to be based on

Gestalt methods for facilitating learning, positing Silent Way within a Gestalt framework would thus more adequately address the therapeutic implications of the Silent Way.

In contrast to the all inclusive perspective on learning shared by Gestalt and Silent Way, traditional teaching suggests a fragmented perspective on the learning enterprise. For example, a practice of packaging concepts into units rather than interdisciplinary terms demonstrates an: "..isolation of learning inherent in the typical modes of habitual organization of schooling.."[20] Conventional lesson arrangements do not easily accommodate speculation, controversy or individual interpretation, and their preparation would suggest confidence in an authority that does not find its place in the child. For instance, it has been the case that in some schools special time has been spent teaching a child to read from left to right as a separate instructional activity. Children have been known to be singled out for their inability to perform this task. But reading from left to right is not the fundamental issue; timing is the issue. In a Words in Colour class a practice of isolating operations like teaching children to read from left to right is made ridiculous, because it is recognized that one only has to hear oneself reading backwards to know that something is wrong. Left alone it is highly improbable that a child will not soon discover the means for self-correction. All people speak according to certain conventions. If one invites people into situations where they have the freedom to read in whichever direction they wish, as for example in the spiral game (see appendix) people will generally come to read in a way that makes sense in conventional terms. By giving them the choice and the opportunity to experiment they develop an autonomous relationship toward their readily ability.

But again, teaching practice only reflects teaching priorities. Where

Sub.T.Le. looks to the learners' needs to determine lesson guidelines bureaucratic schooling proceeds by respecting teacher as authority. Studies on the importance of contextual arrangement in the classroom reveal that the average mode chosen to present lessons define what is required from students.[21] On the average, students' participation is limited to watching, writing and reading: limitations which assign the: "..locus of control of learning.. outside the student".[22] Sub.T.Le. lessons do not proceed except as the students' full participation is ensured; the essence of this complete committment constitutes the substance of the lessons. And because lesson progress and direction is contingent on students' participation the responsibility, hence authority, for what is and is not learned rests with the student. Sub.T.Le. lessons teach students that they can fulfill their own needs as learners through techniques that provoke a more involved attitude toward learning, awareness and therefore control over their own contributions. Through this process of self education autonomy is achieved.

Apart from the theoretical correspondences between Gestalt and the Silent Way a further, more detailed look at Silent Way and Words in Colour techniques might help establish the ways in which these techniques reflect and foster the goals of Gestalt therapy. For instance, a facet common to both Silent Way and Words in Colour is the relatively few nouns used to generate language. In the Silent Way classroom only the word "rod" and the pronoun "I" are introduced, at first, in English or their equivalents in the language to be learned. These words are then used in as many conceivable linguistic operations as possible. Introduction of new nouns is greatly restricted to prevent the tendency to memorize words as vocabulary. Thus a language "field" is generated by one noun as a central "figure",

An essential unity in all things is the Gestalt notion implied by

classroom techniques identified for their ease in accomodating varying levels of ability in a way that does not sacrifice relevance for challenge. A rod can easily, appropriately and imaginatively be used as a basic noun ("rod"), embodied correctly within a vast possible assortment of situations using various language structures. A rod can represent:

a person	e.g. the waiter stood by..
a table	e.g. the waiter stood by the table
a chair	e.g. the waiter sat down on the chair

A rod can be used to represent an object where the emphasis is on positions, of the various ways of using language to describe the positions.

- under the table
- on top of the table
- on the left of the table (or right of)
- a long way from etc.

Each student is introduced to concepts through lesson materials used in a way that is relevant to the student's present abilities, yet such introductions are received and worked individually by students so that personal interpretation melds with syntax, adding what is necessary to turn information into skill.

> "..the exterior symbol system is not sufficient to explain all of knowledge acquisition...it (knowledge) could not be constructed without a whole set of private experiences which reside within the feelings and sensations of our bodies and, in a more general way, in our consciousness".[23]

Rod constructions used in Silent Way to symbolize concepts also have the inherent capacity to both embody several levels of language ability and allow personal meaning to be assigned. The undistracting quality of the materials used facilitates a connection to be formed between inner and outer experience. Even though the teaching emphasis is on the outer, visibly

apparent manipulations, the neutrality of the constructions allows nuance, subtlety and feeling to colour the language generated in a manner that is significantly individual. Students are able to approach the simplicity of these constructions with the degree of sophistication appropriate to their current facility in the new language and develop an understanding of language that is deeply rooted in their sense experience. As the cushion is used in Gestalt therapy to stand for emerging "figures",the rod in the Silent Way easily assumes the role appropriate to the issue at hand. Through the central focus provided by rod constructions students share and challenge different levels of expertise, drawing on the backdrop of their experience. Consequently what may initially seem merely a language lesson holds the potential for a transforming experience, as does a therapy session. Learning in Silent Way evolves as it involves.

A consistency is evident in the use of such central and unifying techniques which is not exemplified by the techniques alone. Gattegno's entire development of subject-oriented teaching approaches are extensions of one another that can be seen as variations on the same theme. Words in Colour may be used in a Silent Way classroom once enough of the new, spoken language is mastered and reading the written word is the next challenge. Mathematics taught using rods via subordinating principles can be incorporated within a Silent Way classroom. Also concentration on word shapes may be a necessity in a Silent Way classroom where the language being taught has an unfamiliar alphabet.

In examples given in the preceding discussion, the consistency of Gattegno's various teaching approaches can be verified through their interchangeability, a point which indicates the very well integrated conceptual basis of his work. Gattegno's instructional techniques interlock

as a complete Gestalt through which well-developed figures on varying levels emerge from a set of parts. The systems Gattegno has designed for teaching reading, language and mathematics appear based on the Gestalt psychology conception of learning which, in turn, connects to psychological models of infant learning (Winnicott, et al). Technical implementation of these systems employs the use of figure/ground temporal relationships that respect the developmental constituents of infant perception and learning,as though the perceptual organization in infant learning holds true for adult learning. This assumption is also held by Gestalt therapists, although their field of concern more actively engage inner processes as foreground emphasis than does the experiential field of Silent Way.

> "The Gestalt therapist..believes that the natural state of man is a single, whole being--not fragmented into two or more opposing parts. In the natural state, there is constant change based on the dynamic transaction between the self and the environment."[24]

Gattegno conveys a Gestalt unity in his concept of self, through techniques that facilitate aspects of the self's interaction with the environment rather than hindering its progress, so that maturation is a concomitant by-product of the learning process. His systematic, yet flexible approach to subject matter, with lesson presentations designed to engage diverse, non-linear aspects of the self's functioning within the learning situation (such as imaging abilities); his persistent stand on the interchangeability of teacher and student roles are all evidence of a dynamic approach to learning that equates well with the Gestalt paradigm of growth. But the Gestalt unity is even more apparent in the description Gattegno gives on the details of man's functioning in the learning process:

> "In the learner's experience, images knit closely together, actions (of the organs of phonation, or the muscles of the hand and arm) and meanings have been combined to form as strong an association as possible."[25]

To Gattegno man's functioning in learning is a fluid network of associating parts. The learning itself is an orchestration conducted along subject lines. Aspects of the self are called in service of a theme (lesson topic), according to the dictates of a melody (techniques), with synchronization or harmony depending on the quality of the conducting (instruction). Like the self the orchestral arrangement or lesson dynamic is composed of several functioning parts. In a harmonic performance the elements of the composition are singularily lost, as are the physiological-psychological components of self during learning. This musical analogy reflects Gattegno's point about learning and retrieval being a function of more then memory. In trying to remember a musical selection an incident occurring at a much later date can trigger an image which projects all or a portion of the selection back into consciousness. Other functionings are involved in learning to play a musical instrument and still others are employed to write a musical composition. Recall of the learning involved in performing these tasks requires access to differing kinds of learning processes, depending on the nature of the learning task. Memory in each instance entails more than the cognitive assimilation and recall of technical information. Learning to speak and to write a language are other examples of selective retention for:

> "Together (man's functioning in relation to his learning environment), they relieve memory and assist in the coordination of automatic responses to the appearance of words in the media of speech and writing."[26]

In a paper entitled "Education and the Living Image" Peter Abbs expresses his abhorrence of the contemporary school's tendency to engender: "Only an abstract and quantitative mode of understanding, the memorizing of inert knowledge crudely measured through a plethora of mechanical examinations".[27] The conventional approach to fostering students' critical faculties would seem to fit comfortably with methods belonging to a

Behaviorist psychologist's description of learning.[28] The processes engendering imagery do not belong within a criteria of Behaviorist objectives, for such psychological processes cannot be perceived objectively. Yet imagery, Abbs continues, is a reflection of our inward being. Since enhancing imagistic ability is a subject not stressed in contemporary teaching "..our inwardness..becomes difficult to grasp.."[29] and this form of selective ignorance in contemporary schooling leads, Abbs maintains, to, "..alienation of man from the sources of his own being."[30] Our "being in the world"[31] thus appears to reflect a void, and anomie, meaningless in our existence.

