# **Yield**: engaging touch, presence and the physiology of wholeness

Nothing in the world is as soft and yielding as water.

Yet for dissolving the hard and inflexible, nothing can surpass it.

The soft overcomes the hard; the gentle overcomes the rigid.

Lao Tzu, Tao Te Ching

Carol Agneessens Hiroyoshi Tahata

#### Overview

My friend and colleague, Hiroyoshi Tahata, and I have been exploring the first developmental movement known as yield for over ten years. His contribution and insights into working with this gentle approach for shifting structure, movement patterns, coordination and perception are documented through client photos and an understanding of cellular biology and the extra cellular matrix. I explore yield in the context of embryology and movement awareness. This article presents a brief synopsis of our collaboration.

**Yield is the first developmental movement.** Often misunderstood as a passive surrendering or a 'doing nothing', it is in fact an active coming into relationship and is the fundamental movement behavior underlying all others.

Take a moment and recall an image of an infant resting securely on her mother's chest. Sense the very tangible contact between them. There is a qualitative difference and feeling sense when an infant yields into this contact as contrasted with a collapse due to the flaccidity of an infant's tonus or the absence of maternal bonding.

# Yield underlies all other developmental movements and our basic relationship to the world.<sup>1</sup>

The action of yield brings us into contact with the environment so that we can release weight into gravity. As the weight of body mass is released, a corresponding sensation of lift rises through our structure supporting other gestures and movement behaviors. Yield is key to **interoception**: the ability to read and interpret sensations arising from the viscera and internal tissues of the body. It is an action which supports awareness and insures a deepening understanding and richness of our inner lives. The movement of yield nourishes a sensory explosion of sensation. Whether these sensations are pleasant, terrifying, frustrating, joyous or painful we can yield into our comfort or discomfort in the moment and be with the true ground of our experience.

This somatic understanding arising from yield may flow into expression. Allowing a moment of yield, a split second awareness of releasing into ground, begins to remap the familiar neurological pathways of movement. Yield is the essential ingredient for shifting

<sup>&</sup>lt;sup>1</sup> Aposhyan, Susan. Natural Intelligence. pp. 64-67. Williams and Wilkins. Baltimore. 1999.

<sup>&</sup>lt;sup>2</sup> Blakeslee, Sandra and Matthew. <u>The Body Has a Mind of Its Own</u>. Pg. 213 Random House. NY.2007.

tensional patterns dictating movement expression.

In our 21<sup>st</sup> century technologically 'wired' culture, our ability to yield is often absent in the movement vocabulary of our fast paced lives. We scurry through the busy-ness of daily schedules often detached from the support of the grounding weight of our bodies and the resources of our environment. Perhaps that support comes from the 'terra firma' allowing us to yield into the weight of our bones in order to push a cart, walk, or run to meet an appointment, move fascia, reach for a book or rest into sensuous contact with a lover.

The active nature of yield, a coming into full body awareness in relationship, is the foundation for all movement patterns. As adults, yield supports intimate contact with self, with others and our physical world.

At the most basic level: to yield is to sense and to allow weight. This action supports the primary orienting relationship between our body as matter and the field of gravity we are embedded in.

## Exploration:

Take a moment (a pause) and notice how you are sitting. Are you resting into the support of the chair – or are you holding your body in a familiar way or tense way – separate from the support of the chair or floor? Notice the shape your body assumes as you continue reading. Become aware of tensions in your body, your eyes, your neck and yield into the shape of this tensional holding pattern, feel it, breathe into it, know it. Can you name the sensorial quality of your body's shaping or breathing pattern linked to action of reading? As your awareness of this pattern deepens – does your body shape begin to change?

A very simple example of yield occurs daily in our working practice. A client lies on the table, yet doesn't arrive on the table - is bracing or holding his/her weight. We may gently rock their limbs, support their weight from underneath, cue them verbally, etc. to assist them in "yielding" into the table. Or we may engage with them to bring their awareness to the holding and use it as a moment of awareness. There are many different ways to work with it. Through allowing weight, (yield - to meet/allow with awareness) we also increase our perception of proprioception, orientation and self understanding.<sup>3</sup> Yielding into contact with our clients informs our touch. Touch is the earliest sense to develop in-utero. The development of the haptic senses<sup>4</sup> and how they relate to the development of the other senses has been the target of much research. Human babies have been observed to have enormous difficulty surviving if they do not possess a sense of touch, even if they retain sight and hearing. Babies who can perceive through touch, even without sight and hearing, tend to fare much better. Yielding is the basis of true and contactful touch. Touch may be thought of as a basic sense in that most life forms respond to being touched, while only a subset have sight and hearing.

