

MAKING CONNECTIONS

TOTAL BODY INTEGRATION THROUGH
BARTENIEFF FUNDAMENTALS



PEGGY HACKNEY

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Through Bartenieff Fundamentals**

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Peggy Hackney

Illustrated by Mary Konrad Weeks

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PREFACE

Well, you see, there are many possibilities! ...

As human beings we want to be fully present, embodied, as we live our lives. We want to communicate who we are and what we stand for in action, so that our message reaches out to others. As we move, whether in dance, theater, sports or simply in being with others, *we want to connect*. In order to do this we need to find means to connect inwardly, both to what we want to say and to how all parts of the body relate to each other to support our statement and purpose. To do this, we need to know something about the fundamental nature of making connections. This ability to make connections, to create relationships, is a skill which begins “at home,” within our own bodies. This book provides a chance to explore how we go about creating the connections within us that allow us to become fully embodied human beings in the world.

As I write this book about making connections through movement, the words of my mentor Irmgard Bartenieff come back to me with a diversity of implications: “Well, you see, there are many possibilities,” she often said. Yes, there are many possibilities for talking about our human process of becoming embodied. There are also many possibilities for illuminating the fundamental work of Irmgard Bartenieff and my own continued development of that work, because the work is constantly changing.

When I was working with Irmgard in the late 1960s and throughout the 1970s as she was forming her Bartenieff Fundamentals, I was never disturbed to see that she would seem to totally change what she was teaching from year to year. I could see that she was exploring. For instance, one year she might be concerned almost exclusively with mobility at the proximal joints, while another year she might focus on internal space with breath support. She didn’t set out to propose a new theory of body connectedness. She worked with living bodies and responded to their needs. Bartenieff Fundamentals developed in application, which means that what was stressed in any particular year was part and parcel of where Irmgard was in her own life at that time and where she perceived her students/clients to be. This alive relationship, this sense of adventure in the classroom or in private work, is something I have enjoyed also as a way of working. I have come to believe that effective teaching comes from that alive relationship. It also means that the “adventure” is never the same two days in a row. This brings into real question what can/should be written about Fundamentals.

And so it is with great trepidation that I write; for black and white words written in the linear language of English seem too concrete and much too inanimate. Their sequence is too set. Words need to have the capacity to jump, turn inside out, constantly alter their emphasis, texture and relationship. It seems I am longing for movement. But I have been moving these ideas for thirty years. In the unceasing alternation of mobility and stability, now is the time for some ideas to become stable, in print, so that they can take on new life and mobility in the work of others.

When I ask myself: “Why am I writing this book?,” I realize that I am searching for closure on this period of my life and my current work with Fundamentals. It is a time of taking stock, of seeing where I am with this body of work—like seeking to complete a thought. Paul LaViolette, who studies how people form new thoughts, says that thoughts are “momentarily stabilized patterns of flow” (i.e., they have substance). I want to give work that has been totally fluid a bit more substance momentarily. When I was talking with my colleague Robert Ellis Dunn several years ago, he said in his mischievously insightful way: “Oh, I can’t wait for your book to be published so that it can be out of date!” “Yes,” I said, “and then we can go on.” We have been in a period of “form creating” in the Fundamentals work for about thirty years. Now it seems that this is for me a period of “form stabilizing.” It also should be stated that this form I am momentarily stabilizing should not be confused with the form Irmgard would have chosen to stabilize. I am not writing the “Bartenieff Fundamentals,” because I could not. It would not interest me to be mainly historical, even though some history is included here. Only Irmgard could have written that book.

By writing this book I am recording where my own work in movement is now—feeling-tones and associations around Fundamentals that have coalesced around certain larger themes. From the ongoing continuous flow of complex and richly patterned movement associations, mostly subconscious, certain more simple discontinuous thematic words or thoughts emerge—words such as “initiation,” “connections,” “sequencing” and “dynamic balance.” It is true that these themes, words, have been almost universally agreed upon among persons working in Fundamentals and were spoken about consistently by Irmgard. In other words, these themes are not new. And it is also true that over time each of these major concepts falls back into the sea of subconscious feeling-tones to have more and more associated relationships. So in another way these concepts are always new and unique to each individual. Each concept contains in some sense an historical record of the evolution of processes that contributed to producing that concept. At each moment when thoughts emerge in relation to each other, the individual person is in a “form-creating” mode, actually creating knowledge. And this is my working definition of learning—“Learning is the creation of knowledge.”¹ It is a creative process. As we create knowledge we come into an embodied relationship with what we know.

