

Advances in the Theory and Practice of Rolfing®

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Editor's note: This article has been translated and adapted from the Portuguese by Heidi Massa, Certified Advanced Rolfer™.

What follows is an adaptation and update of a portion of my doctoral dissertation, "Exploratory Studies of the Psychobiological Dimension in Rolfing: Creation, Development and Evaluation of Questionnaires." The full dissertation was presented in September 2006 to the Somatic Psychology group of the Department of Clinical Psychology at PUC-SP (Catholic University of Sao Paulo), and is available at http://www.sapientia.pucsp.br/tde_busca/arquivo.php?codArquivo=3251

The purpose of this dissertation chapter was to outline advances in structural integration since Ida Rolf's founding of the Rolf Institute of Structural Integration®. One of my goals in preparing my dissertation was to establish and nourish lines of communication between the Rolfing community and the academic world. However, because this chapter includes my review of the existing literature on Rolfing, I want to share it with the Rolfing community. Because it was prepared for an audience having little or no knowledge of Rolfing, some of the information presented will look very familiar to most of you. I retained it here to maintain the integrity of the chapter, as it carries both my view of the subject and the organization and form through which I presented the information to the world of academic psychology.

To prepare the preliminary review of the literature on Rolfing that follows, I first had to reorganize and complete, as much as was practicable, the collections of the Rolf Institute of Structural Integration® and the ABR (Brazilian Rolfing Association). From this effort came the idea of building an on-line virtual library to make the existing intellectual product readily available and easy to consult. I undertook this task.

Although some important work might have been omitted because it escaped my attention, the intention is for it to be a base and stimulus for future discussion, study, instruction and research. The Ida P. Rolf Library of Structural Integration is now available to the public free of charge at www.pedroprado.com.br, and material cited below is posted there.

SOURCES OF EXISTING LITERATURE

Ida P. Rolf created the Rolfing method based on her own empirical research (Feitis, 1986). Initially, she formulated the ideas by herself; however, as she trained more and more students, they began to discuss and debate the work among themselves – and, eventually, to contribute to it. At first, the material was transmitted as an oral tradition (Rolf herself wrote very little); but over time, it was reduced to writing by Rolf's followers.

First, in 1969, the Bulletin for Structural Integration was created. This publication gathered the initial commentary and discussion about Rolfing, and flourished in that form until 1980. It collected approximately 150 contributions, twenty-one of which were from Rolf herself. Around the same time, with the establishment of the Rolf Institute of Structural Integration in 1971, Rolf Lines was created. At first, it was only an information bulletin. However, it soon became a place for Rolfers to share their professional experiences, which, in turn, fomented an informal debate about the practice of Rolfing. As the Rolfing community grew in number and extended beyond the United States – first to Europe and later to Brazil, Australia, Japan and

elsewhere – Rolf Lines changed, and was transformed into a magazine with articles and research reports on Rolfing.

It was in 1981, when publication of the Bulletin for Structural Integration was discontinued, that Rolf Lines assumed the mantle of a more scientific journal and began to print more serious material of the kind that was previously the province of the Bulletin. Currently in Volume XXXVI, it was Rolf Lines that published the greater part of discussions about Rolfing – not only in formal articles, but also in a section called the Forum, which included exchanges of letters and impromptu reflections on controversial topics about the theory and practice of Rolfing. In 2001, by which time Rolf Lines had already published nearly 400 significant articles, its name was changed to Structural Integration: The Journal of the Rolf Institute. The editorial standards became more rigorous, and the Forum section was separated out. By 2008, 244 more articles had been published.

Meanwhile, in 1989 in Switzerland, Hans Flury took the initiative to create Notes on Structural Integration, which was published annually through 1993. Its more rigorous editors accepted only scientific articles. And, in 1999 in Brazil, the ABR began to produce Rolfing-Brasil, a Portuguese language publication to document the work of Brazilian Rolfers, as well as to provide them with translations of important articles from elsewhere. It is now at Volume 8, No. 25, and has published nearly sixty original articles.

During the same period, various academic works and a few formal research projects were completed, and various books written by Rolfers were published. This work was the product of the professional practice experience of the community – a community that has, as of 2008, grown to comprise 1608 members in thirty-six countries and forty-nine states of the United States.

THE CONTEXT OF THE WORK

Maitland, in teaching materials and later in an article written with Cottingham (1997), built the first framework in which to organize the various domains encompassed within the vision Rolfing. He noted that to understand Rolf's contributions to manual and holistic therapies, it is necessary first to understand the differences between therapies that are holistic and those that are not. He outlined three paradigms of

therapeutic practices, which represent three potential attitudes toward treatment: palliative, corrective, and integrative (holistic).

Practices in the palliative paradigm seek to alleviate tension, pain or other symptoms. Practices in the second paradigm, the corrective, are directed toward the correction of that which produces the symptoms, seeking to alter the causes so as to eliminate the symptoms. Both of these paradigms indicate more superficial or local interventions, whereas the third paradigm, the holistic, cultivates integration, i.e., balance and harmony within the person as a whole.

As an illustration of how the three paradigms work, consider a person with back pain. He could receive a massage to alleviate the pain and to reduce tension (first paradigm); various biomechanical maneuvers to correct inter-articular misalignments (second paradigm); or Rolfing structural integration, to integrate the entire body in gravity (third paradigm). Much of Western medicine operates in the second paradigm, with specialized methods of controlling symptoms.

The objectives and attitude of the practitioner, in whatever practice of therapeutic intervention, are based on one of these three paradigms, and reveal differing philosophical dispositions. The three paradigms are not mutually exclusive: e.g., with an integrative vision, one can still correct particular symptoms and achieve relaxation. Or, a treatment that begins in the first or second paradigm can end in the integrative paradigm.

Rolf expanded the holistic approach to include the idea of integration in gravity. She insisted that lasting changes to structure or function require balance not only within the body itself, but also in relation to gravity and the environment. Often, the recurrence of a symptom or the appearance of new dysfunctions is a sign that the person has not been able to adapt to local interventions, which might have failed to take into account some other dimension of the person, or the person's relationship to the environment. Rolfing, therefore, has two concomitant objectives: to organize the person in relation to himself, and also in relation to gravity and the person's environment.

Maitland's contribution in formally articulating the domain of Rolfing has helped to stabilize the focus of our approach,

and has provided a foundation for others to elaborate the distinctive therapeutic attitude that distinguishes Rolfing from other manual therapies. Rolfing recognizes that a person's symptoms must be perceived and addressed in relation to the person's entire structural and functional system, as well as in relation to the environment in which that system exists.

REVIEW OF SOME ESSENTIAL CONCEPTS

Gravity and "The Line"

Over the past fifty years, advances in physics have brought new models for interpreting the concept of gravity, which is the central theme of Rolf's ideas. Both the concept of the gravitational line as a referent for structural integration (in the sense that all human structures are organized around a central axis) and the idea of gravity as a compressive force acting through a column of blocks best organized when their centers of gravity are aligned, have shown themselves to be limited.

