# THE CHI MACHINE INTEGRATES THE BRAIN & BODY

The brain and body exist in three dimensional space, the left/right dimension being just one part of the total life force. One must also consider "integration" in terms of the top/bottom dimension, for centering, and the back/front dimension, for total attention, in order to understand how the brain and body work together and are, in fact, one.

## THREE DIMENSIONS

There are three dimensions of the brain/body system. These are the laterality dimension (left and right body and brain hemisphere), the centering dimension (top and bottom and brain), and the back/front dimension (back body and brain to front body and frontal lobes). How do these dimensions apply to your ability to learn and express yourself?

#### LATERALITY DIMENSION

The first of these three dimensions is the laterality dimension. This is the dimension of the left and right hemispheres of the brain and the left and right sides of the body. This dimension is affected by homolateral behavior, lateral dominance patterns, transposition of hemispheres, and it affects the eyes and ears.

#### EFFECT OF LATERALITY ON READING SKILLS

This expressive hemisphere helps you decode written words into phonemes, derive meaning from complex relationships among word concepts and syntax, and understand what you read in terms of you and your own experiences.

## EFFECT OF READING SKILLS ON LATERALITY

Important developmental steps need to have taken place in order to function with both hemispheres on together for eyes, ears, and whole body movement for the complex near-point activity of reading across the midline. These developmental processes need to be complete for reading and writing activities.

## LATERALITY AND THE MIDLINE

In order to read fluently, to write creatively, to spell and remember, to listen and think at the same time, you must be able to "cross the midline" which connects right and left hemisphere, the two opposing energies of the brain and body. Although we all cross it to some extent, the midline is either a bridge or a barrier for learning, depending upon our prior learning experiences. When right and left hemisphere communicate spontaneously, working together at one time, then the midline becomes a bridge, connecting neurological pathways. When right and left brain must take turns working, or work in conflict, then the midline becomes a barrier, and the connection is broken.

## CENTERING DIMENSION

Centering has to do with balance, overall whole-body coordination, "groundedness," and integrity of upper and lower halves of the body - how well they work together. It keeps you centered in your thinking, processing the information in terms of your own life experience or knowledge, as you read.

# BACK TO FRONT DIMENSION

Back to front dimension has to do with concentration, focus, and the ability to retrieve information from the back of the brain and bring it up to the frontal lobes for further processing or expression.

#### CROSS OR MIXED DOMINANCE

Over 50% of the learning disability population is cross or mixed dominant, which can cause confusion and disorganization, especially in the homolateral state and especially for learning fine motor skills. The person is dominant with the hand on one side of the body and the eye and/or ear on the other.

## CEREBROSPINAL FLUID

The flow of cerebrospinal fluid through natural movement and breathing reflexes of the body is the desired state. When the body reflexes are working properly, the natural movement of the feet, calves, sacrum, and occiput all create a gentle, pumping action on the cerebrospinal fluid. The cerebrospinal fluid is pumped throughout the central nervous system. The cerebrospinal fluid acts as a shock absorber, removes toxins, transports hormones and nutrients, and cools the temperature of the brain so that it can work to its optimal potential. The cerebrospinal fluid is only circulated efficiently when it is pumped by this fluid movement of the body. When the cerebrospinal fluid is blocked, the attention, centering, and left-brain/right-brain integration energy flow can become blocked.

# LATERALLY INTEGRATED/HOMOLATERAL

The laterally integrated person is someone who has learned how to use his two hemispheres together, as a whole system; the homolateral or "switched off" person is someone who has yet to use more than one small part of his consciousness at one given time. Our experiences determine how integrated we become. Unfortunately, because of the homolateral behaviors and attitudes in our society, most of us do not realize the level of integration available to us. Instead of the spontaneous, joyous life we could have as human beings, we function as limited machines in controlled and rigid patterns. The disabilities and "dys-eases" that people experience are symptoms of failure to achieve the integrated state. After one learns to use the whole brain, disabilities start to disappear.

#### THE BRAIN

In order for the right and left brain to work in integrated fashion, the two brain hemispheres are interconnected by the corpus callosum, an intricate bundle of nerve fibers. In infancy, a complex system of switches is developed during the first few months of life. Ideally, as we first creep and then crawl, we begin to synchronize and integrate information so that the two hemispheres can work together through life in harmony and coordination. One hemisphere can take over for the other and can also operate on its own side to process a given task. To learn a new task easily, both sides of the brain need to be involved in the operation.