Experiencing meaninglessness in life is a theme encountered frequently by those in the helping professions. By not recognizing, in practical terms, the importance of imagery and similar non-rational, non-quantifiable processes, schools prepare students to lose themselves. Only by developing the means for discovering our own potential will we become whole in relation to the world, acting from a place of understanding and not from a place of meaningless compliance to the wishes of others. However, recognizing the importance of imagery in man's experience of the world is not easy for persons educated according to rational ideals. Acceptance of imagistic processes as vital components to perceived reality involves surrendering: "..to shaping forces operating outside of our analytical reasons and our controlling willpower."[32] This surrendering is the subject of Mary Selman's discussion in her paper, "The Silent Way: Insights on ESL". Surrendering to more than rational processes, Ms. Selman says, is constantly stressed in the Silent Way classroom. In committing himself to the learning process at hand the Silent Way student allows for a gradual realization of his own "perceptual and analytical powers" a realization aided by lessons utilizing materials and

techniques that provoke, enlist and engage imagery as a vital component of the learning process. For example, at first glance it may not be obvious why colour was used on fidel and word charts as a means to trigger sound equivalents. Gattegno explains: "Colour can help convey a phonetic clue to words like a relief map does to the spatial arrangement of an area."[34] Emphasis on perceptual processes, and the part they play in aiding the learning process, has led to the development of specifically organized charts designed to augment perceptual functioning to benefit learning outcomes. Gattegno's particular stress on perception is conveyed in his comment: "The eye also functions in time as a scanning instrument, but in addition it photographs vast expanses. Space can therefore be taken as a whole in one glance.."[35] Hence we see that the focus in Silent Way is not to direct the eye's attention along linear lines. Instructional methods which capitalize on eidetic and peripheral eye-functions are used, in favour of rational, linear forms of lesson presentations which do not optimally facilitate this kind of seeing. Surrounding students with a welter of material arranged to elicit diverse, ill-used abilities, tends to convey a feeling of immersion--a pressurized situation Gestaltists believe leads to "insightful" experiences.

Finally, it is worthy to note that whether or not the Gestalt principles evidenced in Silent Way are direct cause to its success, foreign languages introduced within a Silent Way lesson context are mastered, to a fairly capable degree, in hours rather than months or years.

FOOTNOTES CHAPTER 3

1. J. Fagan and I.L. Shepherd, eds., Gestalt Therapy Now, (New York: Harper & Rowe Publishers, 1970), p.40.

2. Ibid.

3. B. Joyce and M. Weil, Models of Teaching, (New Jersey:Prentice-Hall,1980), p.13.

4. Roderick M. Chisholm, ed., Realism and the Background of Phenomenology, (New York:The Free Press, 1960), p.124.

5. Ibid., p. 123.

6. Fagan and Shepherd, Gestalt, p. 18.

7. Ibid.

8. There is no one succinct definition of "self" available in Gattegno's terms. However, a partial understanding may be gleaned when he says in his book On Love, (New York:Educational Solutions, 1977), "What every one of us meets when asking the question: "Who is the "I" that has always been me since I was conceived, has experienced all that I am aware of, and can become aware of all that will come my way?"

9. Gattegno makes similar statements repetitively throughout his writings. For instance, in The Universe of Babies, (New York:Educational Solution, 1973), p. 121.

10. Fagan and Shepherd, Gestalt, p. 108.

11. Susan Ackerman, letter in Newsletter, December, 1979; and "Arizona TESOL workshop" letter appearing in Newsletter, (New York:Educational Solutions, December, 1982).

12. Fagan and Shepherd, Gestalt, p. 108.

13. Gregory Bateson, Mind and Nature, (Toronto:Bantam Books, 1979). p.159.

14. Carl R. Rogers, On Becoming a Person, (Boston:Houghton Mifflin Co.,1961).

15. Caleb Gattegno, Teaching Reading With Words in Color, (New York: Educational Solutions, Inc., 1968), p.6.

16. Ibid., p. 101.

17. Ibid.

18. Caleb Gattegno, The Common Sense of Teaching Foreign Languages, (New York: Educational Solutions, Inc., 1977), p.121.

19. John B. Enright, "An Introduction to Gestalt Techniques", in Gestalt Therapy Now, eds., J. Fagan and I. Shepherd, (New York: Harper & Rowe, 1970), p. 108.

20. Francois Saegesser, "Simulation-Gaming in the Classroom", Simulation and Games, 12(3), (September, 1981), pp.281-294.

21. J.O. Urmson, "Saints and Heroes", essay in Moral Philosphy, Washington: University of Washington Press, 1958), p. 198.

22. Saegesser, Gaming, p. 284.

23. Ibid., p.286.

24. Fagan and Shepherd, Gestalt, p.78.

25. Gattegno, Words in Colour, p.101.

26. Ibid.

27. Peter Abbs, "Education and the Living Image", Teachers College Record, 82(3) (Spring,1981), p.183.

28. Here I am speaking of the Behaviorist school of thought, which does not include inner, subjective phenomena in its description of behavior. Standard Behaviorist procedure is to study behavior in isolated, fixed terms and apply the findings as generalizations meant to explain the whys and wherefores of man's behavior.

29. Abbs, Education, p.184.

30. Ibid., p.183.

31. "Being in the world" means in, in objective terms; with, in subjective terms; and of in a spiritual sense.

32. Abbs, "Living Image", p. 200.

33. Mary Selman, "The Silent Way: insight for ESL". TESL Talk 8 (1) 1977, p.35.

34. Gattegno, Words in Color, p. 5.

35. Ibid.

An importance of the development of a healthy self and a sense of personal wholeness and well-being has been fundamental to all our discussion up to this point. Whether one is considering Winnicott's perception of the infant's development of a healthy relationship between self and other (including mother, object, etc.) or the Gestalt model for the development of complete units of meaningful experience, the essential emphasis remains the same and leads naturally to concern about those circumstances that serve to interrupt the developmental sequence, and thus to the question of reparation.

Theories vary about the specific kind of reparation which may be needed for an intellectually or emotionally damaged child, as do the practical methodologies employed. But there are a number of striking similarities despite the divergences; Gattegno's educational model synthesizes, within the classroom situation, many of these approaches. Common perspectives are that, despite the damage, healing can occur through later experiences: (a) they may be thrust upon us or specifically structured within educational or therapy environments, (b) there are also similarities in the models of consciousness used in both therapy and education to explain the process of trauma and reparation. A look at psychoanalytic and existential approaches to healing, bearing in mind the Gestalt model that has been presented, will provide, from the standpoint of reparation, elucidation on the crossovers that exist between these models of therapy and Gattegno's learning approach.