And so, as I work with organizing this material, at every point I hear Irmgard’s words: “...[T]here are many possibilities.” And I say: “Yes, here are but a few.” Each reader will find more.

Organization of This Book

As a sequence for writing this book I am metaphorically organizing my material in a developmental progression. This organizational progression, based on the work of Bonnie Bainbridge Cohen, will be encountered again and again. The sequence is:

1. Breath
2. Core-Distal Connectivity (Navel Radiation)
3. Head-Tail Connectivity (Spinal)
4. Upper-Lower Connectivity (Homologus)
5. Body-Half Connectivity (Homolateral)
6. Cross-Lateral Connectivity (Contralateral).

We will begin with some very personal memories of Irmgard Bartenieff and the development of her approach to Fundamentals. Events in history are part of a flow line, part of a phrase. Irmgard Bartenieff's important work breathed life into Fundamentals. It was germinal. One might say it was the initiation moment of the Fundamentals "phrase." But Irmgard's power and joy lay in working with people in movement, mobilizing people in the moment—not in explaining what she was doing or formally addressing the issues her work generated, nor the full extent to which it could develop. Fundamentals was not a theory codified and thoroughly illuminated by its originator. Irmgard's own major writing on Fundamentals was deleted from the final published version of her book, which she co-wrote with Dori Lewis, *Body Movement: Coping with the Environment*. She asked me to read her manuscript and make comments, which I did in 1977. I have utilized quotations from her manuscript in this book.² But my hope is that the entire Fundamentals portion of her original manuscript will eventually be published. Irmgard's students were waiting for her to publish before they began writing about Fundamentals. We were disappointed that the Fundamentals aspect of her work did not receive full publication when her book came out in 1980. In the time since 1980, we have each continued to do our own work—clarifying the material in both action and theory. My colleagues and I are realizing a larger, more comprehensive framework for what Irmgard was doing, which hopefully will nourish the work. I will leave detailed historical research to the historians. My concern is more with the living progression—and so, I give my own personal memories of Irmgard in [chapter 1](#) and then move directly into how I work, including my thoughts on theory underlying the work.

In [chapters 2 and 3](#), I discuss some of the theory behind the work with an immersion into the whole sense of patterning as a basic life-giving process, much like the breath. In [chapter 4](#), I present what I perceive to be the core or navel center of working in Fundamentals and its goal. I cover the vertebral spine of the system ([chapter 5](#)) i.e., principles and concepts on which the system is based.

In the next portion of the book ([chapters 6–11](#)), actual body level issues are dealt with in detail. I explore stage-specific movement experiences in the developmental progression and discuss possible movement experiences within each pattern—Breath, Core-Distal,

Head-Tail, Upper-Lower, Body-Half, and Cross-Lateral. I must also be clear that my thirty years of experience is in Fundamentals, not in Body-Mind Centering; so although Bonnie Bainbridge Cohen's work has been inspirational and has provided a framework, I will not be writing about Body-Mind Centering per se.

By the last chapter in this book, the stages of bodily differentiation are complete. It becomes clear that no one pattern is more important than any other. It is the sequences or pathways through all the patterns that weave the message. All the patterns are available, and it is the effective functioning of changing relationships according to context that takes us to the integral stage. Within the book, this brings us to the question of reintegrating all our specific knowledge into our own life context, acknowledging its timeliness. What is the purpose in all of this after all? Is studying Fundamentals meaningful? What would "meaningful" be in our world today? Certainly there are no answers, but I do want to engage the question.

Whether one is a dancer, actor, athlete or business person, a fully functioning expressive body increases life's possibilities. Irmgard Bartenieff stated: "Body movement is not a symbol for expression, it is the expression." The functional and the expressive are in intimate relationship. The work we are exploring in this book activates connections to facilitate integration and enrich life. As you read this book you are engaging in an active relationship with me and the questions that becoming embodied pose to all of us. Here we go....