The right brain hemisphere controls the left side of the body and the consciousness of the left eye

and ear. Likewise, the left brain hemisphere controls the right side of the body and the right eye and ear. The nerves to the muscles and sense organs cross over from the controlling brain hemisphere. When one side of the brain is in control, the other side either cooperates and coordinates its movements with the controlling hemisphere, or it may "switch off" and block integration.

## PERCEPTION AND REALITY

We may perceive our world from two entirely different perspectives or points of view; either as a whole (through the gestalt hemisphere) or one piece at a time (through the analytic hemisphere). Our awareness of what we know depends upon the hemispheres of the brain. Although neurologically more complicated, the metaphor of the receptive/gestalt view of reality and the expressive/analytic view of reality as two distinct systems can help us to understand and make changes in function.

# RECEPTIVE/GESTALT CONSCIOUSNESS

The receptive brain, usually in the right hemisphere, is wholistic and grasps the biggest picture of "whole" available, rather than perceiving the parts and putting them back together. It is the receptive gestalt brain which specializes in the recognition of faces, an ability most people still have long after they have forgotten someone's name. The receptive gestalt brain is responsible for other long-term visual memories, orientation in space, rhythm and tone, body awareness, and artistic abilities (such as sense of color and spatial relationships). This brain is necessary when we need to process information in recognizable "chunks" where no analysis or linear, sequential operation is necessary. This receptive brain receives information passively, without judgment or sense of limitation.

# EXPRESSIVE/ANALYTIC CONSCIOUSNESS

The expressive/analytic brain, usually located in the left hemisphere, has an entirely different perception of reality. It is critical, judgmental, and acutely aware of time and survival. It works in terms of goals, language, and self-expression. It processes in computer-like fashion, breaking down information into tiny bits which it can sequence and order, one at a time. This analytic brain is the language center where the ability to speak and understand verbal information is generated and stored. This hemisphere contains the Common Integrative Area where the learning process is completed and comprehension takes place. The Common Integrative Area is activated when experiences are internalized and become a part of the Ego.

## THE ONE-SIDED STATE

The first step towards the integrated state is bilateral integration, where one has access to both right and left hemispheres at the same time, and therefore, both eyes, both ears, and both sides of the body. The homolateral person is limited to "one-sided" thinking because he has access to only one side of the brain at a time, and must "switch off" one side each time he wants to use the other, in alternating fashion. Although he can be adept at this "parallel processing," the homolateral person always experiences a coordination problem, at some level, depending upon the severity of his disability. Whether it affects his eyes, ears, or body as a whole, he doesn't

seem to use the two sides of the brain together through the corpus callosum as nature intended.

For example, this might be the child who switches off the analytic/language ear in school. He becomes so absorbed in the gestalt, the intonation of the teacher's voice or outside noises, that he loses all sense of the meaning of the words. As a reader, he might switch off his gestalt eye, therefore breaking down the words into sounds but unable to blend them into whole units, or to register the in his long-term visual memory.

The homolateral person is confused (and therefore tests weak with muscle testing) by bilateral activity. Walking, swimming, running, or jogging all require increased conscious effort and conscious control, which causes him to switch off the gestalt brain. Instead of relaxing and energizing him, these activities seem to bring him further frustration and may even lead to injury. His tendency may be to avoid large muscle activity or to place high demands on his body to achieve through competition or goal setting, as opposed to the pure intrinsic reward of joyful movement.

#### THE LATERALLY INTEGRATED BRAIN

Too much attention and adulation has been accorded the gestalt or "right" brain in interpreting recent brain research. The gestalt brain's contribution to information processing and the proper functioning of the autonomic nervous system is undeniable. However, it is not an either/or situation as some learning systems might suggest. The gestalt brain's functions must certainly be recognized and developed for the realization of optimal potential; however, the gestalt brain has been given credit for what is actually the work of the integrated brain. We must remember that the gestalt brain alone is totally passive, receptive only, and without the ability to make discriminative responses and to express itself.

What most people have attributed to the "right" brain is really the result of back brain/front brain integration which takes place in the Common Integrative Area, a part of the "left" brain, not the "right" at all. The integrated person expresses himself from this language area. He knows who he is, believes what he is saying or doing, and expresses himself fluently. No performance, be it reading comprehension, painting, dancing, or other can belong to the performer until this level of integration is achieved.