Among the ideas that have received extensive discussion in the years following Rolf's death, in terms of both the theoretical viewpoints and their implications for the practice of Rolfing, the contributions of James and Nora Oschman (1998, 2000, 2001) are considered the most important. Oschman tried to bring the concepts of the theory of relativity and quantum physics into the domain of Rolfing and outlined, in light of those concepts, certain explanations of the physiology of connective tissue.

Meanwhile, by attentively experiencing the effects of gravity first-hand and studying them in others, Rolfers found that gravity manifests not only as a sense of weight, but also as a sense of lightness. There have been two principal approaches to this theme. In simplified terms, one approach continues to emphasize the idea of gravity as a compressive force. In this approach, the biomechanics of the body's bones and connective tissues convert this compressive force to lift. The analysis of the structure begins by considering it as a closed system in gravity, and stresses the relationships among forces and masses within this system (Flury, 1989; Harder, 1991; Salveson, 1992; Brecklinghaus, 1998; Gaggini, 1998).

The other approach to the theme of lift emphasizes the importance of sensory orientation processes to postural

organization. Adherents of this view arrive at an understanding of gravity as a relational concept – as a continuing dance involving the mechanisms of perception and the positional adjustment of the person in the environment (Agneessens, 2001; Zorn and Caspari, 2001, 2003). They see the person as a dynamic structure and seek to understand gravity in the context of movement.

Is there no one in the entire Rolfing community who has not participated and is not still participating in this debate? "The Line," Rolf's orthogonal geometric reference that has been considered both static and dynamic, will be a continuing topic of discussion among us.

Connective Tissue

The nature and behavior of connective tissue have also received a great deal of study – including speculative articles, compilations of clinical observations, and a few books and scientific research projects.

Several Rolf Institute® anatomy instructors have directed their studies to the nature of connective tissue. They have also explored the implications of its nature for locomotion, rehabilitation, and chronic pain (Schultz, Feitis, 1996; Myers, 2001; and Bertolucci, 1998, 2003, 2005a and b). Along the same line of inquiry, Rolf Institute anatomy instructor Robert Schleip (2005, 2006), along with Adjo Zorn (2007), has performed laboratory research to study the passive elasticity of connective tissue. This research is contributing to our understanding of why the Rolfing touch is so efficient and how to maximize the results of our interventions.

The presence of smooth muscle cells within the connective tissue matrix suggests that Rolfing affects the autonomic nervous system. This resonates with the theory and practice of Rolfing (Schleip, et al., 2004, 2005, 2006). From the theoretical viewpoint, the Oschmans have contributed their vision of the function of connective tissue in light of quantum physics, which is very much in line with contemporary studies (Oschman J., Oschman N., 1993, 2001, 2003).

A byproduct of the practice of Rolfing is Myofascial Release. In Brazil, Certified Rolfers including Bertolucci, Menagatti, and Cintra have organized this into a specific system, which is a rich addition to the exploration of connective tissue touch (Bertolucci, et al. 2005). The descriptions of techniques and integrated systems of

techniques, which demonstrate and record the possibilities of manual intervention for the liberation of myofascia, also show that different therapeutic paradigms can be used to take care of specific symptoms and help relieve pain (Bertolucci, 2005b). Similarly, in Australia, John Smith published *Structural Bodywork* (2005).

The Recipe: A Ten-Session Protocol

Maitland (1993), while organizing Rolfing conceptually, also established important distinctions among the general objectives, principles, strategies, techniques and tactics of the work. He arranged a hierarchy of thinking from the most abstract to the most concrete, and from the most general to the most specific: the general principles support the strategies, which require tactics, which are effectuated through techniques.

In the early days of Rolfing, it was common to confuse the techniques or tactics of the work with its goals, and to identify the latter with the former. In Rolfing, the types of touch applied to connective tissue range from superficial to deep. Rolfers use their hands, thumbs, forearms and elbows. However, the tactics do not define the work itself; they are no more than ways of accomplishing the process. Historically, confusion in this respect has clouded for many people the real sense of Rolfing, and has in some sense caused the practice of Rolfing to be led astray.

Rolf, in order to clarify the instruction and dissemination of her point of view, established the famous formulistic protocol of ten sessions ("the Recipe"). It was brilliantly conceived, broadly applicable, and highly efficient as a working strategy. It was also an outstanding pedagogical method: as practitioners repeatedly performed this systematic protocol, bit by bit they came to comprehend the real nature of the work and master its particulars. In other words, the clinical application of this formulistic protocol was a method of practitioner self-training. However, the power of the ten session strategy was so great that it was seen by some as equivalent to and synonymous with the essence of the work itself.

Any formal protocol brings with it two potential pitfalls: first, the assumption that all bodies travel the same path in their evolution toward an "ideal" configuration; and second, the notion that the same method is appropriate for everyone (Maitland, 2002).

As to the first, some people understood that clients were to be evaluated based on the degree to which their structures were congruent with the line of gravity – verticality in relation to the ground. Rolfing was directed to the liberation of soft-tissue restrictions to permit the emergence of a higher level of organization around a central vertical axis, and they believed that the goal was to harmonize each person's reality, within the limits of each person's individual process, with an ideal. That ideal was, in fact, unattainable.

A formulistic protocol by its very nature assumes the existence of an ideal body or bodily state that represents normal. This is a somatic idealism; and formulism and somatic idealism go hand-in-hand (Maitland, 2002). But, Rolf's variety of somatic idealism was not rigid or judgmental. Instead, she used her concept of ideal structure and function – which reflected universal values and referred to the human species as a whole – as a base line against which to evaluate her clients and the results of the work.

As to the second pitfall – the belief that any particular method is appropriate for everyone – to deliver the same treatment to all persons presupposes that the results will be the same in each case, and that the process will go along the same path toward a body that conforms to the ideal (Maitland, 2002). It follows that whatever is unique and specific to each person and each person's process cannot be addressed in a formulistic or idealistic theory.

Clinical observation has demonstrated that the Recipe does not adequately account for differences among various body types. With the gradual emergence of different theories of structural typologies came adaptations of the Recipe to address these variations. Not surprisingly, therefore, student reports attest to the fact that Rolf's own work was not necessarily according to the protocol. Rather, she adapted the method to each client's individual needs. The protocol was designed not so much as a mandatory technique as a way to facilitate instruction.

The discussion has produced two opposing views: some advocate following a practice that values the somatic ideal and that uses only the basic ten session protocol taught by Rolf, while others have tried to distill the fundamental principles of the Recipe, which principles govern the strategies of

Rolfing. This divergence of views produced, in 1987, a schism within the community out of which emerged, on the one hand, the Guild for Structural Integration (where the first view was cultivated) and on the other hand, the Rolf Institute of Structural Integration®.