It is interesting to note that in so far as both Freud's psychoanalytic method and Gattegno's educational process facilitate the reparation of damaged aspects of the self, there are a number of philosophical similarities in their views of man and psychic process. Both Freud and Gattegno base their psychological theories on a view of man as an energy system, but their respective systems clearly differ. Freud's system, for example, is based

solely on intrapsychic functioning. Man is divided into mainly conscious and unconscious energy, with the unconscious seen as regulating and determining conscious behavior. The psychoanalytic technique is a basic method used to reach those unconscious recesses and acquaint the patient with the unconscious determinants governing his life. Such exposure and explication presumably frees the patient to have more conscious control over his behavior. Gattegno's model, on the other hand, extends "man as energy" to include "world as energy". Professor A.J. Dawson presents Gattegno's four levels of complexity to this universal view as: the "cosmic, vital, behavioral, and human realms" whereby it is claimed, as human beings we are composed of the substance of the cosmos and are affected and transformed by energy from the same.[1] Therefore, where Freud saw influence and transformation in psychical terms, Gattegno extends the range of impact and intervention possible to include all energy forms known to exist. But although the parameters to their respective energy models differed, Freud and Gattegno share one important perspective which prompted both to develop facilitative techniques, that is: namely, "Energy seeks manifestation."[2]

The psychoanalytic technique is to psychoanalysis what the Silent Way is to Sub.T.Le.; both practices are based on the manipulation of energy. While psychoanalysis is aimed at freeing the emotions by tapping unconscious processes, the Silent Way is directed towards tapping all forms of energy thought to exist within the learning process, using these to the best possible advantage, so that more than an intellectual freeing occurs. It is the attention to subtle shifts in energy by analyst and teacher and their encouragement of this self-same focus in their client or student that is the nucleus common to practices. In Sub.T.Le. a practice of awareness is extended to subject matters where, in language teaching, for instance,

Silent Way lessons make allowance for the many subtle and diverse elements that serve to distinguish expression from communication. These subtleties are addressed by techniques which emphasize stress, melody and rhythm and require students to really look and listen. In English "Often the same two elements will yield two different meanings because of two contrasting stress patterns."[3] For example, compare:

I know some French teachers second hand

I know some French teachers second hand

That there are peculiarities in the English language is an attribute common to all other languages. However, unlike most language teaching, but similar to psychoanalytic therapy, the Silent Way is a technique that heeds and exacerbates subleties which hold meaning but of which one may not be aware.

However, unlike the passive stance taken by a psychoanalyst, the Silent Way teacher is action oriented. In a Silent Way lesson insight is triggered through active provocation which is hinged (as in psychoanalytic therapy) on the personality and experience of the student. Whereas psychoanalysts see understanding to be largely responsible for change, and therefore restrict intervention to verbal interpretation, Silent Way challenges the student to actively, physically engage in activities which can provoke an unconscious assimilation and integration of lesson material. For example, the teacher might relate the advanced, complicated structure, "theirs are there and there's none too dark", engaging students as participants in establishing a sequence that illuminates this concept while the teacher gestures in a mainly silent but appropriate manner (see appendix).

Since learning revolves around the manipulation of energy, the repression and release of energy is therefore of common and central concern

to both theories, but while the basis to the strict, traditional psychoanalytic perspective is pathological the Silent Way is positive in its conception of man. Psychoanalysis concentrates on evoking a release of repressed trauma, called blocks, to the psychic flow of energy which, untended, obstruct and sometimes prohibit natural energy. Lack of spontaneity, or an inability to play, would be seen as a chief indication of psychic arrest and could be successfully treated within a psychoanalytic medium through play therapy. "Child analysis of whatever school is built around the child's playing..(although) playing really applies to adults as well".[4]

The space provided by the therapy situation allows for growth in trust between therapist and patient. Sharing replaces a patient's self-contained rigid pose, and communication becomes possible where none existed before. In therapy, trauma is revealed and released through manipulation of objects for a child and through manipulations of words for an adult. The therapist attends closely to the patient's experience in the therapy situation, in particular the patient's experience of the therapist, and at appropriate moments attempts to clarify, for the patient, the difference between the patient's perceptions and his own. Through this process the way is gradually cleared for the patient and therapist to meet and finally, play together.

Just as Freud saw symptoms to be signs of unnatural blocks to man's psychic energy, Gattegno views mistakes as unnatural curtailing of energy that would otherwise be liberated to a more constructive employ. Gattegno calls mistakes the misappropriation of past negative experiences onto the interpretation of present situations--or misperceptions. Obviously this view could equally apply to the misperceptions that emerge in the transference[5] therapy situation, whereby the patient perceives the therapist to be or to be

doing, other than he is. Paul Watzlawick makes a comment pertinent to the point; he says:

> "Anybody seeking our help suffers in one way or another from his relation to the world..he suffers from his image of the world, from the unresolved contradictions between the way things appear to him and the way things should be according to his world image."[6]

Watzlawick's comments can be transposed to a classroom situation where, for example, a student has been taught, at an early point in his life, that 5 must always follow 3 in mathematical operations. In later years the student finds that the original introduction to the 3 and 5 number placement is out of context when applied to later operations. This formula brings a negative response and he experiences conflict. The student could be said to be fixated, to use a psychoanalytic term, on a set perspective not appropriate in the larger context of mathematical operations. Generally, the traditional approach would be to "point out" the student's error, explaining how the numbers 3 and 5 can appear and how they should be used in varying problems. But this "pointing out" is not sufficient for a student still locked in an old system of reference, a system which had a different set of referents which originated at a different stage of emotional and intellectual development. Further, if the child's original understanding of 3 and 5 was formed under duress or coercive circumstances, an explanation alone would not necessarily induce him to abandon his "image" of how these numbers can be used. To approach and to remedy the problem confronting such a child, the teacher must try to bring the child to realize that something he is doing somehow does not communicate. In order to arrive at conceptual agreement concerning the use of 3 and 5 a Sub.T.Le. teacher may ask herself, for example, "What is it that I can do, suggest, tell, so that the student faces up to what he has, in fact, been doing? How can I help him see the

difference between his perception and what is also possible?" The teacher begins by introducing doubt; that is, even if the teacher understands what the student is doing wrong, she may feign misunderstanding or puzzlement, questioning the student in an attitude of curiosity until the student begins to look deeply into what it is he has been doing.

By not revealing that he understands a student's difficulty the teacher pushes a student farther in examining what he formerly assumed, a tactic parallel to therapeutic interactions and based on the same logic: the recognition that change cannot be brought about in a student's demonstrable learning until somehow he is made aware of his participation in that process. To achieve this, sometimes information must be selectively withheld. "In no therapy is all the machinery of therapy revealed to the patient. There would be no problem of "timing" or deciding what "depth" of interpretation to make if the therapist immediately revealed all he sees."[7] Finding the means to provoke awareness is both the main assumption forming the operative basis to Gattegno's learning approach and the key tenet of most subjective therapies, including psychoanalysis.

When emphasis is moved from approaching either error or symptom as objective facts, to examining these from a subjective, personal point of view, one becomes freed from a bias, common to many educators and therapists. This bias assumes that errors or symptoms can be analyzed and treated in isolation of subjective, human variables, so as to lead to an ultimate conflict resolution. There is a danger, which Paul Watzlawick mentions, whereby such diagnostic practices can be misused and psychological damage created. Watzlawick says a problem identified solely within parameters defined by a therapist may serve to establish with certainty, a problem which, prior to the "diagnosis" had not so certain an organization.

> "To label a child as "delinquent" or as suffering from minimal brain "dysfunction", or to label an adult as an "alcoholic" or a "schizophrenic", means that one is participating in the creation of a problem in such a way that change may be made more difficult. A therapist who describes a family situation as characterized by a "dominating mother and a passive father" or "a symbiotic relationship between mother and daughter" has created problems, although the therapist might think he is merely identifying the problems put before him. The way one labels a human dilemma can crystallize a problem and make it chronic."[8]

Traditional approach to error is comparable to the diagnostician who relies exclusively on the diagnostic manual in order to determine cause and prescribe treatment of medical or psychiatric symptoms, or comparable to the therapist who sees patients strictly in relation to his own theoretical constructs. Although prescriptive treatments sometimes work to relieve the symptom, the subjective cost incurred by the patient lies in his not learning for himself what led to the difficulty or how to personally deal with a similar dilemma in future. Schools are also guilty of fostering the "category complex", use of labels such as "learning disabled", "functionally maladjusted" and "behaviorally below normal", which place limits and definitions on growing abilities. Schools might find their efforts more rehabilitative if they focused their attention on what the student <u>is</u> capable of doing and building on that. Human worth, as the key referent, is an experiential reality to those therapists and educators who put a continuing curiosity and respect for life before pride in their own abstract analysis.

To deliberately choose a subjective rather than an objective stance towards a problem, raises certain difficulties, for the teacher or therapist must be able to tolerate uncertainty and ambiguity, to wait patiently until the "gestalt" or pattern emerges, that describes a person's unique relationship to his problem. One may never rest assured that what is seen by oneself

is the perception held by others or that one's viewpoint is superior to another's. One's own opinion must be suspended, judgement withheld, and as naive an approach to the problem as possible must be taken. Through the atmosphere of acceptance engendered by this approach within both psychotherapy situations and Sub.T.Le. classrooms, healing becomes possible.