<sup>4</sup> Haptic communication is the means by which people and other animals communicate via touching.

<sup>&</sup>lt;sup>3</sup> Carli-Mills, Rebecca, Email correspondence.

Yielding is a physical expression of and support for emotional and social bonding; bonding is first experienced in relation to the body of mother, and the earth, as the infant yields her weight into her supporting surfaces. If the support is not felt to be secure and responsive to her needs, the infant cannot yield fully, and bonding will not be complete. Adequate touch and holding are essential to the bonding process and to physical and psychological well being; this begins in the womb at the cellular level, but continues in various forms throughout life.<sup>5</sup>

# **Contributions from Embryology**

Moment by moment the study of embryological development illustrates the action of primary yield. The meeting of egg (pulsating matter-gravity) and sperm (motility-electromagnetism) is one of coming into transformational contact. The fertilized egg or zygote is biologically driven to implant into the uterine wall. Hormonal flows and neurological predispositions of mother may create a welcoming field or one that rejects the pregnancy. Either movement behavior directly imprints the developing embryo through the hormonal bath of elation or dismay.

An embryo is an undulating, vibrating potential. However, if the uterine environment is one of rigidity, fear or terror, the embryo is unable to yield to its own inherent physiological motility. And reciprocally, the uterine field withdraws the secure ground of implantation.

In my rolfing, movement and craniosacral practice, the capacity for a client to yield to their own internal state of vulnerability, softness and internal knowing often speaks to these pre-verbal, intra-uterine dynamics.

### The Embryonic Membrane: where am I?

Primary yield initiates the development of the embryonic membrane as container or envelope. Initially, the skin boundary of the embryo is just one cell thick, however, its continuity cultivates the feeling sense of wholeness, and security.

We experience our first orientation to gravity through our mother's relationship to gravity. A mother's sense of orientation becomes the orienting imprint for the embryo's body mass in gravity. In- utero, nourishment flows or is thwarted in the exchange from her body to the embryonic body. Autonomic tonus is set through this primary relationship. The membranous continuity of this envelope forms the linings of the viscera, lymph, cranial membranes, connective tissues, and more.

Internally, this membranous layering feeds internal sensation and the interpretations we give to those sensations. (interoception)

Externally our skin forms a boundary of self and other and our world. Our skin envelope offers a sense of protection and safety. Yet this boundary is porous and affords a dynamic exchange between ourselves, another, and the environment.

The movement of yield, addresses the envelope and may arise out of a client's need to experience more continuity and safety when trauma has occurred. Working with the membranous layer may arise from a need for personal boundaries or broadening an understanding of their own internal sensations, in relationship to self, other and their world. A practitioner may find their client's envelope defended or to porous. This

<sup>&</sup>lt;sup>5</sup>Hartley, Linda. Somatic Psychology: Body, Mind and Meaning. pg. 127. Whurr Publishers, London. 2004.

spectrum of containment can be addressed with yield as a pathway to the intra-uterine imprints which initially in-formed the membrane.

After any type of invasion, (surgery, accident, or injury), yield assists a client re-owning the area of trauma. As a client is supported in yielding into a sense of weight and mass, or projecting their presence back through surgical scarring, continuity and embodied presence returns. The membrane envelope is the continuum substrate of whole body sensing.

### Anchorage dependence and cellular growth

Hiro describes the embryo yielding into the matrix of the uterus. This is our first primitive movement for growth. The cell/embryo yields into the matrix to survive. It is well known in cellular-biology that the cultured cell needs the extracellular matrix<sup>6</sup> (ECM) as an anchorage for survival and growth. If the cell is isolated from the ECM by the enzyme trypsin, the cell can not survive by itself, in spite of the presence of enough nutrition and growth factors in the culture medium. In cellular biology, this is called anchorage dependence.<sup>7</sup>

Normal cells need to contact and interact with the matrix as an anchorage. During embryonic growth this matrix is the womb.

The question arises, what is "movement"? Studies on the cell as a minimum unit of life reveal that not only is cell growth dependent on anchoring substrate but also on cellular motility.