Notes

1. My friend Dean Elias, former dean of Antioch University-Seattle, currently dean of the California Institute of Integral Studies, and I were discussing the field of education, learning and other large topics. He made the statement quoted in the text and I have always enjoyed using it as a frame for knowing whether learning is happening. "Am I/are these students creating knowledge in this moment?" Knowledge is not the same as information, because true knowledge, in my understanding, requires claiming the information in a personal way. Claiming it personally requires coming into an embodied relationship with it.
2. The manuscript was entitled *Body/Space/Effort: The Art of Body Movement as a Key to Perception*. I particularly like this subtitle, because it acknowledges the key role of movement in our process of coming to know whatever it is that we actually know.

ACKNOWLEDGMENTS

I thank Irmgard Bartenieff for inspiring, challenging and having faith in me from the moment I met her until she died nearly fifteen years later in 1981. It was Irmgard who set me on the path of discovering how my own internal body connections could lead into my full expressivity. She ignited a curiosity about the nature of how human beings express themselves; and she encouraged me to integrate my artistic and scientific selves in the true tradition of Laban Studies by taking the work further in my own way.

I am richly blessed with wonderful colleagues and friends whom I love and who have contributed greatly to the realization of this book. For them I am profoundly grateful. Pamela Schick has been unswerving in her insightfulness, solid personal support, willingness to “jiffy-pop” ideas, discuss theoretical issues, try out descriptions of exercises, and wade through editing pages and pages of early drafts of the manuscript. Without her this book would not have come into being. Janice Meaden has shared her heartfelt self, moving and planning innumerable Fundamentals classes with me, while bringing a delightful sense of fun to my professional explorations and life. I am grateful to Ed Groff for his continual ability to value and manifest sensate knowing even as he is also an inspiring theorist in the movement field.

I say thank you to my many other colleagues in the Laban/Bartenieff work from whom I have received a wealth of knowledge—Janis Pforsich, Carol Lynne Moore, Kedzie Penfield, Martha Eddy, Karen Scherwood, Bette Lamont, Beverly Rackoff, Jim Lepore, Ellen Goldman, Carol Hutchinson, John Chanik, Janet Hamburg, Antja Kennedy, Ute Lang, Christine Gewalt, Ciel Werts, Aileen Crow and Cecily Dell, to mention a few.

An educator’s life is primarily about learning from one’s students. Without the dedicated students in classes at the University of Washington, University of Utah and in Europe, and my physical therapy clients in Seattle, Washington, I would not have been able to develop my work. I thank each of you for your willingness to “play” with me and the material as it was taking form.

I am particularly grateful to Bonnie Bainbridge Cohen for her continual caring exploration and elucidation of the area of human movement and development, and for her generosity in reading this manuscript. I am inspired by her personal presence and the richness of the inner world she has illumined.

I also thank my friends and colleagues from the areas of movement/dance and body work for sharing their ongoing work with me over the years—Joan Skinner, Janet Adler, Irene Dowd, Bill Evans, Bessie Schönberg, Missy Vineyard and Idelle Packer. And to my many

other teachers and colleagues in the world of dance, thank you. The kinesthetic wisdom you shared has permeated me to the point that I can no longer locate specific sources.

Charles M. Johnston and my colleagues at the Institute for Creative Development have added greatly to my understanding of the creative process and its stage-specific progression, including in particular the nature of integration. I have taken this work and applied it to aid my understanding of how we create ourselves bodily, how we become embodied, and how we can move beyond polarities that seem to threaten to disembody us in this world.

I am indebted to Mary Konrad Weeks for the numerous months of work it took to produce the wonderful illustrations for this book. When we began working, neither of us had any idea how difficult it would be to convey a sense of ease and weighted flowing connection in a drawing, while also remaining precise and clear about joint articulation. Mary stayed with the process until the drawings could convey the essence of the movement and anatomy in a way that invites bodily participation. I am also grateful for the generous and timely help of Scott Sutherland, Lucy Venable and David Ralley—genius creators of the LabanWriter computer program—in producing the Laban symbols used in the text.

Finally, I thank my family. From my mother Jo Spivey I learned how to accomplish tasks and get things done with eager enthusiasm. She took me to dance classes at age three, because I had so much energy; and I have continued to love manifesting myself through movement ever since. I also gained understanding of the importance of integration of the body, spirit, emotions and intellect from Mother. In her model, these four aspects form the corners of a square that is then surrounded by a circle, creating a sense of wholeness. Her motto, which lives within me, is “Be Square to Be Round.” Mother encouraged me to write; and she was willing to read what I had written, editing when necessary. I am sorry my father Calvin Spivey is no longer living. He taught me to think clearly, following a line of analysis, and to read voraciously on whatever subject interested me.