So far the discussion has dwelt on: ways in which Gattegno's methods of teaching reflect a philosophical approach to learning that heeds certain aspects of infant psychological development; how these psychological elements must be respected both in the early infant situation and in all other learning experiences if psychological damage to the learner is to be avoided; and that a symptom of the disrespect for same tends to be shown in a reduced capacity to play. Psychoanalytic technique has been compared to Sub.T.Le. and specifically Silent Way as a working approach notably able to free an inhibited creative capacity. The growing casualties of traditional schooling that comprise categories of "learning disabled" and the current funding difficulties responsible for placing these labeled students perjoratively in the hands of the ordinary teacher, exacerbates the need for a radically revised understanding of learning and learning breakdown. Gattegno's particular developmental perspective addresses these needs.

As Winnicott states, whereas traditional schooling takes for granted a student's ability to creatively utilize an object medium, the Sub.T.Le. approach assumes no such ability. Sub.T.Le. classrooms re-create in simulated form components found in the infant's early environmental milieu. In doing so these classes replicate a period in the students' lives just prior to the development of ego and intellect. Through a sophisticated use of materials arranged to favour the formation of gestalts and through concentrated, well paced introduction to lesson concepts, Silent Way teachers

stimulate an adult's or child's return to a primary level of functioning where current ego skills are of no use, and this allows students to learn to use all the potential available to them as infants, with which they were endowed.

Psychoanalyst Margaret Mahler demonstrates the perceptual organizing tendency of an infant and its relationship to separation/individuation or the growth of autonomy in the following case illustration. She speaks of observing a seven month old boy called Peter:

> "He felt the observer's arm, which rested on the chair next to him, patted it, and then looked at the face and the Gestalt to whom the arm belonged".[9]

She concludes, after lengthy observation of this child and others:

> "Visual and tactile inspection..is a characteristic complex behavioral phenomenon which is in the service of the infant's cognitive and emotional adaptive development at this age. It occurs at the time when others are recognized as different although similar to mother, that is, when the child has a need to learn about persons other than mother, and when he begins to recognize the mother as separate from himself..."[10]

Perceptual organization is related to emotional and cognitive development in that as the child begins to recognize persons other than his mother, his attachment towards her weakens and his curiosity concerning other persons and things increases. A process of educative enrichment has begun. It is the benchmark of intellect formation which correspondingly leads the infant away from mother and on the road toward autonomous functioning.

The developmental patterning Mahler clearly outlines can be directly mapped onto Silent Way lesson presentations and progressions. Lessons begin with induced gestalt-forming perceptual procedures, with the teacher (substitute mother) continually utilizing figure/ground techniques in a manner that draws the student's attention to the learner in himself as distinct and unique from the teacher and others in the class. Through

practice in taking responsibility for his own learning in the class, this difference is pursued until a sense of autonomy is fully realized (see Chapter 4).

The healing properties imbued in the Silent Way's attention to developmental antecedents to learning can be seen if one views the Silent Way's gestalt lesson complex as a regressive technique. In therapy, R.D. Laing says, some form of regression usually occurs whereby: "..the patient retraces his or her steps to where things went wrong and before, hopefully to undergo some sort of metamorphosis and to emerge reconceived and reborn."[11] But regression doesn't necessarily have to have pathological connotations. Laing goes on to say, "Regression may be a return to modes, forms and contents of our being from which we have become cut off".[12]

The Silent Way's use of a technique which plunges participants into situations requiring less familiar means for coping, would seem to be a forced way to destructure what then is restrucured on a new level of awareness. This induced state of confusion is not always met with unalloyed pleasure, however, by learners new to the Silent Way. In a telephone conversation with Mary Ashworth (April 29, 1983), Professor of Second Language Learning at the University of British Columbia, Ms. Ashworth said that, in her experience, Silent Way workshop participants either love the approach ecstatically or hate it vehemently. These extremes may say more about the participants than about the approach; participants who report the Silent Way process as a negative experience are probably unwilling to let go of rational control in the learning situation in order to enter more primary states of mind.

Surrendering to the confusion often predominant in the Silent Way lesson's early stages is a prerequisite to the lesson's success, and a willingness to examine one's inner processes emerges as a necessity, although

it may later be seen to be a by-product after the content has been mastered. But it comes as no surprise that persons raised according to western rational ideals might not greet this surrendering with enthusiasm. Existentialist R.D. Laing says we are so terrifed of exploring our unconscious selves, even to include it in our description of ourselves, that it is not surprising that when a person finds himself completely immersed in an inner reality (in cases of madness) he feels lost, frightened and unable to communicate to the world. Laing adds:

> "..the very fact that it is necessary to speak of outer and inner at all implies that an historically-conditioned split has occurred, so that the inner is already as bereft of substance as the outer is bereft of meaning."

In addition, most therapy treatments tend to distort schizophrenic (as an extreme example of mental distress) behavior further, by not providing the framework with the safety necessary to go through what is an essentially natural, healing process; that is, to recover what was lost through regression to former, more complete states of being and then return renewed. Laing's description of a natural healing process bears striking parallels to the learning experience Gattegno offers, in a modified form; experiences which, Gattego claims, help us to recover our natural abilities.[14] At first we move: "from outer to inner"; "from the ego to the self"; "from mundane time to aenoic time".[15] With the proper environmental support and facilitation this regression is reversed, at some point, to bring us eventually full circle, renewed. Thus, in progression we move from: "inner to outer"; "from the movement back to a movement once more forward"; and "from self to a new ego."[16] In a less extreme form than the version Laing suggests, Gattegno simulates and stimulates conditions provoking a primitive level of perceptual confusion that perhaps holds a sense of timelessness similar to the learner's early experience, thereby allowing learning

capacities to be revitalized and enhanced as new, more complex abilities.

Earlier discussion on the infant/mother matrix has shown the relationship between environmental provision and emotional and intellectual development, as the success or failure of this first learning relationship seems to hold profound implications for the child in all later learning experiences. Ideally "..the child experiences so much love in connection with his mother that he has..much to draw upon for his later attachments".[17] Melanie Klein adds, however, that the child's intense love for his mother is also accompanied by intense fantasies of destroying her, fantasies for which he feels abiding guilt unless he regularly receives the opportunity to make amends. If no opportunity for restoration appears, then he may develop a permanent fear toward his own aggressive impulses, assertive energies, impeding future risk taking and the closely aligned creative urge. Unless his "feelings of guilt are over-strong..his drive to make reparation.." continues and "..come(s) more fully into play.." in later, less intense relationships.[18] This need is obvious in a child's wish to please his teacher, his fear of jeopardizing his relationship to her through his own error and her consequent disapproval. Yet the child continues in his need to exercise both love and hate, good and bad behavior and to know that despite these extremes he is essentially good. Given the repeated opportunity to exercise a full range of expression in an environment that services as well as accepts them, the child settles into a relaxed concept of positive self-worth. His behavior thus becomes increasingly more playful and he entertains possibilities that further his emotional and intellectual needs. Where the opportunity to make amends does not appear, whether through inadequate mothering or poor environmental support, the child lapses into a state of abiding guilt, so that where forgiveness brings feelings of

self worth and courage to explore, the opposite brings feelings of worthlessness, fear and a need to defend against reminders of the same.

The school inherits the fruits of this early developmental conflict, for: "By turning to other people his conflicts are not done away with..he transfers them from the first and most important people in a less intense degree to these new objects of love (and hate) which partly stand for the old ones."[19] Since there is less emotional attachment to the teacher than to the mother, a measure of neutrality is introduced in a situation having the same psychological dynamic for the child.

At first the intensity of both one's love and one's guilt drive one to invest in other things. Depending on the reliability of support found in this early situation one is freed to either establish oneself as a self-sustaining individual or suffer a variation of attraction/repulsion extremes which leave one tied, somehow, to needs unmet in the early situation. Schools offer the opportunity for "..new companionships (to) prove to the child that he is able to love and is loveable, that goodness and love exist.."[20] They also provide the means for the child actively to repair fault he feels exists within himself. Where it has failed in the original mother/child experience it can, in some instances, be ameliorated by a positive relationship to the outside world at a later stage. Sub.T.Le. is an extension of this reparative opportunity. Through a manipulative medium provided and facilitated by the teacher, the child has a chance to renegotiate the effects of his early environmental situation and arrive at a more positive evaluation of himself.