Thereafter, the Advanced Faculty of the Rolf Institute, having been freed of this particular argument about the work, revised the Recipe and created principles for strategizing, under which the Recipe is considered one of many possible work strategies. In 1992, Rolf Institute faculty members Maitland and Sultan published the article entitled "Definition and Principles of Rolfing" (Maitland; Sultan, 2002).

The Principles of Intervention

Having been relieved of the limitations of somatic idealism and formalism, Rolfing became a resource for more people. Rolfers began to consider how different psychobiological types struggle differently with the effects of gravity, and the resulting discrimination was incorporated into the theory and practice of Rolfing. Nearly all types of bodies and all types of persons can benefit from Rolfing, but not all benefit in the same way.

The idea of normal also changed: it came to be recognized less from an external referent and more from an internal and personal referent, respecting each person's process of discovery and adaptation. The vertical line thus came to be seen as a result rather than a norm. Without any external referent, the search for what is natural for each person in relation to the person's environment transformed Rolfing into a far more complex and fascinating process.

Out of all this arose the non-formulistic thinking, in which strategies are organized for each person within the framework of the Principles of Intervention. Maitland reduced the strategy problem to three basic questions: How do I begin, how do I continue, and when am I finished? (Maitland, 1993). Maitland, Sultan and Salveson, in their Rolf Institute advanced trainings, taught the meta-principle of holism and five subordinate principles, the combined application of which yield the conditions for the work to be efficacious. With the understanding of these principles, strategizing the work can be more free, creative and efficient. It is directed to the specific needs of each client as the client's process develops and

produces better results (Maitland; Sultan, 1992). The Principles are as follows:

Holism

Holism is the meta-principle that comprehends all the other principles. Consequences of the principle of Holism are:

- The body is an entirety, and no part is more important than any other for the organization of the whole;
- The body is one with the person, and a somatic dysfunction will be reflected in all other aspects of being;
- Living bodies are self-regulating and self-organizing systems;
- To understand local dysfunction, one must understand the condition of the whole and its relationship to the environment;
- No part of the body can be adequately understood in isolation from the whole and without regard for the environment;
- All of the principles operate together.

Adaptability

The principle of adaptability is concerned with whether the client is able to accept new options for alignment, self-perception, and movement. By this principle, we recognize that any intervention (whether by touch, movement or words) will be effective only if the client can adapt to its results. This adaptation must happen in the client's physical structure, in the relationship among the various dimensions of his being, and in his relationship with the universe of which he is a part and in which he orients, organizes and integrates himself.

If one releases a myofascial restriction – e.g., of the retinaculæ of the ankle – the intervention will actually enhance the active range of motion of that joint only to the extent that the relationships among the ankle, knees, hip, vertebral column and head are free enough to accommodate the freeing of the ankle. Should the knees or hip joints be rigid, the ankle will not be able to use the dimension of freedom produced by the intervention – and according to the principle of adaptability, the ankle will return to its restricted condition.

Similarly, even if the structure has sufficient freedom throughout the myofascial network to accommodate the intervention upon the

ankle retinaculæ such that the other joints can respond with appropriate movement, the ankle will stiffen up again to the degree that the client's body image cannot accommodate the greater potential ankle movement.

Support

According to the principle of support, an intervention will be successful only to the extent that the client can find effective support in gravity for the change. At the mechanical level, for example, if the client's pelvis is shifted excessively anterior in the horizontal plane, it will not provide adequate support for the chest and head. Therefore, there will be compensations throughout the myofascial system to stabilize the structure in gravity. If restrictions in the tissues of the chest are released, but the restrictions causing the excessive anterior pelvic shift are not, the chest will lack mechanical support for the greater freedom in the chest tissue, the change will not be stabilized, and the contractions in the chest tissues will return in order to re-establish the person's equilibrium in gravity.

Similarly, if the person is unable to initiate the gait from the chest and repeats the pattern of initiating it from the anteriorly shifted pelvis, the chest tissue that the manipulation freed will tend to contract once again due to the absence of dynamic support in gravity. Therefore, helping the client both to recognize the system of support and to use it in movement have become elements of the work.

If the same person can recognize support within his process of perception and orientation to space, as well as in the heightened awareness of sensation in the feet, his consciousness of posture and equilibrium are enhanced, which achieves the principle of support in Rolfing. On another level, the client's awareness of a pattern or sense of support in the therapeutic relationship can also help support changes at the structural and functional levels.

Palintonicity

In Greek, palintonos refers to a dialogue between opposites. It expresses a relationship among spatial dimensions, and addresses the unity of opposites in the body and in movement of the body through space. It is manifest in the relationships among structures, spaces, volumes and planes. It refers to an orthogonal order, and recognizes that the success of an intervention is a function of appropriate

spatial relationships and of the dialogues between opposites.

Imagine, for example, the body of a depressed person, with a collapsed chest that exerts mechanical pressure on the respiratory diaphragm and the organs. Under the lens of the principle of palintonicity, the balance between the superior and inferior parts of the visceral space is compromised, with too little space above the diaphragm and too much space under it. The transformation would bring about a new spatial relationship, freeing the chest and allowing a different spatial relationship between the two visceral compartments. At the same time, the relationship between inhalation and exhalation would have the potential to be transformed. The depressed person's pattern of respiration was most likely expiration-fixed within the collapsed chest, with reduced the contractile potential of the respiratory diaphragm. If, in response to the improved spatial balance, the functional respiratory pattern also becomes more balanced, we have altered the functional palintonicity, as well.

In another dimension, if the person has a more elevated chest, the head can also be carried in a more erect position. This might influence the person's proprioception of the head and his perception of the relationship of the head to the environment. This implicates the palintonic principle in relation to perception of the personal and environmental structure, and in relation to the process of transformation and integration of the person in gravity.

Continuity

What happens on any dimension of the human being will be reflected in all other dimensions. All interventions affect the continuity, organization and function of the whole. The success of any intervention is limited by its continuity within the dimension in which it is effected. However, it is also limited by continuity among other dimensions. Interaction among the various dimensions of being allows the possibility of continuity among them and brings them into harmony with each other.

In the example above, we have been describing changes in the structural and mechanical dimensions concerning the relationship between the superior and inferior visceral spaces; their functional effects on the respiratory cycle; and their psychological implications (potentially

connected to changes in perception of the world as a result of more erect head that can provide a greater range and competence of perception of the environment – and the relation of the body schema to the body image).

If the person cannot sustain the change in the emotional states that can be triggered along with changes in the perception of the environment and of the self, there will be lacking continuity for the change in the intended dimension – and the force of the intervention will be diminished accordingly. If the person cannot assimilate the change in the respiratory function, it will also diminish the power of the intervention. If, however, the person perceives the meaning of this transformation (whether it be a postural change in gravity, improved respiratory function, or enhanced perception of the environment), he will be able to live it more fully.