The molecular cell biologist reveals that for cells to survive they need to extend over enough area of the anchorage. Interestingly, when there is not enough area of anchorage to connect through and around the cell, the cell cannot express cytoskeletal dynamics. This lack of anchorage results in apoptosis or cell-death. Basically, the cell can only move in the direction of anchorage in vitro. The cellular movement of anchoring into the matrix is the action of yielding. It appears that cell motility is dependent on the matrix. Therefore, the behavior of yielding into the matrix induces the expression of cytoskeletal dynamics which means motility, and facilitates interaction of the cell with the ECM as its surrounding. The reciprocal relationship between the growing cell and the anchoring matrix not only orders cell growth but speaks to the reciprocity between uterine ground and seeded zygote as well as the local environment and individual.

A prediction could be made that particular cells in tissue which is holding trauma, may have lost cytoskeletal dynamics or have less potential to extend to all dimensions. Consequently, partial cells in an individual organism may conserve some pattern of polymerization-depolymerization on the cytoskeleton, possibly affecting the fluctuation as a whole in the individual organism like a "breath". (In chemistry, polymerization is a reaction of monomer molecules to form three-dimensional networks or chains.8)

### Fluctuations through the cellular matrix

Molecular cellular biologists<sup>9</sup> seek to understand how order in multicellular systems emerges from randomly moving cells as they interact with their surroundings. The movement of individual cells is inherently affected by biophysical fluctuations. The

<sup>&</sup>lt;sup>6</sup> Oschman, James.PhD. Energy Medicine.. pp. 43-50. Churchill Livingstone. London. 2000.Definition: A meshwork-like substance found within the extracellular space and in association with the basement membrane of the cell surface. Molecular Biology of the Cell. 5<sup>th</sup> edition. Newton Press.

<sup>&</sup>lt;sup>8</sup> Wikipedia. Definition of Polymerization.

<sup>&</sup>lt;sup>9</sup> This project was sponsored by the Ministry of Education, Culture, Sports, Science and Technology in Japan in 2010-2015. <a href="http://sci-tech.ksc.kwansei.ac.jp/d">http://sci-tech.ksc.kwansei.ac.jp/d</a> biosci/cross-talk/indexEng.html

human embryonic stem (ES) cell as well as the embryo is very sensitive to its surroundings.

It has been shown that it must be important **for the individual cell to fluctuate randomly to a certain extent for that collective movement to be efficient**. The system actively utilizes the fluctuation of individual cells to self-organize. For example, researchers<sup>10</sup> revealed that the Brownian movement between actin and myosin, as a random fluctuation could be used for muscle contraction. The cellular slime mold as a model of multi-cellular organism, can be transformed into a collective form with organized movement by accumulating random vibration on individual cells.<sup>11</sup> This could be an orientation to order when the individual cells randomly fluctuate, followed by interacting with surroundings. Therefore, **the order of the organism depends on how much the cell fluctuates**. As the fluctuation of the cell may reflect cellular motility, one fluctuation of the individual organism is like a "breath".

A long time ago, the ECM was dismissed as merely a substrate providing a "cell recognition site". <sup>12</sup> But in studies of recent years, scientists are recognizing that the ECM provides information to the cell. The ECM interacts with the cell in the context of self-organization. The cell fate (proliferate - differentiate - death) can be controlled by the physical strength or geometry of ECM. As Rolfers and Rolf-movement practitioners we know how important the order of ECM (collagen matrix) is for structural integration. In a similar way, the condition of the cell should also be considered important to produce and organize the ECM. Intervention with yielding can affect the condition (motility-growth) of the cell. The movement of yielding may be able to enhance the fluctuation of the cell and facilitate the interaction between the cell and the ECM as a way of promoting continuity and order.

On a cellular level the extra-cellular matrix promotes the growth of cells, and aggregations of cells forming organs, tissues, and other life sustaining functions. What consistently noted is the reciprocal action between internal growth and the external environment. Throughout the 8 weeks of embryological formation, the surrounding fluid environment is forefront in shaping the embryo. The field of epigenetics recognizes the environmental forces or metabolic fields which shape the embryo and precede the action of genes. From an osteopathic point of view, these fields continue to shape and promote the health of the adult. According to John McPartland, DO. "the forces of embryological development persist as the forces of healing in patients…" <sup>13</sup>

We are as much a product of environmental shaping as we are of what we might imagine to be our strongly willed and genetically linked directives.

<sup>&</sup>lt;sup>10</sup> Nature. 397. 129-134. 1999.

<sup>&</sup>lt;sup>11</sup> <u>Science vol.</u> 328. Pp. 1021-1025, May 2010.

<sup>&</sup>lt;sup>12</sup> <u>Science</u>. vol. 276, 30 MAY 1997.