Thank you to my daughter Ashby Anglin for enduring life with a mother who was writing a book, and for sharing your own growth process with me. You are most special in all the world, and I love you very much.

And to my husband Rob Anglin, the love of my life, thank you for your deep love and caring that sustains me.

CHAPTER 1

Personal Memories of Irmgard Bartenieff

Before we dive into a discussion of the principles or actual movement experiences which are used in the study of Fundamentals, let's return to the person who developed this area of study, Irmgard Bartenieff. Rudolf von Laban's seminal work in the first half of this century identified and illuminated the concepts of Effort¹, Space, Shape, Action of Body Parts, and Group Relationships as elements which describe how human beings express themselves through movement. But until his student, Irmgard Bartenieff, brought the perspective of her own work from physical therapy to the Laban framework, the Laban work lacked a *full body* component. Emphasizing the importance of *internal body connectivity* in making movement come alive both within the individual and out in the world was Irmgard's unique contribution to this work.

The field of Laban Movement Studies has broadened immeasurably since her pioneering work, but it was certainly her "touch" which initiated in some proprioceptive or kinesthetic way the desire to explore all the possibilities of interconnection: self to self, self to other, and self to world. She ignited the exploratory fire. And because "information" does not exist without the filter of the person through which that information is given, Irmgard's own personal qualities become part of what one values and studies in Fundamentals. Since I am not a historian, I will provide personal memories from my own insight and others, rather than attempt a strict historical approach.

Irmgard was a spry 67 years old when I met her. Because I was a psychology major, Lucy Venable, then president of the Dance Notation Bureau where I had gone to finish my certification in Labanotation, said, "If you're interested in how people express themselves, you should study Effort-Shape."² And so I essentially apprenticed myself to this sprightly young-old woman for the next 15 years or so, until her death in 1981.

I am reminded again and again of a typical scene...

In my mind's eye I see Irmgard with her gray hair tied back by a pastel chiffon scarf at the nape of her neck. My memory lens opens more and I see we are involved in one of our ongoing discussions about movement, exploring connections within the body. Suddenly, she springs alive with a new thought. Her seemingly frail body becomes immensely energized as her expressive hands begin opening, gently touching a multitude of places in the air. She says, "Well, you see, there are many possibilities! ..." Her eyes are twinkling and her head is tilting expectantly, as if the complex interrelationships indicated by her round, all-encompassing gesture are enough to convey the totality of her thought. She is waiting for me to respond, eager and childlike, waiting for me to "take the ball and run with it."



Irmgard Bartenieff.

At these moments I felt inspired, ready to open myself to take in more, to feel the mystery, the potential, the moving connection between things, thoughts, bodies—whatever we were discussing. She would elaborate, I would follow, playing in her swirling thoughts.

We had a delightful, accepting relationship. We were like grandparent/grandchild colleagues. Each of us was allowed to be who we were in our eccentric, imperfect way yet with maximum love and appreciation. I came into the Laban work young, at age 18, and was already steeped in the structural notation by the time I met Irmgard when I was 22. Other people in the early Effort-Shape training group were older and viewed Irmgard as a mother, sometimes good, sometimes bad, with all that term could imply in the way of resistance and need to break away. What they saw as the “Bad Mother” (the one who was confusing and somewhat non-revealing and non-validating yet always implying “You

can do more...there is more to learn.”) only spurred me on to find my own personal clarity to bring to co-teaching with her. She could then be free to pursue her global thought wanderings (following her rich intuitive indirect process through the class), and I could be counted on to follow up with pin-pointed questions or succinct explanations. Now, 30 years later, I find myself reveling in the broad implications of movement training, wanting to work at the meaning level, and being less interested in specific drills or one-facet descriptions. Perhaps it is a stage in the creative process or perhaps it is an inheritance—part of the “genetic line.”

Irmgard was an integration of what might at first seem to be a mass of polar opposites— a magical child springing into the air unexpectedly and a wizened old woman padding around the Laban Institute in house shoes...a delicate, frail-looking assemblage of bones capable of yanking students around with fierce power...a highly poetic spirit delving into analysis of specific joint functions. She was eager to know all, and impatient that all was not already known. Her eyes were alive, bright and sparkling in one moment, her face drained, in need of replenishment, in the next. She was highly discriminating yet all-embracing of diversity.