Closure

The principle of closure affirms that a session or a process ends when the client achieves the highest degree of somatic and perceptual integration available at that moment, taking into consideration the current temporal and spatial limitations. According to this principle, we consider the degree of integration that is available to the client in his process – both consciously and unconsciously. It refers to the degree of appropriation that has happened or that has yet to happen to arrive at the moment of closure of the process. To abide by this principle, it is necessary to take into account variables that will occur outside the therapeutic context, once the structural changes manifest in function over time.

To address the highest possibility available at a particular moment – given, and respecting, the limitations of the tissue and the course of the client's personal journey – we must consider the fact that Rolfing happens in cycles, within the limitations and possibilities of the particular phase of a particular person's process. Each phase prepares for the next, which can happen whenever the person chooses. It is a delicate task – to respect the moment and to refrain from initiating a new cycle of changes that cannot be integrated in the context of the current series. And yet, in recognition of this principle, the practitioner must leave the process to the client, so that the client can participate in and own the results of the process.

It is appropriate to emphasize here that, as a function of the meta-principle of holism, the work takes place through the dynamic interaction of all of the principles. They all operate continuously and interactively, each coming to the fore over and over as the entire system evolves through the process.

The Taxonomies

The development of the principles made possible non-formulistic work, which requires continual monitoring and re-evaluation to identify the various dimensions in which the work has already happened, as well as to make proper choices of technique for further interventions. Along with the development of the principles, Maitland (1993, p. 3) set forth the taxonomies of assessment and observation, which facilitate perception of the different dimensions influenced by the body and its organization in gravity.

The categories that have emerged are physical, functional, energetic, and emotional Prado (2004a). As has been included in the Manual for Completion of the NAPER Questionnaires, the elaboration and restructuring of these categories is as follows:

Physical:

- Structural
- Functional

Psychobiological:

- Emotional/psychological
- Cultural/environmental
- Existential/spiritual
- Energetic

This organization advances Rolfing by explaining the different dimensions of the person that present in the context of the work and facilitating the organization of existing techniques (Prado 2004a) and those that will be developed in the future. As we will see, and which is implicit in the formulation above, it facilitates increasing discrimination and organization of the work. In short, this categorization helps us to identify the locus of the client's dysfunctions and fixations in each taxonomy. It also lets us determine where the client would benefit from intervention the most. Below, we will explore the various taxonomies of assessment, including their definitions and the main theoretical advances in respect to them.

Physical

Structural

The structural taxonomy concerns the geometry and biomechanical alignment of the body. It "may be operationalized as segmental postural position, or, geometrically, as computerized topography" (Maitland, Cottingham, 2000, p. 120.) In the continuing tradition of teaching and clinical practice of Rolfing, photographs taken before and after various sessions – or before and after the entire process – are used to evaluate this dimension.

Rolf used a model of orthogonal organization with respect to the relationships among the sagittal, horizontal and coronal spatial planes. Loss of dimension in any one of these planes implies adaptations in the others. In its simplified version, this model is illustrated by a column of blocks, the centers of gravity of which share a common alignment. A central line – the axis of gravity – is considered the point of reference for observation of the three-dimensional architecture of the body. To facilitate this three-dimensional reading, the model of 'core/sleeve' has been suggested (Feitis, 1986, p. 211), which compares more internal to more external body structures and assesses the functional equilibrium between them.

The exploration of Rolf's model gave rise to new ways to perceive and describe the human form. The development of these models of perception has paralleled the development of specific techniques, and ultimately the quality of touch used in manipulation. The principal innovations came from Flury, Sultan and Schleip.

Flury (1989), a Swiss physician, sought to define in a literal and orthodox manner the effects of the gravitational force on the arrangement of myofascial tissues. He created a typology based on four combinations of anterior/posterior pelvic tilt and shift within the horizontal plane. He described various primary and secondary overall structural shortenings derived from the four possible combinations of pelvic tilt and shift. Within a corrective mindset, he sought ways to create a "Rolfing language" and to found a new science. The work of Harder (1991), Flury's principal disciple, advanced the physical and biomechanical discussion along these lines.

Sultan (1986) developed the Internal/External Model based on observations from cranial osteopathy – a science that

studies the flow of cerebrospinal fluid. In this science, the flow takes place in two phases – flexion and extension. Depending on the individual's tendency with respect to these phases, the myofascial structures accommodate themselves in specific rotations, which affect the arrangement of the structure as a whole.

Schleip (1993a) extended this thinking to include the role of the nervous system in the structural arrangement. He proposed a typology based on the relative dominance of the flexor and extensor muscle groups. In addition to the introduction of this typology, his work contributed to the technique of touch, bringing the idea of monitoring touch vis the type of nervous system stimulation it induces.

Sultan, Salveson and Maitland, in an effort to give greater precision to Rolf's structural readings, developed a model of structure based on embryological development. This model, the Five Elements of Structure, divides the body into five anatomical regions: visceral space, superficial muscular layers, pelvic girdle, shoulder girdle, and axial complex. The structural arrangement is observed with a view to the relationship among these components. It was viewed initially not as a typology, but rather as an aid to perception and design of strategy for the work (Maitland, 2000).

From the nascent visceral osteopathy of Barral and Mercier (1983), Schwind (1992, 2003) brought advances in ways to perceive and address the visceral space. Minutely detailed observation and description of membranes connected to and supporting the organs clarified their importance for the arrangement of the structure as a whole, as well as development of techniques to approach them, opened a whole new chapter in the evolution of Rolfing. Gaggini (2000, pp. 6-10) and Sommer (2000, pp. 11-14; 2005, pp. 127-30) are continuing this line of research. Sommer's work includes the neural tissue (2006 pp. 22-23; 2008 p. 42).

In the realm of specific techniques and tactics, a group of advanced faculty developed techniques to address every joint in the body. (Maitland, 2000, 2001b; Sultan et al., 2001; Schwind, 2006 and Asher, 2007). We must recognize that these are not techniques of osteopathy or physical therapy: despite the influence of these fields, the advanced faculty's innovations are grounded in Rolfing's focus on connective tissue. The best descriptions of technique

are presented in *Spinal Manipulation Made Simple* (Maitland, 2001b) and in the compendia formulated by Maitland, Sultan and Salveson for their advanced trainings (Maitland, 2000). Along with these authors, Gaggini (2003) has contributed her work on the biomechanics of alignment.

The influence of cranial osteopathy, articulated in its various forms by Upledger (1983), Milne (1994) and Sills (2001), has brought to the practice of Rolfing several specific maneuvers for work in the cranium and other techniques that require a particular orientation on the practitioner's part. In contrast to direct techniques, which challenge the existing tissue pattern, these indirect techniques require the practitioner first to receive the existing pattern and take the tissue in its direction. The practitioner then waits for a gradual diminution of the pattern's force on the tissue, following which the structure stabilizes itself in a new pattern in gravity. The existence of these contrasting orientations of actively inducing a change, on the one hand, or waiting for and receiving the change, on the other hand, have broadened the gamut of intervention in terms of both assessment taxonomies and work techniques (Sultan, 2001; Walker and Loveitt, 2004; Maitland, 2006).