In concluding the discussion, I can think of no better way to demonstrate the holistic and healing properties of "subordinating teaching to learning" than to present a summary case history of a young brain damaged child who was the focus of an extensive study by Willi Drewes in 1977.[21] In this study we

see how use of the Sub.T.Le. approach through the Words in Colour technology, allows a skilled teacher to weave the strands of learning and healing together.

Penny was a seven year old child with whom the author came in contact for remedial purposes in 1976. She had been involved in a car accident earlier in the year which left her considerably brain-damaged, and was assessed to show a verbal IQ of 75, having a performance level of 65.

Initial evaluation of Penny's strengths and weaknesses showed Penny to be sufficiently selective in her word choice to be able to speak well, but this ability was not evident in her reading. Abilities that she did possess however, that are also necessary for reading were: recognition and application of words to appropriate contexts; proper use of sequence; ability to make correct language transformations--noun and pronominal substitutions, for example, and an ability to act on directives.

Her weaknesses were as follows and are notable in the light of our discussion on the consequences of developmental arrest. Penny was "often 'uncooperative'"; displayed a self-deprecating attitude; was particularly interested in other students' performance but warded off anyone's interest in her's by "..refusing to listen by going away, making noises or engaging in some other activity".[22] She showed "..little confidence in herself and in her ability to make and keep friends..(and so) she had few friends to play with and played mostly by herself."[23] Besides a lack of unity shown in her inconsistent approach to school tasks (uneven lettering, random spacing, and poor word recall other than her own name), Penny's attention span endured no longer than five minutes. A reading program was designed, taking these strengths and weaknesses into consideration, which is documented showing a progressive building in Penny's academic strengths and a concomitant change

in her confidence and expressive behavior.

In his documentation, Drewes describes Penny changing from exhibiting defensive, withdrawing and isolating behaviors: participating in groups only through the initiated activities of others, to a cooperative, happier attitude, playing with others while also contributing her own ideas to the play. As she "began working on her own.."[24] spending "..as much as twenty-five minutes on one activity.." she became concurrently more enthusiastic in involving other people, including mother, in her reading and in her non-academic activities.[25]

According to Drewes' assessment of Penny's initial intellectual and emotional state, his documentation of her progress and his summarizing comments all point to a reparative process that confirms and exemplifies our discussion. Despite the obvious trauma, a process of freeing was seen by Penny's changed behavior, from negative, defensive postures to a positive, spontaneous enthusiasm in both home and school circumstances. We have seen that defensiveness protects even as it inhibits growth. But a prerequisite to spontaneity is a freedom from fear, a trust that the trauma one endured will not be repeated in any form. Trauma induces an allergy, a reaction toward all instances which would trigger echoes of the same. Intrusive practices of any kind, in Penny's case, could well produce reminders of the original trauma and her helplessness in that. Reparation must necessarily preclude activities which would lead to traumatic association and a way found for her to reconnect within herself, her former (pre-accident) and present self. This is the therapeutic task posed by Penny's dilemma that Drewes met, by meeting Penny's needs as a Sub.T.Le. teacher through the Words in Colour medium.

In her progress Penny demonstrated the vicissitudes of separation/

individuation discussed, achieving more satisfaction from her own accomplishments and from her involvements with others as her lessons progressed. She was released from the previously fearful stance that tied her to "others" for need satisfaction and freed to invest her energies in sustaining her own spontaneous impulses. Through his relationship with Penny, Drewes demonstrated the essential qualities of Winnicott's "good mother" by: following Penny's lead whenever possible, tailoring lessons according to her strengths and weaknesses, and by providing qualities of consistency and reliability that would allow her trust to be regained. By subordinating teaching to learning, Drewes enabled Penny to find the means within herself to communicate satisfactorily in a reading mode, both to herself and to others, so that under Drewes' tutelage Penny was confirmed intellectually and emotionally.

As a humanistic example of educative remediation, Willi Drewes has given us a rare, recorded instance where Sub.T.Le. has been used with (technically) emotional and/or intellectually dysfunctional individuals. Further study needs to be undertaken investigating, for example, such areas as: the preventative value of the Sub.T.Le. approach in economic terms; defining the range of intellectual and emotional problem combinations that could be precluded or ameliorated through use of a Sub.T.Le. approach and to answer the question what kinds of "training" would be needed for teachers wanting to subordinate their teaching to learning?

Whatever the future presents in terms of educational change it is certain that Sub.T.Le. and its adjunctive strategies present, in their use, an opportunity to explore and expand levels of what it means to be an "intelligent", "human", being.

Footnotes Chapter 4

1. A.J. Dawson, "The Self Educating its Awareness", (unpublished article: Simon Fraser University, 1979), p. 4.

2. Ibid. p. 7.

3. Allen, et al, eds., New Dimensions in English, (Kansas: McCormick; Mathers Publishing Co., 1966), p. 20.

4. D.W. Winnicott, Playing and Reality, (England: Penguin Books, 1971), p. 46.

5. Sheila Ernst and Lucy Goodison, In Our Own Hands, (Los Angeles: J.P. Tarcher, Inc., 1981), p. 216, describe "transference" as originally a psychoanalytic concept coined when Freud "..recognized that the aspects of people's behavior and experience which they found most distressing and irrational..emerged in relationship with their analyst" and could be re-examined, expressed and resolved in the therapy context.

6. Paul Watzlawick, The Language of Change, (New York: Basic Books, Inc., 1978), p. 40-1.

7. Ibid., p. 208.

8. Ibid., p. 3.

9. Margaret Mahler, The Selected Papers of Margaret Mahler: Separation-Individuation, Vol. 2 (New York: Jason Aronson, 1979), p. 105.

10. Ibid.

11. R.D. Laing, The Voice of Experience, (New York: Pantheon Books, 1982), p. 158.

12. Ibid., p. 159.

13. R.D. Laing, The Politics of Experience, (Gr. Britain: Penguin Books, 1967), p. 103.

14. Caleb Gattegno, What We Owe Children, (New York: Avon Books, 1970), pp. 30-1.

15. Laing, Politics of Experience, p. 186.

16. Ibid.

17. Melanie Klein, Love, Guilt, and Reparation, (New York: Delta Publishing Co., 1977), p. 326.

18. Ibid., p. 327.

19. Ibid.

20. Ibid.

21. Willi Drewes, "Teaching Penny to Read", (MA Thesis(Educ.), Simon Fraser University, 1978), p. 43.

22. Ibid.

23. Ibid.

24. Ibid., p. 74.

25. Ibid.

INTRODUCTION TO APPENDICES A, B, AND C.

The Silent Way (Appendix A) and Words in Colour (Appendix B) are based on "..a phonetic means of writing the alphabet without changing the shape of the letters. (Gattegno) has produced a color-coded system in which the various combinations of symbols producing the same sound are grouped in columns according to a specific color" (Willi Drewes, "Teaching Penny to Read", p. 13). Gattegno's mathematics exemplifies the strong interconnectedness of all subjects taught according to Sub.T.Le. principles (Appendix C).

The main materials used in mathematics teaching are rods:

- coloured lengths of wooden sticks, each 1 centimetre square in cross section. Each subset consists of 10 rods, 1 cm. 2 cm ... 10 cm. long. Their colours are respectively: white, red, light green etc.

Words in Colour and the Silent Way employ the use of rods plus the following materials:

pointer - an essential tool enabling a person to move quickly from word to word, or sound to sound on the charts and Fidel, without a person's body getting in the way.

Fidel - an Ethiopian word for a teaching tool, in the form of a chart, that serves to display the totality of spellings with the totality of sounds accorded in a language to those spellings.

word charts - show words which display the intended sounds by means of a colour code. Students who are able to read a few words use these as references in order to decode other words on their own (see illustrations).