Her lightness and indirectness masked her inner intensity on first viewing. She was not “easy” yet she was also non-confrontational. To Irmgard the point of an exercise or a discussion was always obvious from the movement itself. When skeptics would bring up baiting questions about either the movement or the philosophy behind the movement, rather than engage in a discussion or argument, Irmgard would begin to move and say something like, “But you see if you do it this way...(while moving either herself or the questioner).” If the question still remained she frequently raised her eyebrows, shrugged her shoulders and waved away the webs of disbelief with her hands as if to say, “Oh well, you can think that if you want...since you haven’t yet found your answer in the moving.”

For Irmgard, movement, not more pondering, was what brought new knowledge. I have come to see this as the activation of preconscious knowledge and have myself recognized that our bodies contain knowledge which is not accessible by ordinary linear intellectual probing. Moving, and a willingness to perceive the movement, brings access to bodily knowledge—particularly the feelingful connection between thoughts. Frequently, moving reveals the nature of the relationship between ideas—the pattern of the contexture, or the interweaving of parts.

In her manuscript, *The Art of Body Movement as a Key to Perception*, Irmgard states, “*The main object of all this material is to suggest additional modes of perceiving yourself and the world around you, using your live body totally—body/mind/feeling—as a key to that perception. The heart of that ‘liveness’ is movement and, therefore, it is the movement itself that we have studied. How your body functions in movement—Body/Effort/Shape— and what that means to your perceptions and expression*”

“Activate and Motivate,” the words of her first physical therapy teacher, the late George Deaver, were passed on to us as a motto for teaching. Yes, **Irmgard was action oriented.** She could get almost anyone moving, yet her teaching was certainly different from traditional dance training. Without explaining why we were to do the movement or really how to do it, she might explode full force, do three stamps into the floor, run lightly forward, and end in a low, wide stance with a loud “Ha!”

We would stand incredulously watching this strange lady commit herself totally and we would be almost dumbfounded when she would turn around in eager expectation, wondering why we weren't already moving. (Most of us dancer-types were waiting to get the counts and be told some technical aspect to attempt. These were not forthcoming.) Then she would yell, "Well, do it!" and we would be galvanized into action-stamping, running, and jumping into a squat, "Ha!" At this point we were still mystified as to exactly what all of this would do for us, but were somehow willing to attempt it in the belief that there was an underlying method to be discovered. We had been trained to imitate, but Irmgard discouraged that. "My movement is not for you to imitate, but to speak to you, to get you started."³ She motivated us through Effort—through images and the dynamic quality of her voice—but she might not at any given moment indicate what connections to notice. For example, why, in terms of "body connectivity," were we using the *Strong/Direct/Sudden Effort* "Ha!?" Only gradually did we make the conscious association that using the *Weight Effort* facilitates the process of finding the heel-sitzbone connection. This connection, in turn, facilitates a stable grounded state, which provides a foundation for the integration of the Lower Body and Upper Body.

Years later in a certification faculty meeting Irmgard enjoined us as teachers to provide a class that is "fully rich in experiencing contrasts rather than sorting out concepts. It (the class) should be evocative in the moment rather than 'teaching' theoretical material. It should send high energy into a physical concentration."⁴

Irmgard's classes were full of large total body movement. Later teachers of Fundamentals stressed the floor exercises as the prime definers of Fundamentals, but I almost never experienced an entire class lying on the floor. We took time to go "inside," but then we worked with moving through space, experiencing shape change in each plane, while using our voices in rich Effort support. We definitely spent time on the floor, but we always "played" in a very effortful way with our own expressions in the environment. Irmgard knew that adults need time to go back to the "baby" patterns, but that the real change is in the personal phrasing that occurs within the context of one's own life, integrating the new connection into larger movements in the "real world."

Effort, Shape and Space are all inroads to neuromuscular repatterning. In almost every class that Irmgard taught there was wide variation in dynamic range and in spatial complexity. We were vibrating with sound, and we were flying and falling! I was astounded the first time I saw Irmgard come from a running start and dive into the floor on a diagonal (down, forward, left). She claimed that she was "riding the kite tension" and added, "the space will hold you." I had my doubts, but decided that if someone nearly 50 years older could do it, so could I. After a couple of bruised knees, I discovered that, indeed, clear spatial intent to ride the diagonal would open pathways to a motor pattern for my body to fulfill that intent. I was hooked into this way of training—**Action! Moving with intent is the key.**

I entered Irmgard's classes as a dancer, but there were many therapists, anthropologists, and educators who also came to study. We all wanted to move and know about movement in a way that connected us to ourselves and to other human beings.