<sup>&</sup>lt;sup>13</sup> McPartland, JM. Skinner, E. <u>The Meaning of the Midline in Osteopathy.</u> pp. 312-323.Hippocrates Verlag. Stuttgart. 2006.

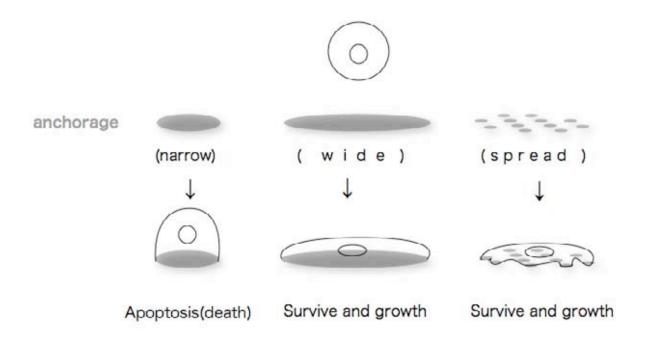


Fig. 1. The cell needs enough contact area of ECM as anchorage. If enough contact area of ECM protein, fibronectin, was given to the cell, the cell can spread to survive and grow. Diagram is drawn by Hiro referring from the data in SCIENCE VOL. 276, 30 MAY 1997.

# **Exploration:**

Take a moment and imagine yourself in a large and riotous crowd – perhaps you're at a rock concert or getting on the subway during rush hour in New York City. What happens to your breathing, what sensations pour through your body? Do you contract – expand or run toward the nearest exit?

What happens to your body-shape when you imagine yourself sitting in a beautiful garden on a lovely summer day? Does your system contract, expand or neither?

We are embedded in a dynamic relationship with our environment. The world which we call 'home' shapes our bodies, our beliefs, and gives meaning to our actions. The local environment is part of a larger world with its often dominating cultural or religious beliefs, politics and legislation.

Our movement behaviors express the continual exchange with our surroundings.

Describe a setting which supports your experience of yielding into the sounds and feeling tones of nature which surrounds you? Notice the whole body sensation of being embedded in this world.

At birth, if we are lucky, we are placed on mother's belly and literally wiggle up her torso in search of her nourishing breast. The capacity to creep up her belly is dependent on the innate neurology of the vestibular system, informing the infant which way is up (or down) in the field of gravity. The infant finds the nipple, roots and sucks by yielding through her throat and tongue in order to swallow. The survival gestures of sucking,

swallowing and breathing all require the underlying action of yield.

Yield, push, reach, grasp, pull, and release, are movement behaviors that continue throughout a lifetime. As the infant matures coordination grows through in these gestures.

A sense of safety underlies the flow of expression. Is it safe to yield to our own instincts and into relationship with the people and environment around us? Hyper-vigilance charges muscular tonus and action with a sympathetic urgency to run, fight or be on constant alert for danger. Or a lack of containment and sense of security may have clients in a perpetual gesture of reaching; for safety, for contact, or escape. As a client learns to yield into a matrix of safety and membranous containment within the therapeutic relationship, their own sense of inner security can transform the imprints of a an autonomic nervous system imprint.

...yielding into one's inner sensations and reflections throughout a treatment session supports the practitioner in responding from instinct, heart and knowing, thereby cultivating an honest and embodied relationship with a client.<sup>14</sup>

# Yield supports the process of attunement between practitioner, client and the surrounding environment.

Attunement from a biodynamic craniosacral understanding means being able to 'meet', contact or settle into an awareness not only of one's self and another but also of the space immediately around our bodies, and office perimeter. Holding an awareness of these dimensions of orientation requires the practitioner to slow their own working tempo and pace. Attunement supports expanding perception and sense of the whole. More often than not, by working at a slower speed, I find the session deepens and the transformative process heightens.

Through the action of yield, I am able to remain in contact with my own somatic sensibilities and work more easily and gently. This in turn helps a client sustain an awareness of their own internal sensations. Client and practitioner entrain to the spaciousness emerging from attuned relationship. Perception of the surrounding space is heightened. I might notice the song of birds outside, or the movement of the traffic or hear children at play. All of the sounds emanating from the environment can nourish the session and open both practitioner and client to the somatic reality of being embedded in their world.

When I attune to my own whole body sensorium, rather than directing my focus solely toward the client, I am able to interpret my body sensations as information which in turn supports the therapeutic relationship.