APPENDIX A

THE SILENT WAY

This account reveals several aspects of the Silent Way that have been discussed theoretically in previous sections. Here are three major aspects of the Silent Way:

1. Unified structural and procedural characteristics which relate to the earlier discussion on presentation by "wholes".

2. A stress on positive abilities so that a sense of competency is felt by the learner at an early stage. Using practical means to actualize this goal the Silent Way demonstrates an emphasis on potential, rather than on production of error.

3. Lesson procedures and teacher attitudes that emphasize and encourage self-responsibility on the part of the learner.

The following excerpts are taken from three sections of secondary ESL classes taught the Silent Way, by Leslie Alexander, at Frank Herz Secondary School, Surrey, on January 10th, 1983. The classes were seen to follow one another and were arranged according to a mixed ability model, the range amongst all three classes spanning zero for beginners to advanced levels. The wide range of cultural and education backgrounds plus the erratic way students come and go there makes flexible ability groupings in ESL teaching a "must". Essentially, however, these particular classes were arranged so that beginners and intermediates were grouped together to form the first class; beginners, intermediate and advanced formed the second; and beginners alone comprised the third.

Initial Procedures

Students were seated around a square table in a room where walls were covered with English Silent Way Charts and the Fidel. On the middle of the table was a model made of rods (see fig. 10). The teacher tapped the structure with a pointer and asked students to name it. More advanced students having greater exposure to and facility with the English language began to puzzle over the question out loud while the rest of the class

showed signs of concentrating on the problem at hand. After a few varied suggestions someone finally said "restaurant". The teacher nodded in agreement. In silence the teacher tapped items within the model restaurant: tables, chairs, kitchen, benches and a waiter. As a student identified "table", for example, he was asked to say the word and the class was motioned by the teacher using hand movements, to repeat the word in unison. Wherever possible the teacher used hand signals and mime in place of her voice to convey her message rather than English, which the students supplied. When a word was encountered that a student found difficult to pronounce, a couple of approaches were taken:

a) In the first class a student was heard to mispronounce the word "benches". He was directed to tap it out on the Fidel but he had difficulty doing this. He could not identify the word correctly until he was helped by other members of the class. Having had the concept "benches" represented in physical model form and having consulted the Fidel with the help of the class, the student could now connect the correct written expression plus its pronunciation with the symbol. The student was then asked to write the word "benches" on the blackboard (Interpretation of "write" will be dependent on the student's level and experience with the English language. Some students are able to write in written script with ease while others print more easily. Some have had no exposure other than the examples provided by the Fidel, which shows letters in printed form. All learn from each other's attempts. Writing or printing as forms, are not subjects that require a separate focus in the Silent Way). When the class appeared ready the lessons proceeded to embrace sentences, tenses, and other, more

complicated facets of the English language. The students' readiness determined the pace, a readiness that could only be ascertained by a teacher who was finely attuned to each student's level of ability.

b) Sometimes, however, the student's pronunciation was not sufficiently accurate to qualify as native English. If the teacher seemed to feel that the student was now ready to attend to their pronunciation more specifically, the teacher motioned the student to repeat the word syllable by syllable. She then silently:

1) held up one or two hands, depending on the number of syllables in the word.

ii) as the student repeated the word slowly the teacher, taking each finger to represent a syllable, showed the student at which point he was mispronouncing the word.

iii) she did this by moving each finger to one side as a syllable was pronounced, stopping at the finger representing the syllable being mispronounced. In the example "benches" there are only two syllables. The teacher was able to indicate to the student, through a finger/syllable correspondence, that the student was mispronouncing the second syllable "..ches" of the word.

iv) having established this the student was now motioned to back to the Fidel and tap out the word. When he did this he was then able to see that he was using the "zz" sound instead of the "..ches" sound. He noted the family of "zz" sounds as differentiated from the "..ches" family groupings. Through the functional analysis he was now

able to relate the word "benches", correctly pronounced, to the model on the table.

c) Another problem concerning pronunciation that was also encountered in the "benches" example was the improper use of inflection. The student was saying ben/ches instead of ben/ches. The teacher again uses hands to approach this problem with the student. The teacher:

i) tapped out "benches" on the Fidel and pointed to the benches in the restaurant to indicate the word in question.

ii) as she tapped the first finger on her upraised hand to indicate the first syllable, she made an upward movement above this finger with her other hand.

iii) when she touched the second finger representing the second syllable she made a downward movement. This was done until the student accentuated the word properly. He could also have been aided by the class's example if the teacher's movements had not been met successfully.

AN ESL TEACHING EXAMPLE

In a workshop held for ESL teachers (November 5, 1982) Gattegno announced that we would now have a lesson in Mandarin. The class was a group of people having mixed exposure to Silent Way materials. Some had been introduced to the Fidel and some had not.

A chart of characters arranged according to colour combinations was placed before us and an intense atmosphere of confusion prevailed. No one understood Mandarin or could in any way identify the characters. Like a conductor Gattegno indicated with a pointer where to begin reading the characters (at what point in the design) and in what direction. He also moved the pointer up and down to show when the voice was to rise and when it was to fall. Sequences were introduced at such a fast pace that it was hard to deal with the concentration and surrender to the process as other than mandatory. Yet students who had not been exposed to the key colour sound equivalents for the Fidel picked them up gradually after listening to the "sound" choices of their peers.

We were all kept on our toes as we were often singled out at random to:

- complete a sound sequence following a pattern introduced
- initiate or respond to a dialogue with a neighbour using words introduced
- assume the role of teacher when called upon to do so, and so on.

More experienced students showed evidence of an accumulating effect by drawing from their other experiences with the Fidel in other languages and applying this knowledge to Mandarin, while the less experienced began to demonstrate understanding through increased accuracy in voicing their sound/sign correspondences. Gradually a progressive building process

became evident. People starting off with no experience mixed with people who had - and each learned from each other. Gattegno referred to this building as the 'dragnet principle'.

Students who expressed sceptism initially towards the approach changed, gradually, as they were rewarded in their efforts with proof of abilities they never thought they possessed - a competence to master rudiments of a very difficult language in a matter of one hour.

CONVEYING A SIMPLE CONCEPT

The expression "and so what" could be conveyed by the following:

A long rod is placed horizontally on a table with a small rod resting on top at one end. The teacher makes a snoring sound and, with every wheeze, raises the small rod a little. It would not take students in any language long to realize "someone is sleeping". An upright rod is then moved in little up and down movements (to indicate walking) towards the sleeping person and the following dialogue begun:

"Ethel!" "Ethel!" "Get up! It's 8:00 o'clock. You'll be late for school.

"Oh." Ethel gets up and follows "mother" away. The teacher points to "thursday" on the calender nearby and repeats the whole scene again, this time pointing to friday. Finally, during a third performance, mother's request is announced by Ethel with "and so what! it's saturday." The teacher taps saturday on the calendar.

CONVEYING A COMPLEX EXPRESSION

"theirs are there and there's none too dark"

Assume: students have met "none is dark and "this is too dark"

Procedure: with 4 or 5 students:

1. a) motion for students to pick up, say, in one case a blue rod, a green and a yellow; another to pick up a red, two whites and a black rod; another to select two dark greens, an orange and a blue rod etc.

   b) motion for 2 or 3 of them to place <u>their</u> rods on the table. Motion for another 1 or 2 to place <u>their</u> rods on the side shelf (something other than the table).

   "Yours are here and theirs are there". Spoken by the teacher with relevant miming and pointing.

   Resort to tapping words out on charts if necessary.

   Each student takes a turn to mime and speak appropriately.

   (The teacher is silent as much as possible, frowning or waiting patiently if an error is made, or shows a look of curiosity if "here" and "there" are interchanged etc.)

2. The teacher rearranges the allocation of rods to the students emphasizing the rods that will be <u>there</u>, as yellow, white and orange, perhaps including light green and pink. But in the action of sorting the teacher shows signs of doubt and of trial and error in deciding which rods to include in the "far away" grouping. The teacher may go to include a black rod in the "far away" set, be seen to change his mind and instead put back the black and for it substitute another rod which will fit into

the upcoming utterance, "none too dark". Then, when the subsets are satisfactorily on the shelf, the teacher can mime the correspondence of each with a student whose particular subset is now "there, not on the desk beside him.

Then, when rods are mimed to be in one one correspondence with the students, they are placed in "near" and "far" positions and the teacher says:

"theirs are there ....none too dark".

again with the appropriate motions. Finally:

"theirs are there and there's none too dark",

with the teacher gesturing appropriately from subsets of rods to the students and vice versa.