Irmgard was a founder of the American Dance Therapy Association and acutely aware of the psychological implications of movement. After watching a client/therapist

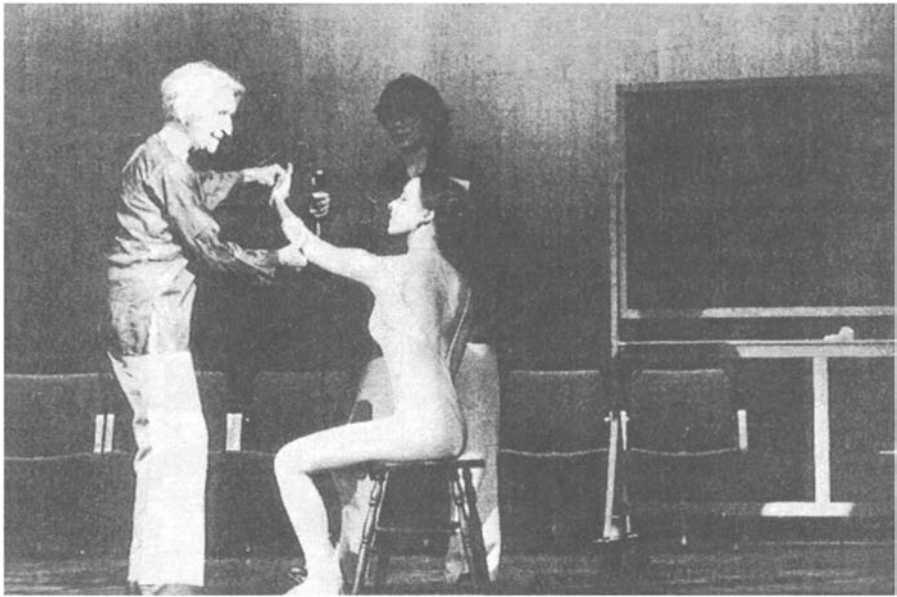
interaction from behind a one-way screen she was frequently able to astonish the doctors at Albert Einstein Hospital by predicting new progress in therapy several sessions in advance of its conscious emergence in the verbal client/therapist interaction. **Observing the movement of oneself or others is a touchstone to knowledge.** This is a simple statement with profound implications for our society. Irmgard was constantly learning, because she was constantly perceiving movement. She taught us to do the same, to do as Laban said simply, **“to pay more attention to human movement—bodily and mental—which is obviously at the basis of all human activity.”**⁵ This enchantment with perceiving movement led to her willingness to experience what was happening with a particular client and be excited about what was there to work with, rather than conceiving in advance what “should” be there.

When I asked George Bartenieff, Irmgard’s son, what he thought set Irmgard apart, he said, “Well, other therapists are always trying to fix people. She never tried to fix anyone. To her, working with someone was like an adventure the two of them were on together. She was fascinated and curious about what would happen.”

Practitioners of Fundamentals who are also psychotherapists frequently utilize movement within the context of a verbal therapy session. Conversely, movement therapists often spend quite a bit of time within a session encouraging the client to verbalize feelings which are coming up in the process of moving. I do not practice psychotherapy, but in the Fundamentals classroom, I encourage students to bring movement-engendered feeling to a conscious level either to share out loud or to record in their own journals. I believe in integrating the pre-conscious and the conscious. Irmgard, however, rarely did this, either within a class or a private session. When I once asked her what she did with psychological “aha’s!” which came up during a session, she said in a deliberate, slow voice, “We go back to the movement.” This dedication to action over verbalization was ever present. Activate and Motivate!

Irmgard’s motivational skill has already been mentioned, but it needs further discussion. In talking with fitness trainers and aerobics teachers from the NY Sports Training Institute⁶, Irmgard stressed the importance of stimulating the movement motivation for repetitive skill-oriented tasks—not just warming muscles or falling into “the mistake of the machines.” In jumping, for instance, for it to be effective body training there must be “the desire to jump like two-year-old children—really jump with joy! Animate people more to move and out of that comes the desire to jump.”