### Exploration:

Imagine yourself in a recent session. Were there moments in the session where you consciously brought your awareness back to yourself? Or – was the focus of your attention placed almost solely on your client? Resolve to take pause. Allow yourself a moment to become aware of your own internal state. This might be your heart beat, or a sense of pleasure in the work that you are doing, or frustration that something is not changing, or your breath. Whatever aspect of your sensorium speaks to you, listen. Perhaps something from your own body understanding needs to be expressed to your client.

<sup>&</sup>lt;sup>14</sup> Agneessens, Carol. manuscript. <u>The Embryonic Universe: traversing the primal thread.</u>

### A case study: sessions with Eleanor.

Eleanor is a 26 yr. old graduate student, majoring in philosophy.

Bright, alert and yet subject to binge eating and purging which in the aftermath collapses her structure and diminishes her sense of self. Beginning with our initial session we began addressing the difficulty she experiences in sensing the physical support of her back (particularly through her heels, the area behind her heart and back of her cranium). She was initially unable to yield the weight of her body into the table. Her comment was that if she let go of her back – she would feel to much. Her vision was often very focused and she was unable to sense the wider field around her. Her orientation was upward and forward in space.. She described feeling being pulled ahead, often feeling as if she was out of control.

When she was 5 yrs.old, she witnessed the death of her mother in a brutal traffic accident. This memory plagues her and to escape the pain and horror of these memories, she suppresses her feeling state by smoking, binge eating and purging.

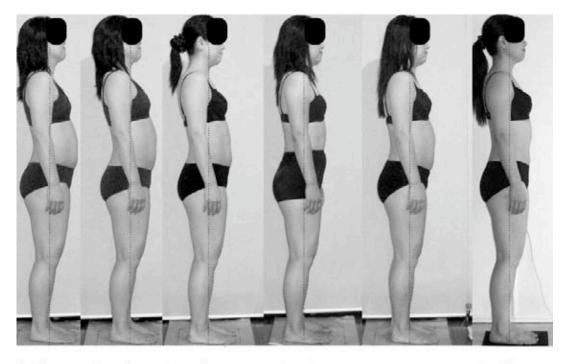
Initially, we explored the movement of yield as a way to settle and slow the fast tempo of her nervous system. By tracking states of activation and pausing to gently touch, see and feel the heart wrenching moments of history (as they arose spontaneously in her memory), she was gradually able to re-cover a fuller sensory experience of settling into her own body. She began to yield into the pain of memory rather than suppress and psychically run from it.

A new sense of safety and support emerged as we strengthened her embodied sense of her envelope of containment. She began to explore a new feeling sense and security from the field around her. As Eleanor continues to gain a whole body sense of her skin boundary, her capacity to orient answered the question plaguing her: 'where am I?' She now speaks of her mother's death as it is held in the context of the larger field of space and time. She is able to see the continuity of her own life and direction in it. Although the memory of this early trauma will never be forgotten, and she will continue to unravel the psychological complexities of this early loss, her ability to connect to deeper resources within herself afford her the support to continue traversing her own life path.

This work took place over 8 sessions.

Hiro has developed and refined a way to teach and work with primary yield that integrates this essential and fundamental 'power' into the movement work. When this movement is embodied, the actions of push, reach, grasp and pull emerge in an amazingly organic way. His use of the concept of yield has helped students to understand the difference between an ideal posture/movement based on an image and a dynamic posture that rests and moves in relationship with gravity.

### A case study.



before after 1st 5 weeks later after 10 series 6 mos. later after 5 Mvmt

### Figure 2. Sustainable effect of Yielding work on the structure.

After 1st session, the client could not come to my office for 5 weeks due to her schedule. Instead, we can observe how she has changed after 5 weeks without any intervention. The photo of 5 weeks later was taken before the next 2nd hr. We can see the differences between the photo of 5 weeks later and the one after the 1st hr. After 10 sessions, she could let go of chronic tension in her shoulders. Also her belly dance performance was improved. Total 15 sessions facilitated integration as shown above.

### How to work with Yielding:

- 1.Provide the safe matrix and sensation through the touch where the client is unable to to yield or rest into the table.
- → you can see decompression of joints etc. the body begins to be ready to transform. 2.Enhance fluctuation where can not express motility.
- → just follow the own fluctuation pattern with breathing. Some vibration will reach there.
- 3.Synthesize the fluctuation into the whole water cube. Hiro uses the water cube as a seeing model, which may be useful to perceive the individual cell as a bubble which is closely related to the whole structure.<sup>15</sup>

This case study was done without any tissue release work. All work was based on →coherency (collective fluctuation) will show up.