An extension of this exercise could be to change a yellow to a blue rod and say:

"theirs are there and there's one too dark" or "theirs are there and there's one too dark, there", or "theirs are there and there's two too dark there", etc.

USE OF ANALYSIS AND IMAGERY

In an excerpt from his chapter on the Silent Way David Davidson describes how a Silent Way teacher encourages analytic powers in her students and develops imagistic abilities through gaps in presentation. Students must imagine what is not given to them.

> "An early lesson might proceed as follows: Six or seven rods of different colours and sizes are placed on the desk. The teacher points to one, says, "rod", and motions for the students to repeat. He then points to a second rod, again says, "rod", and again motions for the students to repeat. He points to a third, and without saying anything, motions for one or all of the students to speak. The students by now realize that regardless of size and colour, the sticks are called "rods".
>
> The instructor then picks up one rod and says, "a yellow rod," and motions for repetition. He picks up another one and says, "blue". Some students in the group will respond with "a blue rod" and so on down the list of colors--pink, white, green, red and black. For orange, the teacher might try to elicit "an" rather than "a" with an "adding-on" motion of the fingers. If students do not volunteer the word, the instructor will have to say it, but will leave it for the students to figure out for themselves why they must use "an" in this situation."
>
> Language in Education: Theory and Practice, page 11.

ARIZONA WORKSHOP

(originally published in the Arizona TESOL Quarterly, December'82, 12(3) and reprinted in Newsletter, February, 1983)

"At Dr. Caleb Gattegno's workshop on languages and learning ..we had many opportunities to experience the rich and complex abilities of the human mind that are so often tapped in Silent Way classes. I shall try to touch on a number of these attributes by describing what I observed, within and without, during the Greek class given on Saturday.

..."Saturday's session began with the first Silent Way chart anyone had seen at this workshop, a 16" x 22" black wall chart on which rows of rectangles of different colors were arranged. Twenty people went up front to work on this language, which turned out to be Arabic, while the rest of the audience observed, supposedly silently. (The audience's instructions were to be as "furniture", ie. quiet, in order to observe, but many got swept into the language learning process and sat on the edge of their seats gesturing with and mouthing what was being elicited by the swift tapping of the teacher's pointer from one rectangel of color to another). After about an hour and fifteen minutes, the first group returned to their seats, an entirely different collection of 20 people went forward and the Arabic learning continued where the first group had left off. Thus, when another hour and fifteen minutes later the Arabic chart came down and the Greek chart went up, there were about 60 people in the audience who had not yet been "up front" for a language class but had been observing. Twenty of them went forward for the Greek. Many of the colors (and thus the sounds) on the Greek chart were the same as the ones on the Arabic chart, because both languages have those sounds, and so the students in the Greek class did not have to start at the beginning as the first Arabic students had.

...There always appeared another opportunity to catch what one had

missed once or many times, or had had and then lost: a sound for this or that colour, a sequence of sounds, the insertion of a new series into a previous, longer series. The opportunities were always variations, never drills, so that one was constantly, inwardly, on one's toes to reassemble the impacts. The swiftness of the pace left no room for memorization; one could only be impressed.."

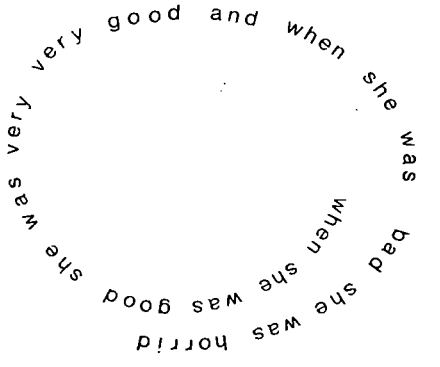
APPENDIX B

WORDS IN COLOUR: The Spiral Game

In learning to read, students need to be aware primarily of the fundamentals of speaking and communicating. To produce speech children need to be aware of what is involved in making sounds and of how to build on that. To communicate one must also be aware of how language is structured around certain conventions or conveniences. For instance, the learner has to see that it is necessary to know whether to read from left to right or the reverse, and up to down or down to up.

To heighten such awareness a Sub.T.Le. teacher could invite the children into reading words from a passage in a book, in any way they choose, including ways they have perhaps not thought of before. They soon begin to realize, usually with much amusement, which is the convention, because it is the sounding out of that one, and no other, that produces the corresponding recognizable spoken language.

Every language is spoken in time order, but the words written as substitutes for them have to be in space order, one following another in "linear" fashion. The students could investigate the possibilities - there are not many - including one that begins in the center of a sheet of paper, proceeding to extend words in spiral form. So long as the reader can become aware of which order fits his language he is not likely to try other orders of words in the same schema.

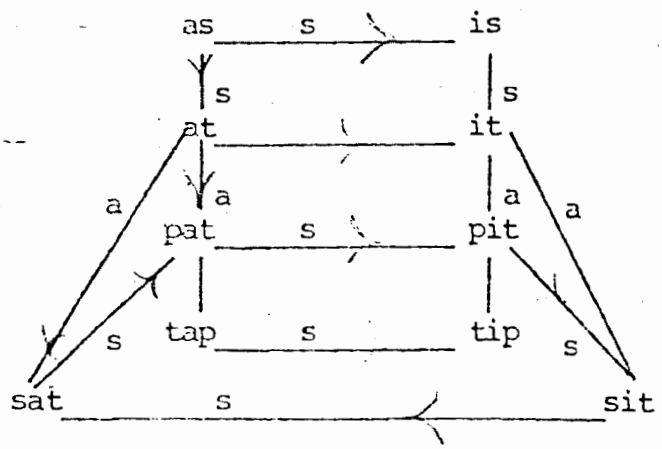


Transformations

s substitution

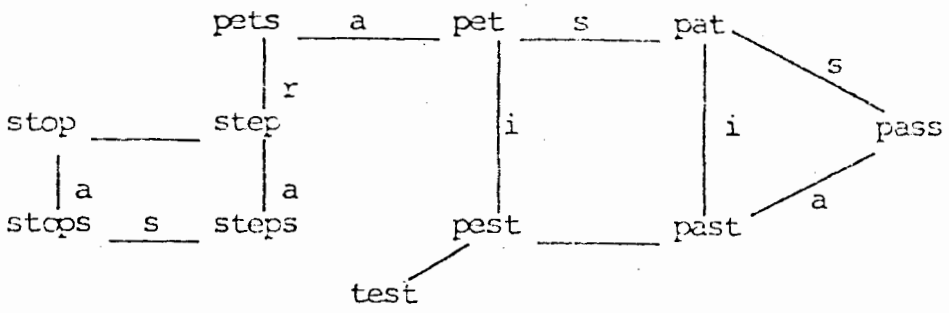
r reversal

a addition



Transformations

i insertion



APPENDIX C

A central basic feature of Gattegno's mathematics, that is consonant with language teaching and the teaching of reading, is the back and forth movement between rational, objective modes of thinking and introspective, reflective modes. For example, in a section entitled "Creative Writing in Mathematics", from Children Teaching Themselves Mathematics, students are given answers for which they must supply problems. "The variety of answers given will not only reveal the students' degree of facility in computation, but may given indications of their awareness of transformations".(p.26) For example,

$$36 = 35 + 1 = 34 + 2 = ...$$

The following are a few other, very briefly outlined, activities that illustrate the Sub.T.Le approach to the learning and teaching of mathematics.

Primary Grades:

Use the coloured rods to find as many lengths as you can the same length as a dark-green (or any other colour).

If the white is the measuring rod; say (or write down) other names for the number 6. (e.g. 1 + 5, 2 + 4, ..., 1 + 4 + 1, 4 + 1 + 1, etc.)

If the black rod is the 1, the dark-green measures 6/7. Give other names for 6/7. (e.g. 1/7 + 5/7, 2/7 + 4/7, 1/7 + 4/7 + 1/7,...etc.). Use rods only if you need them.

Continue with other names for 6/7, using - and + signs.
(e.g. 6/7 + 1/7 - 1/7, 7/7 - 1/7, 8/7 - 2/7, 9/7 - 3/7,..etc.)