Functional

A functional assessment evaluates the quality and economy of movement, and along with direct observation, includes tests of mobility and balance (Maitland; Cottingham, 2000, p. 120). The functional category has generated the most discussion – and also the greatest evolution – in Rolfing. Movement work at the Rolf Institute of Structural Integration® nurtured many elements that later unfolded in the psychobiological category (emotional, cultural, energetic and spiritual). To help us understand better the advances in this perspective of the work, it is fitting here to tell the story of its evolution.

Rolf recognized that connective tissue manipulation transforms function. She saw structural integration and functional economy as equivalent. She further recognized the connection between structure and function, on the one hand, and behavior, on the other hand.

Rolf herself used movement to enhance the outcome of manipulative interventions. To quote one of her most famous phrases, "Put it where it belongs and ask for movement."

The underlying premise was that correct movement would help to balance the myofascial network. Rolf used movement during structural sessions as a technique auxiliary to manipulation.

A series of exercises Rolf inherited from Amy Cochran (later dubbed *Ida's Yoga Exercises*) were used to re-pattern movements and sensations. Here, the emphasis is on the neurological imprint of movement patterns, and movement work is seen as a technique for re-educating articular proprioception and teaching how movement transmits through the body. Caspari (1996) has prepared a practical description of these techniques.

Having recognized the importance of function, Rolf called upon Judith Aston to collaborate in developing what she called Rolfing Movement. Aston designed the first systematic functional approach, and her work revealed that structural integration could happen using no more than functional techniques. Eventually, along with Rolf's formalistic approach and somatic idealism, Aston's vision collided with Rolf's. However, after having separated herself from the Rolf Institute, Aston continued her work and founded the system known as Aston Patterning (Foster, 2004; Pare, 2004).

The next group to advance the functional perspective included Megan James, Heather Wing and Gale Ohlgren. For them, movement work was directed to somatic exploration and education. It allowed the clients to find options for movement in their daily lives, as their tissues and structures adapt to gravity (Ohlgren; Clark, 1995; Wing, 1982a, 1982b). Although the work was considered auxiliary or complementary to structural manipulation, the therapeutic relationship was emphasized. Conceptually, what emerged was a more process-oriented perspective: perception of the client's rhythm in respect to the transformations and ownership of the results.

Dugan and French, in 1987, advanced a more introspective aspect of the work, which began by bringing the clients to perceive their own fixations. Next, micro-movements, light touch and gentle stimulation help the client recognize and release multiple fixations sequentially and reintegrate in gravity. This work made it possible to observe emotional patterns, and brought a psychotherapeutic component to the somatic approach. As a result, it

engendered considerable resistance among the more structurally oriented practitioners, and movement work began to be set apart and devalued. In 1990, Dugan and French left the Rolf Institute and formed the Dugan-French Association (DFA).

Wing and Ohlgren – and later for many years Jaye and Harrington – carried the torch and preserved the values and interest in internal processes, emotions, therapeutic relations and individual introspection. They perceived the value of exploration of internal movement as a way of exploring integration in gravity, and discussed movement work as not merely a series of as re-patterning exercises, but rather as a Rolfing technique in and of itself.

This perspective brought to the work an attitude different from that of the structuralists, some of whom were prone to falling into a “doing to” second paradigm clinical mode that was dualistic and treated the body as an object to be fixed. Movement work, with its emphasis on the client’s experience and its a priori non-formulistic approach, supported a more phenomenological vision.

With the formulation of the Principles of Intervention by Maitland, Sultan and Salveson (Maitland; Sultan 1992), movement was finally perceived as a body of work that could be used either by itself or in conjunction with manipulation techniques.

The Rolf Institute organized Rolf Movement trainings, and, later, a Combined Studies program tried to teach both approaches distinct and simultaneously, in the same training. This project was discontinued after a couple classes, as it represented an excessive load of work for the students, who would be getting or giving a session each day.

Prado and Jaye were pioneers in the integration of the movement and manipulation perspectives. In 1994 in Mairinque (SP, Brazil), Prado and Jaye, assisted by Caspari, presented a training in which they performed the exercise of teaching both perspectives together. This was the start of the Brazilian Education Model, which the Rolf Institute eventually accepted. This model used the Principles of Intervention and taught a non-formulistic approach in which the work – whether structural or movement – was defined by the needs of the client. Sessions could be “pure,” with one approach predominating,

or they could combine the two approaches (Prado 1995).

Over time, incorporation of the movement approach has yielded a tremendous product. The movement techniques that had been available earlier have been revised, enlarged and published by Caspari (1996). New movement approaches also arose – e.g., Structural Stretches, which enhance both structure and function (Prado, 2000); Bond’s guide to self-help through Rolfing Movement (1993); Carli-Mills’ discussion of the integration of Rolfing and Rolfing Movement (1998); Flury’s exploration of what he named Normal Function, (1991); and Sanchez’s investigation of proprioception with his tuning boards (2004).

In the early 1990s, the work of Hubert Godard came to the fore. A Certified Advanced Rolfer and a professor at the University of Paris, he came from a dance background and had been inspired by Laban’s work. Godard gave considerable thought to the idea of muscular chains, which had been in vogue in Europe in the 1980s (see, e.g., Muscular Chains of Godelieve Stuff-Denis, 1995), and made forays into skeletal, cranial and visceral osteopathy. Godard worked with movement in the context of rehabilitation and brought to Rolfing the theory of Tonic Function. This theory includes the study of movement, and recognizes the importance of tonic muscle activity for postural organization and functional balance (Frank, 1995, 2006; Newton, 1997, 1998a, 1998b).

For proponents of structural work, as much as for those of movement work, the theory of tonic function provides deep insight and theoretical support for coming to grips with structure, function and context at the same time. It comprises the coordination of movement, the role of perception in the organization of both structure and movement, and the world of meaning and its relationship to gravity. Although these elements had already been included in the theory and practice of Rolfing, they were highlighted by the theory of tonic function.

The distinction between the intrinsic and extrinsic musculature, so salient to Ida Rolf, was amplified and described in detail in connection with the theory of tonic function. A discussion began about the role of perception in postural organization, the correlation between ways of perceiving and

ways of organizing posture and function in gravity, and the importance of perception for Rolfing. The muscle-chain models and access to the tonic layers positioned muscular coordination – and, as a result, functional economy – on the same plane as structural integration.

The emergence of Godard’s work, at that very stage in the evolution of Rolfing, appeased the spirits and calmed the fears of the structuralists, on the one hand, and highlighted the values long held and maintained in movement work, on the other hand. It also brought a new point of view, observing that movement and manipulation were in a sense the same work, and also enlarging the concept of the client from both the biomechanical and functional perspectives simultaneously.