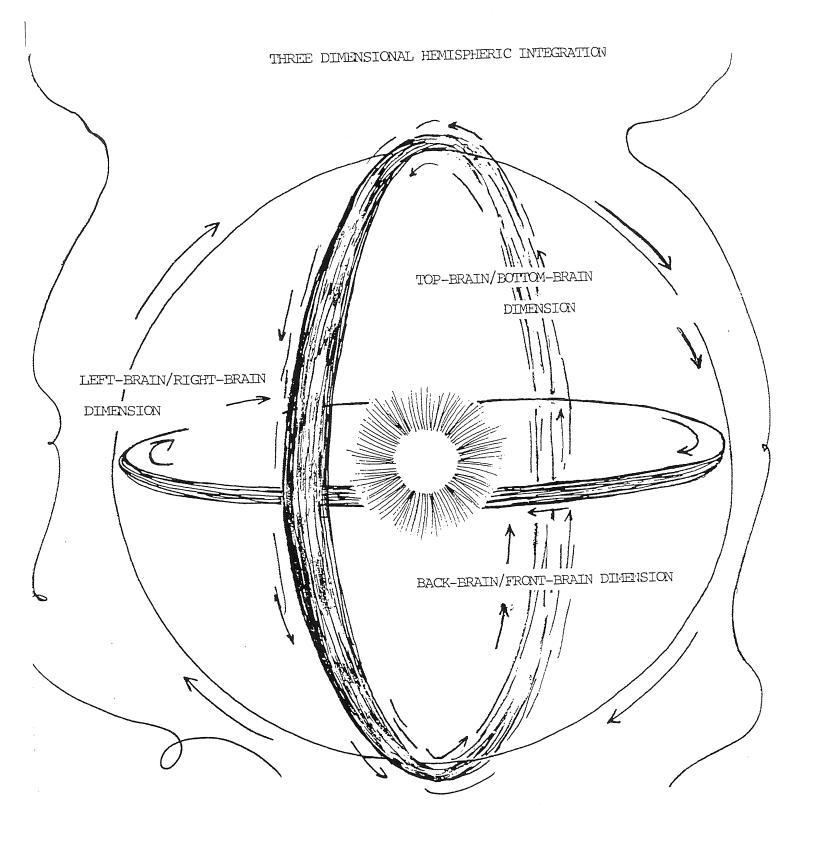
The integrated person moves in space so that his spine, cranial bones and sacrum move together, This results in the flow of cerebral spinal fluid which nourishes and cools the whole brain from back to front. The homolateral person moves in more rigid, blocked or controlled patterns, often without breathing, which inhibits the integration process. The homolateral person functions mostly from the back brain. This is where incoming sensations are processed, motor activity generated by these sensations is initiated, and where analysis and storage of experiences takes place. The homolateral person can learn and repeat material, often quite skillfully. However, the homolateral person is denied that true learning experience when something feels uniquely one's own.

## **SUMMARY**

It has been Deanna Sudweek's experience, and the experience of teachers working with mentally or physically challenged individuals, that most if not all blockages are taken care of with the Chi Machine movement. The 34 movements is approximately half the heart rate to allow for the body to integrate. The Lazy 8 is accomplished by the Figure 8 movement of the Chi Machine. It has been said there are energy centers throughout the body and organs, and the Figure 8 will integrate them.

Repeating affirmations is extremely effective when done at the conclusion of your Chi time while you are feeling the oxygen tingle.

Who would have guessed that the wonderful Chi Machine could and does impact every mental and physical aspect of our body and life!



<u>Left brain/Right brain integration</u> is indicated by the ability to cross the midline. Blockages affect the eyes, ears and the coordination of the whole body.

<u>Top brain/Bottom brain integration</u> is associated with the ability to center and ground oneself. Blockages affect over-energy, hyoid, gait reflexes, and cloacals.

<u>Back brain/Front brain integration</u> allows for flow of cerebrospinal fluid and good ability to focus. Blockages affect the muscles and tendons in the back of the body and the common integration area of the brain.



WHULISTIC (THE WHOLE IS MORE THAN THE SUM OF THE PARTS).

CENTERING

GRUUNDING

SUBJECT AND OBJECT FUSION 0F

SYNCHRUNICITY

SPUNTANEITY

FULL EXPRESSION CREATIVITY

TOTAL FUCUS AND ATTENTION

HAPPINESS

HEALTH

VERBAL

Myopic

Conscious Purposeful

Compulsive

SEQUENTIAL/LINEAR

Auditory/Analytical

Visuo/Focal

Thinking

PARASYMPATHETIC

NUN-VERBAL

Hyperopic

Unconscious Instinctive

Impulsive

GESTALT/SIMULTANEOUS

Auditory/Synthetic

Visuo/Spatial

Feeling

SYMPATHETIC