And how is that done? One nearly sure-fire way is to involve more of who they are—for some people this may mean involving vocalization to engender full breath and effort aliveness. For others it might be finding a poetic image that feels personally right. For others perhaps it might be the proprioceptive inroad of touch. Still others need to be told the principle they are working on and then be left alone to problem-solve. Irmgard’s motivational gift was to know instinctively which to use. Sometimes I feel her semi-secretive nature was also a form of motivation. Psychologists say an incomplete drawing of a circle invites completion by the viewer. By not quite totally revealing an answer (which infuriated some students) she also provided a chance for students to complete the circle themselves.



Irmgard Bartenieff and Peggy Hackney demonstrating Bartenieff Fundamentals.

Irmgard also motivated through movement which was clearly phrased, and therefore easier for the neuromuscular system to perceive. In my memory I hear her “Te, te, te, te, DA” (four light upward steps, one open strong downward step). Phrasing was clarified through singing it. Poetic images and metaphors were abundant... “Your palm is the heart of your hand. Use it with free flow and let it caress the air.”⁷ Or when students were having difficulty with sustained strength, “You are a slow Chinese Monster!”

I can still feel the strength and pointedness of her touch in the classroom. She yanked, pressed or pulled until I was willing to experience something new. For instance, she didn’t want me to miss the delightful rotary change in the shoulder joint that happens when progressing through a sequence in space from back and up (↻) to up and left (↻)⁸, so she yanked me through it—a bit like a Balinese master teacher who is determined that the student will do the movement. With other people she guided gently. Each was different.

In individual work with patients Irmgard also employed connective tissue massage, a manual technique of “therapeutic pull” as originated by Frau Elizabeth Dicke (1929). It aims at reworking the elastic movability of different tissue layers against each other (dermis, subcutanea, and facia). This aspect of actual intervention in the tissue could release habitually blocked tension and relieve pain, thus freeing the neuromuscular pathways for being receptive to new patterns. The clarity of Irmgard’s strokes could also leave proprioceptive messages about pathways of connectivity which the individual could then utilize as a movement motivator.

Irmgard was not a great believer in endless repetition for skill building (such as is frequently done in a traditional dance technique class). She felt that such repetition was deadening of the personal involvement, because most repetition does not adequately stress the reinvestment in Effort energy that is really necessary for continued re-creation of the movement. For this reason we generally did not repeat exercises many times within one class. But we did repeat similar exercises or experiences frequently within a long series of classes.

Irmgard Bartenieff did not set out to develop a theory of body connectivity or fundamental movement training. **In fact she was not primarily a theoretician. She worked with people, with human beings.** Out of years of spontaneously adapting her knowledge of the body, art, education and therapy to dealing with hundreds of specific individuals, she came to a way of working that worked for her and addressed the concerns of the people and the culture in which she practiced.

When I first studied with her in the mid-1960s, the work was called “Correctives.” She was coming out of a period of doing physical therapy with polio patients who were unable to mobilize themselves, to get the center of weight going. She had also been working with dancers who were muscle bound and overly concerned with making shapes, rather than moving fully through space. And as a therapist people came to her who were not fully functioning or were injured and wanted help to “correct” their condition. Our culture had not yet rediscovered movement and the body (no one was jogging or dancing for health reasons). Most people who considered themselves intelligent identified that aspect of themselves as residing in the head. There was a definite mind-body split in the collective, and that was coupled with a highly goal-oriented society. This led to quite a few people who were used to **reaching** for things (ideas, thoughts, success).

This societal norm manifested in the body as an overuse of the Upper Body reach pattern, which frequently was not supported by the push from the Lower Body, or connectedness to the ground. Originally, “Correctives” was redressing a condition in our society at large and in individual members of the society. That condition was: **over-identification of ourselves with the upper body and a dis-identification with, indeed a deadening of, the lower body.**

Addressing this Upper-Lower split was of prime importance to Irmgard, as was rediscovering a relationship to the center of weight, grounding, and getting the lower body moving. This is why there is an emphasis in her work on exercises for the lower body and on Upper-Lower Connectivity through diagonal patterning.

Eventually Irmgard became uncomfortable with the title, “Correctives” because she realized that she was really giving people a chance to experience, or re-experience, movement that is basic to all human beings. Her own impulse was to **confirm what is fundamental**, rather than correct something that was wrong. In the late 1960s she began calling this work “Fundamentals.” But still there was no writtten theory.