In 2001, in Seon, a small Bavarian village, an international summit meeting took place among certain advanced and movement faculty. The basic Rolfing curriculum was explored and defined from the structural and functional viewpoints, as well as with respect to the dimensions of the therapeutic relationship inherent in the Rolfing process (European Rolfing Association, 2001).

The big question was how to organize a curriculum that could honor both the traditions and the advancements of Rolfing, teaching it from different perspectives such as structural and functional, and formulistic and non-formulistic. The experience of teaching had already demonstrated that to teach non-formulistic work requires the students to think abstractly through the vehicle of the Principles, which had not always been possible in a basic training.

Rolf’s classic ten session protocol (the Recipe) was chosen as the axis around which to discuss the new curriculum. As the criticisms of the formulistic model were reviewed, it was perceived that because the formula captured something of the essence of the meaning of being human, it could be used not as a fixed universal template, but rather as a flexible guide that accommodates individual differences within the larger dimension of humanness. The observation that work with respect to the many variables included in functional thinking can be also organized around the strategic concepts of the classic recipe encouraged reflection upon how to integrate the structural and functional perspectives. The result was development of the Functional Logic of the Recipe – inspired and articulated by Godard

and organized, compiled and published by Caspari (2005).

Advances in neuroscience also inspired articles and technical explorations. The works of Menegatti (2003, 2004) deepened our understanding of the importance of phylogeny, as well as its application in Rolfing.

Psychobiological

With his introduction of the term psychobiological to the domain of Rolfing, Maitland (2000, p. 121) noted that this category refers to what is traditionally called the mind, and includes the client's worldview. This taxonomy considers the self-sensing nature of the body, as well as how the client's emotional and perceptual orientation influence how the client perceives his own movement, self-image and place in the world. Acknowledgement of this territory is an advance in that it makes room for discussion of the intersection of the behavioral and somatic realms in respect to the theory and practice of Rolfing. Assessment in this taxonomy, which is by nature subjective, is through the clients' personal reports of their internal experiences. Although these reports are often spontaneous, they may also be elicited in standardized formats, such as the NAPER questionnaires.

To explain the advances that have taken place within this category, I have followed a proposal I developed (2004a), in which I suggested a modification of Maitland's taxonomies (1993) to include in a larger psychobiological category the following subcategories:

- emotional/psychological
- cultural/environmental
- existential/spiritual
- energetic

To my thinking, this is a clearer division than Maitland's (physical, functional, emotional and energetic) in which to make discriminations among different perspectives. A student or professional takes up one or both of the general domains (physical or psychobiological), and from there expands the inquiry into the various subcategories. One must always take care not to reduce one's thinking to the specificity of any subcategory, but to recognize that the human being must be treated in the totality of them all. Still, the subcategories help us to perceive the different dimensions of the whole.

Emotional

This subcategory brings to the work the subjective dimension of meaning and consciousness. To better analyze the advances that have been made, I will address a few subsidiary themes:

- Rolfing and psychotherapy
- Therapeutic relationships
- Rolfing and psychopathology
- Touch in the therapeutic context

When Rolfing began, society in general – in keeping with the prevailing positivist paradigm of modern Western science – assumed a dichotomy between mind and body. This assumption was imbedded in the way that Rolfers first addressed the emotional realm. Rolfing bloomed at Esalen – a cradle of exploration for the new approaches of the Human Potential Movement. Gestalt Therapy, Bioenergetics, Neo-Reichian Body Therapies – and later, Hakomi®, Keleman's Formative Psychology, Body-Mind Centering®, Continuum – were all being created together in this same wave. The notion of gaining access to the emotions through the body was part of these practices from the 1960s through the 1980s.

The emotional dimension received so much attention that, as Rolfing established itself, the earliest descriptions of the work associated it with new forms of psychotherapy. When Rolfing was first popularized, it was frequently mentioned in articles in psychology magazines, such as *Psychology Today* or *Psychotherapy Handbook* (see Feitis, 1986, pp. 36-38). At that time, the most frequent reference was to Reich and his followers; and the articles explored two basic ideas – muscular character armor and energy.

Strong, direct touch into tissue came to be considered the only way to "dissolve" character armor. The power of the physical transformation that happened with Rolfing caused it to be perceived as something that dissolved armor to allow the flow of energy through the body. For that reason, the techniques and tactics of Rolfing were employed in the psychotherapeutic context, and the distinction between structural integration and psychotherapy was blurred. In one moment, the psychological effect of Rolfing was denied, while in the next moment Rolfing was used as an auxiliary technique to psychotherapy. There was even a clinical practice of giving double sessions – a Rolfing session followed by a

psychotherapy session. As we saw earlier, originally there had been no intention to position Rolfing as a form of psychotherapy; however the release of emotions happened naturally through the process. Reports of enhanced well-being – and also of emotional disorganization – were common.

Among Rolfers themselves, much has been written comparing, integrating, and discriminating Rolfing from various forms of psychotherapy, just as many projects and case studies on the use of psychotherapeutic techniques in combination with Rolfing have been reported: e.g., Reichian Therapy (Sharaf, 1972); Bioenergetics (Lustfield, 1997); Jungian therapy (French, 1997, pp. 15-17; 2007, pp. 6-11); psychoanalysis (Kertay, 1999a); psychopathology (Short, 1997, pp. 15-19, and Asher, 1997); Gestalt therapy (Greenwald, 1969). Techniques imported from other practices were used and perhaps incorporated into Rolfing, just as were speculations about different typologies that purported to reflect an emotional organization of the body.

All of this continued to reflect the prevailing view of a division between the mental and the corporeal, and demonstrated the absence of full comprehension of the emotional dimension within holistic therapy. Eventually, studies of these dimensions were separated. Rolfing became more connected to the physical dimension, and its effects in the emotional dimension were viewed as incidental byproducts of the touch. As a result, these effects were not monitored, and the emotional aspect of the process took place largely on an unconscious level.

In 1982, Prado presented at the University of Sao Paulo his investigation of the importance of Rolf's contributions to those who work with posture in psychology. He introduced Rolf's new point of view and indicated the possible use of Rolfing as a prophylactic measure for emotional questions. He also suggested a revision to the concepts of muscular character armor, in view of the uniqueness of connective tissue for the body and its anatomical characteristics (Prado, 1982).

At this time, two sides emerged. One side sought in other psychotherapeutic practices inspiration for pattern recognition and monitoring of pattern transformation (e.g., reading with the bioenergetic typologies). The other side tried to bring Rolfing ideas to psychology (e.g., the understanding of

the human structure for exploration of the subjective realm).

The start of the practice of Rolfing was accompanied by what I would call the gradual formation of the professional identity of the Rolfing practitioner. This process clearly goes along with the development of Rolfing as its own science. Although Rolfing was a somatic approach, therapeutic roles, transference and counter-transference were considered. Rolfing professionals needed to position themselves – both individually and as a community – with respect to these questions. This also contributed to a broader discussion than the one that took place within the Rolf Institute – one that included everyone who was grappling with somatic approaches in those days (Melamed, 1980; Salvesson, 1997).