Intermediate Grades:

Give other names for 6/7, using different denominations for each
(e.g. 12/14, $\frac{3 \times 6}{3 \times 7}$, $\frac{4 \times 6}{4 \times 7}$, etc.)

Draw many kite shapes, every one of them having the same line segment as a diagonal.

Investigate many ways of going from .5 to .6 (e.g. add .1, double and then subtract .4, ÷ by 5 and multiply by 6,...etc.)

Secondary Grades:

Give many transformations of $2x + y = z$. (e.g. $2x = z - y$, $x = 1/2(z-y)$, $2x + y - z = 0$ ...etc.)

Begin with any triangle ABC. Draw more triangles by extending BC to BC_1, and to BC_2 and to BC_3 ....and so on. Mark the midpoints M, M_1, M_2, M_3, ...of AC, AC_1, AC_2, AC_3... Investigate whether or not the median of each triangle bisects angle B.

BIBLIOGRAPHY

Allen, H.J. et al., eds. New Dimensions in English. Kansas:McCormick-Mathers Publishing Co., 1966.

Barclay, James R. Counselling and Philosophy. Boston:Houghton Mifflin Co., 1968.

Bateson,Gregory. Mind and Nature. Toronto:Bantam Books, 1979.

———— . Steps to the Ecology of Mind. New York:Ballantine Books, 1972.

Bion, W.R. Four Discussions with W.R. Bion. Scotland:The Roland Harris Education Trust, 1978.

Bohm,David. "Insight, Knowledge, Science and Human Values", Teachers College Record. 82(3), Spring, 1981.

Boring, G. Edwin and Hernstein, J. Richard, eds. Source Book in The History of Psychology. Cambridge, Massachusetts:Harvard University Press, 1965.

Bowlby,John. Attatchment and Loss. Vol. 1. London:Penguin Books, 1971.

Bruner, J.S., Jolly,K., and Sylva, K., Eds. Play. England:Penguin Books,1976.

————. Toward a Theory of Instruction. Cambridge, Massachusetts:Belknap Press, 1967.

Budd Rowe, Mary. "Wait-Time and Rewards as Instructional Variables, Their Influence on Language, Logic and Fate-Control, Part One-Wait-Time", Journal of Research in Science Teaching. 2(2). n.p. Wiley & Sons, 1974.

———— . "The Pausing Principle-Two Invitations to Inquiry", Research on College Science Teaching. n.p., n.d. mimeographed sheet.

Capra, Fritjof. The Tao of Physics. Boulder, Colorado:Shambala, 1975.

Chisholm, Roderick M., ed. Realism and the Background of Phenomenology. New York:The Free Press, 1960.

Dawson, Sandy, ed. Children Teaching Themselves. Simon Fraser University, 1982.

————."The Self Educating Its Awareness". Simon Fraser University, 1979.

Erikson, Erik H. Dimensions of a New Identity. New York:W.W.Norton & Co.,1974.

————. Toys and Reasons. New York:W.W. Norton & Co., 1977.

————. Studies of Play. New York:Arno Press, 1975.

Fagan, Joen and Shepherd, Irma Lee, eds. Gestalt Therapy Now. New York:Harper and Row Publishers, 1970.

Feher, Leslie. The Psychology of Birth. New York:The Continuum Publishing Co., 1981.

Ferguson,Marilyn. The Aquarian Conspiracy. Boston:Houghton Mifflin Co.,1980.

Fromm, Erich, Suzuki, D.T. and De Martino, Richard. Zen Buddhism and Psychoanalysis. New York:Harper and Brothers, 1960.

Gattegno, Caleb. The Common Sense of Teaching Foreign Languages. New York: Educational Solutions Inc., 1976.

————. Teaching Reading With Words in Color. New York:Educational Solutions Inc., 1968.

————. What We Owe Children. New York:Avon Books, 1970.

Gordon, William J.J. Synectics. New York:Harper & Row Publishers, 1961.

Goutard, Madeline. Talks For Primary Teachers. New Rochelle, N.Y.:Cousenaire Company of America, 1964.

Haley, Jay. Strategies for Psychotherapy. New York:Grune and Stratton, 1963.

Hunt, Morton. The Universe Within. New York:Simon and Schuster, 1982.

Joyce,Bruce and Weil, Marsha. Models of Teaching. New Jersey:Prentice Hall,1980

Kanfer,Ed., Frederick,H. and Goldstein, Arnold P. Helping People Change. New York:Pergamon Press Inc., 1975.

Kami, Constance. "Encouraging Thinking in Math", Phi Delta Kappan. December, 1982.

Klein, Melanie. Love, Guilt and Reparation, 1921-1945. New York:Delta Publishing Co., 1977.

————. The Psychoanalysis of Children. Revised Edition. New York: Dell Publishing Co., 1975.

Laing, R.D. The Politics of Experience and the Bird of Paradise. Great Britain:Penguin Books, 1967.

————. The Divided Self. London:Penguin Books, 1969

————. The Voice of Experience. New York: Pantheon Books, 1982.

Lichenstein, Edward. Psychotherapy:Approaches and Applications. California: Brooks/Cole Publishing Co., 1970.

Mahler, Margaret S. Seperation and Individuation. Vol 11. New York:Jason Aronson, 1979.

————. Infantile Psychosis and Early Contributions. Vol. 1. New York: Jason Aronson, 1979.

May, Rollo. Love and Will. New York:Dell Publishing Company, 1969.

May, Rollo, Angel, Ernest and Ellenberger, Henri F., eds. Existence. New York: Simon and Schuster, 1958.

Mecassi, Luciano. Brain and History. New York:Brunner/Mazel, 1979.

Morowitz, Harold. "Rediscovering Mind". Psychology Today. August, 1980.

Murphey, Gardner. Historical Introduction to Modern Psychology. New York: Harcourt, Brace and Co., 1949.

Ornstein, Robert E. The Psychology of Consciousness. New York:W.H. Freeman and Co., 1972; reprint edition Middlesex, England:Penguin Books, 1979.

Pelletier, Kenneth. Toward a Science of Consciousness. New York:Dell Pub. Co., 1978.

Polya, George. Mathematical Discovery. New York:Wiley & Sons, Inc., 1965.

The Psychoanalytic Study of the Child. Vol. 36. New Haven:Yale University Press, 1981.

_____ vol. 34. 1979.

_____ vol. 33, 1978.

_____ vol. 32, 1977.

Reese, W.L. Distionary of Philosophy and Religion. New Jersey:Humanities Press, 1980.

Rogers, Carl R. On Becoming a Person. Boston:Houghton Mifflin Co., 1961.

Saegesser, Francois. "Simulation-Gaming in the Classroom". Simulation and Games. 12(3), September, 1981; 281-294.

Sahakian, William S. History and Systems of Psychology. New York: Wiley & Sons, 1975.

Samples, Bob. The Metaphoric Mind. 4th Ed., Massachusetts:Addison-Wesley Publishing Co., 1978.

Schultz, Duane. A History of Modern Psychology. 2nd ed. New York:Academic Press, 1975.

Tart, Charles, ed. Altered States of Consciousness. Garden City, New York: Doubleday and Company, Inc., 1969.

Trivett, John V. ...And So On. Calgary:Detselig Press, 1980.

Urmson, J.O. "Saints and Heroes". Moral Philosophy. Seattle:University of Washington Press, 1958.

Watzlawick, Paul. The Language of Change. New York:Basic Books, Inc., 1978.

Wertheimer, Michael. A Brief History of Psychology. New York:Holt, Rinehart and Winston, 1970.

Winnicott, D.W. Playing and Reality. England:Penguin Books, 1971.

———. The Maturational Processes and the Facilitating Environment. The Hogarth Press, 1979.

———. The Child, The Family And The Outside World. London:Penguin Books, 1964.

———. Through Paediatrics To Psychoanalysis. New York:Basic Books, Inc., 1975.

———. The Family and Individual Development. London:Tavistock Publications 1965.

———. Therapeutic Consultations in Child Psychiatry. New York: Basic Books, Inc., 1971.

Wolman, Benjamin B. Historical Roots of Contemporary Psychology. New York: Harper & Row Publishers, 1968.

Zaidel, Fran. "The Elusive Right Hemisphere of the Brain", Engineering and Science. September-October, 1978.