- 4. Trust the self-orchestrating system of the body
- → wait for change and integrate by itself. do not disturb to expand itself.

9

<sup>&</sup>lt;sup>15</sup> Water cube from dreamtime photo – image11675780

(No.2: listen for the pulsation of the body through your touch. you can enhance the wave of breathing. The employed pressure should be very gentle. The self-excited or resonant vibration can transmit large amount of mechanical stimulation into the architecture as Tacoma Narrows Bridge was undulated with winds of only19 m/s (3762 FPM). If the practitioner can hear the rhythm of the pulsation of the body structure, he or she can enhance it by listening. )



Perceiving the water cube as a way of sensing/feeling cellular relationships.

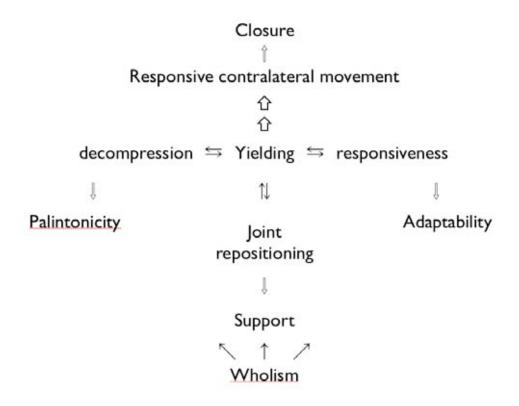


Figure 3: the relationship of Yielding with Principles of Rolfing<sup>16</sup>

# Benefits of yielding work – trauma applications after the Tsunami/Earthquake of March, 2011 in Japan.

Yielding touch offers a specific quality of contact to individuals who have experienced trauma. The practitioner's presence also functions as a bridge to reintroduce a sense of safety and contact with the surroundings.

After the earthquakes in March, Hiro offered workshops in YIELDING as 'first aid trauma' sessions in Sapporo for a network of professionals including clinical psychologists, nurses, and bodyworkers etc. to support their recovery and ability to help others. He was assisted in this endeavor by Kotaro Ogiya and Yashushi Fujimoto. Workshops were also offered on somatic first aid with yielding in Tokyo.

# People were able to regain the sensation of safety and relief by yielding their feet into his hands as the matrix for settling and safety.

In May, 2011, two months after the Tsunami/Earthquake, Hiro visited tsunami disaster area in Miyagi with Rolfers and clinical psychotherapists (Somatic experiencing group). Hiro had several opportunities to offer sessions with yielding. One woman, had a leg bone broken during the tsunami. Yielding and tracking sensation worked for her to rediscover all sensations. She began to recover ease in hearing the sounds of nature, and to feel relieved and grounded. She had been unable to have sensation and feeling after the tsunami. Most people can regain a feeling of safe sensation with yielding. Traumatized tissue begins to heal with yielding contact within the safety of the supporting matrix offered by the practitioner using a yielding contact.

-

<sup>&</sup>lt;sup>16</sup> Diagram by Hiro Tahata. 2011.



Hiro working with a young high school boy in Miyagi after the 'Big Shake'.

Attention to bodily sensation is the foundation of our sense of self. The primary movement of yield stimulates radical acceptance of the 'very' now.

As challenging as it might be, engaging the truth of a particular situation, beneath resistance, rebellion, or the velodrome of monkey mind, a portal to freedom is revealed.

#### Conclusion:

The movement of yield is a dynamic coming into relationship with gravity, with ourselves with another, and with the environment around us. Whether we are speaking of the dynamics of cell growth, the receptive ground of the womb, embryonic growth or the stages of human development; yield is fundamental to all aspects of our existence. As we deepen into a whole body sense of this movement, we breathe the world into us and ourselves into the world.

Yielding underlies our ability to bond. Our relationships are colored by the cellular memories of how we have been held through the ground of a mother's womb and her loving contact. We are able to hold another as we have been held.

Yield teaches us about the surrounding matrix, the field which continues to in-form formation, whether it is the anchorage of the living matrix, the womb, this earthly ground, or the space time continuum permeating our lives.

We might imagine our bodies as the second placenta and thus we are intimately connected within the womb of our surroundings. Yield is an essential action for coming into relationship with the ever-shifting tempos, rhythms, tumultuous or peaceful events of our lives and our world.

<sup>&</sup>lt;sup>i</sup> Agneessens, Carol. Unpublished manuscript. The Embryonic Universe: traversing the primal thread. (2011)