Eventually the power of Rolfing was recognized – the power that was revealed in the physical and emotional transformation of the clients who underwent the process. The pioneers were in the position of having to validate Rolfing, and they based that validation on the visible and measurable physical transformations that Rolfing could produce. To achieve concrete results, Rolfing practitioners sometimes had a tendency to work too hard; and the amount of force required in the Rolfing touch was exaggerated. This might have been the source of the reputation of Rolfing as painful and invasive. Unfortunately, it also encouraged the idea that Rolfing went only to the physical form.

In any event, these ideas had consequences for therapeutic relations and associated ethical attitudes, and clouded the more accurate perception of Rolfing as a process, unique and individual for each client and tailored to the client's particular rhythm (Prado, 1999). This topic led directly into consideration of ethics, and the ethics of touch in particular, helping the Rolfing community to ponder, to meet, and to develop an ethical attitude about clinical contact (Greenstreet, 1992; Kertay, 1999b; Keen, 1999).

With time, there came a certain maturation in various dimensions of the practice, which was reflected by:

- A greater range of specialized touches, originating in the discoveries about the influence of the nervous system on alterations in myofascial tonus (Schleip, 1993b);
- The perception of Rolfing as a process

that transcends the classic ten session Recipe, allowing exploration of the client's process;

- The recognition that the initial release of connective-tissue compensations permits the manifestation and actualization of the structure underlying the compensations;
- A change in the therapeutic attitude from doing to the client to facilitating the client's process by working with the client.

This maturation brought Rolfing to a more evolved stage in terms of therapeutic relations, ethics, and the process-oriented vision of the work (Zorn and Caspari, 2001). This progress was woven through the educational systems of the Rolf Institute, ABR and European Rolf Institute, and gradually more attention was given in the trainings to ethics and the therapeutic relationship (Luchau, 1997; Prado, 2003a, 2004b).

It was Levine (2002) – physician, scientist and Rolfing practitioner of the early days – who developed Somatic Experiencing, a method to ameliorate the effects of post-traumatic stress. He influenced a whole new generation of Rolfing practitioners, and wrote numerous articles about stress and trauma (Levine, 1977, 1980, 1997, 2004). His work sought the regulation of the autonomic nervous system (ANS), the function of which is disturbed by developmental or shock-induced traumas. Levine proposed that activation of the sympathetic and parasympathetic branches of the ANS in situations of unresolved threat could precipitate a freeze response, and as the responses of "fight or flight" were interrupted or frustrated, the activities of both the ANS and the central nervous system would be disorganized, diminishing the resilience of the nervous system as a whole. His somatic approach begins with Gendlin's felt-sense (1982) as a method. According to Levine, once (a) the residual activations are accessed, (b) the resulting discharges are monitored and titrated, and (c) the frustrated responses are completed, then the resilience of the nervous system could be restored by the self-regulatory mechanisms of the body. The conscious presence of the client in contacting the sensations and observing the discharges not only rebalances the ANS, but also yields a new experience – this time one of power – which releases the post-traumatic disturbances.

Levine's work is now the subject of systematic research. Meanwhile, the effects of his training of Rolfing practitioners already have been significant. First, it has called our attention to "coupled" body structures, which has opened our perception to the nature of trauma and its manifestation in the organization of the tissue. Second, we have learned that a certain quality of touch can bring resolution to neurogenic freezing and induce autonomic discharge. Third, the method brings a way to monitor the discharges – which, in turn, brings a refinement to the therapeutic relationship. Recognition that touch, allied with the client's felt-sense, is an effective technique to deal with emotional trauma represents a significant evolution for Rolfing. This evolution requires differentiated touches and a particular therapeutic attitude that makes contact with the emotions possible.

Levine's somatic approach to working with emotions through the body is compatible with Rolf's thinking, and it provides Rolfing practitioners a framework and methodology from which to approach emotional questions. Keen (1999), Prado (2000), St Just and Sanchez (2001) and Sanchez (2004) have written on this subject. Prado's Structural Stretches (2000) include Somatic Experiencing in their conception and practice.

The Rolfing Movement work of Jaye, Harrington and Godard included techniques to address the emotional question. Building upon that foundation, Prado (2005) and Prado and Allen (2005) went on to examine the importance of meaning as both an element of the client's pattern and a contributing factor to transformation of the pattern.

Prado (2005), in "Advanced Training: An Opportunity to Deepen our Awareness of the Subjective," called attention to the need for Rolfing to develop its own approach to the meaning and emotions that are often part of the experience of somatic patterns – a specific approach different from those of other sciences. Psychological life is all about meaning – and meaning is inherently subjective, both individually and culturally. Meaning influences both posture and movement. It is both cognitive and affective at the same time. Prado (2005, p. 5) explains the importance of exploring meaning in the Rolfing context: just as gravity unites the structural and functional perspectives, it is also the key to the work with meaning. The question is how meaning and the subjective

dimension affect, and are affected by, the organization of the person in gravity.

Prado's client-centered approach encourages attention to the perceived meaning of the patterns, as well as to the meaning of their transformation. This attention to meaning augments the client's own participation in the process; brings understanding, awareness, and access to emotional material; and emphasizes how the client lives the patterns and their associated meanings. The idea is to mediate the pre-reflective experience in the direction of reflection and suggest analysis of the effects of the transformation.

Rolfing happens in many levels of consciousness and awareness. The emergence of consciousness can also be the essence of the transformative experience. Such a transformation happens in a person that, as he lives his reality, lives the change of his form. He perceives himself in relationship and in transformation, and also participates in the change through perception, carrying the intention of the change of form in a continuous interaction with the internal and external environments.

It is impossible, at this stage of the evolution of Rolfing, not to consider the symbolic and affective aspects of being, as well as the physical and functional patterns and how they form in the being. Clearly, the degree of continuity across all of the taxonomies at any particular moment will be an indication of the state of the process at that moment. The greater the continuity, the greater the degree to which the client is integrating the work within himself, as well as with gravity and the environment.

Others have inquired along the same lines: Keleman (1992) with Formative Psychology, Kurtz (1983) with Hakomi, and Lizbeth Marcher with Bodydynamics (Meister, 1991 and Stolzoff, 1997) are only a few examples. The works of these authors have been explored by Rolfers, who have produced literature with respect to the interface of these inquiries and Rolfing.

The study of therapeutic relations in Rolfing has been advanced by Luchau (1997), Kurtz (1992), Prado (2004b), Smythe (2006) and McCall (2007). One question is how the Rolfing process can be followed in all of its dimensions. It should not be treated as psychotherapy, but rather as a process of transformation that involves many dimensions of human behavior. It is education and facilitation more than

therapy; however, qualities of healing can be present. This process takes place in a relationship between the Rolfer and the client. This is the fourth dimension of the structural integration process: a dimension of relationship. (Prado, 1996)

Still in the emotional dimension, the academic work of two Brazilians deserves to be distinguished:

Motta (2003) has presented a ten person study that compares the clients' evaluations of their own body images before and after Rolfing. The study concluded that the body image variations could be connected to the Rolfing intervention, that Rolfing facilitated self-awareness by encouraging client identification of bodily sensations, and that Rolfing induced changes in behavior and psychological attitude as much as in the relationships among the various parts of the physical structure.

In "Rolfing as a Restorative Agent of Communication between the Body and the Environment: A Conquest of the Ground," Merlino (2005) made important theoretical observations about perception, consciousness and the body image, connecting them to the Rolfing process. She reports a case study connecting the use of metaphors to perception of self and the environment, consciousness and transformation.

Ultimately, the category of the emotional brings us to the questions of consciousness and its development through the client's ownership of the transformation process – first at a sensorial, pre-reflective level, and then at a reflective level with both conscious language and perceived connection between the transformation and the meanings involved in the person's perception of himself and the world.

Cultural

This subcategory has only recently begun to receive formal attention. For example, in recognition of the fact that the individual's existence in the social context influences body form and movements, the cultural category has been included in NAPER's clinical questionnaires and process evaluation forms (see Prado, 2004a). Sometimes, a particular person's structural and movement patterns are even shared within a cultural group, and are associated with particular historical events or epochs (Prado, 2005).

Maitland (1999; 2000, p. 121) noted the influence of worldview on structure. Prado asserted, in a discussion on meaning, "Meaning is an individual and cultural factor. When we are going for meaning... we are also going for how the individual shares it with others" (Prado 2005, pp. 25-28). The same article also suggests addressing this dimension through techniques that evoke consciousness of a particular pattern, movement or attitude. Cultural diversity and the spread of Rolfing throughout the world has expanded this discussion within the Rolf Institute of Structural Integration®, the Rolfing schools, and their students and class clients, demonstrating the field to be rich with promise for the investigation of the intersection of culture, structure, movement and gravity.

Energetic

Here lies the question of what energy means in the lexicons of both common sense and science. In Rolfing, this discussion permeates both realms. As a method to achieve structural integration and functional economy, Rolfing induces biological changes that the client senses and describes as improved vitality and well-being. Sometimes, this vitality and well-being is called energy. The imprecision in the use of the term energy compels us to consider the inconsistent uses of the term among various fields of science, as well as the fact that practitioners and clients do indeed choose this term to express something – but not always the same thing. Therefore, we should discuss this central question from two angles: one of science, and the other of the general public.

From the scientific angle, Maitland (2000, p. 121) has observed, "The energetic taxonomy relates to the energy fields and flows that are transmitted through the body. The energetic taxonomy can be operationally measured as direct microcurrents that are transmitted through the connective tissue network. Autonomic activity, as operationalized by heart rate variability, has also been used as a measure of the energetic taxonomy." Research studies support this view; see, e.g., Cottingham, Porges and Lyon (1988) and Cottingham, Porges and Richmond (1988). In particular, research on the changes in measured parasympathetic activity produced by the Rolfing touch have yielded significant findings. It is also appropriate to refer once again here to the studies of Oschman (2000, pp. 165-66), who considers how the models of quantum

physics can enhance our understanding of how Rolwing works.

Valerie Hunt's studies of aura readings are another tentative exploration of the energetic aspect of Rolwing (Hunt and others, 1977, and Hunt, 1996, pp. 22-25). She found significant correlations among the physical, emotional and energetic dimensions. Stucker (1999), following Hunt's path, explored electromagnetism as it relates to Rolwing. Her techniques are guided by the organization of the person's electromagnetic field. Her ideas have stimulated considerable discussion. It is both ambitious and courageous to try to raise hypotheses to correlate our work with two potent forces of nature – gravity and electromagnetism. A proponent of such hypotheses will, of course, have difficulty testing and evaluating them. The challenge is how to identify the fixations on the energetic level, and to develop and describe techniques that might address them.

Because the term energy is used to describe the intensity or rate of metabolic processes, those who study Rolwing from the biological viewpoint are contributing their work to the science of Rolwing (Varela and Frenk, 1988; Menegatti, 2004; D'Udine, 1994, 1998; Oschman, 2000).

A brief but beneficial conversation has taken place among Rolwing practitioners, on the one hand, and proponents of various viewpoints in bioenergetics, on the other hand. The participants have explored how the ideas of energy and bioenergy permeate not only exact sciences, but also psychology and teaching. Among the few published works to explore these interfaces is one on Reich (Sharaf, 1972) and one on Bioenergetics (Lustfield, 1997).

In 2005, in the attempt to find appropriate language to use with students and the public, the Rolwing faculty in Brazil recognized the need to discuss the idea of energy. As a result of this fruitful discussion, the faculty decided to stay in secure territory by using the terms vitality and well-being, which connect to the client's experience, and to avoid using the term energy in ways that do not belong to us. We are leaving to the scientists the definition and exploration of energy, given the diverse connotations of the word among the general public.

Existential/Spiritual

This subcategory highlights the transformational aspect of Rolwing. Its

importance has been implicit in Rolwing since its creation (Prado, 2003b, 2004a). Maitland (1990) has attempted to set a philosophical context to support the exploration of Rolwing in the existential dimension. He proposes that Rolwing is in the domain of somatic ontology, a line of inquiry that investigates the nature of being through the lens of our own embodiment.

Rolwing presents the alluring possibility of working with human transformation in perspectives beyond the physical. This is central to our practice and continually occupies the attention of our scholars; see, e.g., "Doing Bodywork as a Spiritual Discipline," by Roger Pierce (1990). Johnson (1999, pp. 33-34; 2006, pp. 24-27) has led a discussion about the iconic line of gravity, and considers it a *mudra* – an archetypal gesture that carries an intention and, if practiced regularly, can bring transformation. Other authors have described it as a model of bodily organization for meditation, and also as a process of perfecting the path of a spiritual refinement. The symbolic line suggests an organization between the sky and the earth in which the human phenomenon exists, and that working to organize what exists between these dimensions supports and enlarges the human experience.

There is a sense in which all of Rolwing is connected to this idea and can be explored through its perspective. We do not consider the investigation to be closed or hermetic, and only about the magic of transformation, but the inquiry is open with respect to it. The debate has led us to reconceptualize the work, focusing on gravity as a relational context, the environment, and the integration of one's being with oneself and with the cosmos simultaneously.

Rolwing works from the perspective of releasing compensations in the soma, and the hope is that conditions will then be right for the human being to explore new possibilities made available through the liberation and reorganization. The effects of Rolwing in the spiritual dimension are reflected in the reports of some clients who feel as one with the universe. It is as if the experience of existence in a more integrated structure allows the person to gain access to a certain inherently human spiritual faculty.

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