Students pressed her to systemize the Fundamentals work into some standard form. Irmgard was resistant to this, because she was constantly learning herself, and what she emphasized one year in her teaching might take a whole new slant the next year, depending on what she had been exploring in the intervening time. I remember when she



Irmgard Bartenieff and Peggy Hackney demonstrating Bartenieff Fundamentals. (Carol Boggs holding microphone.)

came back from Hawaii and was totally enthralled with successive movement through the torso, or when she spent almost an entire year stressing arm rotation through palm facing (after working on an anthropological project). This was quite inspiring to me as a budding teacher and made the idea of teaching even more exciting.

There were definitely core principles which she utilized, but I do not think she ever really articulated the full core of those fundamental truths. I have spent many years trying to formulate them clearly myself (see [Chapter 5](#) for my latest list). In the early 1970s Irmgard, Kedzie Penfield, Ellen Levine, and I met regularly on Saturday mornings to attempt to put some of the material into written form. It became clear that Irmgard needed a full-time collaborator who was a writer to work with her on her life's book. She eventually found Dori Lewis and they co-wrote the manuscript, *The Art of Body Movement as a Key to Perception*, which contained a great deal about the Fundamentals work. I was invited to read and comment on the manuscript, which I did, and I have utilized numerous quotations from it in this book. Unfortunately, many valuable statements about Fundamentals were deleted from the final published book, *Body Movement: Coping with the Environment*. This was extremely unfortunate because in the original manuscript Irmgard discussed how her work was based on a thorough understanding of the early patterns of neurological development, including the early reflexes, righting reactions, and equilibrium responses, as well as the importance of breath, core-distal connections and patterns in spinal, homologous, homolateral, and contra-lateral movement. With Irmgard, students

of Fundamentals received bodily training in this work throughout their training. It was, however, not Irmgard's style to delineate the theoretical background. This work has been beautifully expanded and enriched in recent years by Bonnie Bainbridge Cohen, once a student of Irmgard's.

Although Irmgard was trained as a physical therapist, was totally conversant with anatomy, and had shelves overflowing with scientific books, she rarely spoke anatomically. If pushed, she would discuss a "kinetic chain" in muscular terms, but she preferred to use her knowledge in action or refer to concept in an open-ended way. She used "bony landmarks" as reference points in her hands-on work rather than spend time teaching specific muscle kinesiology. For instance, she might briefly discuss muscles in an area such as "the fan of the outward rotators" in the iliofemoral area, and then proceed immediately into helping a student locate through touch the **bony landmarks** of the greater trochanter and the ischial tuberosity (sitbone bone). The student could then experience the excursions of the greater trochanter coming around down nearer the sitbone as outward rotation happened at the femoral joint. This way of teaching was again action oriented—two **bony landmarks changing spatial relationship**.

Her own knowledge of muscles allowed her to easily facilitate the experience, but she preferred to keep people moving rather than spend class time memorizing anatomy or kinesiology. She lightly brushed through muscles and bones as she moved on to expressivity—her teaching of the scientific side of the body work was more like an oriental sumi painting than photo realism.

In addition to her action orientation and her uncanny ability to motivate, her continual encouragement to view the whole of any phenomena and not get stuck in the parts was always inspiring. Marcia B. Siegel said it beautifully in her tribute to Irmgard after her death in 1981: "Irmgard thought in global terms, holistic terms. She thought mind, body, and action are one, that the individual is one with the culture, and function with expression, space with energy, art with work, with the environment, with religion. When you spent a lot of time around her you could get pretty confused and have to go sort things out by yourself, but you could never again see the universe as a collection of isolated particles."⁹

This capacity to recognize the larger whole, while letting the parts be full and interconnected, included her own ability to let go when she sensed that one of her students needed to move on to another teacher or fulfill another aspect of life. She knew that love and nurturance come from many mothers. Rather than jealously engulf her students (as some teachers do), she encouraged all of us to see the larger whole of what we needed to do to grow, and go out to engage it. This was, perhaps, the greatest gift.

And I have luxuriated in this gift. I have continued to grow in my own development of the Fundamentals work and have brought new areas of exploration to the work. For many years also, I taught courses, entitled "Exploring Your Articulate Body," around the United States on tour with the Bill Evans Dance Company and in Seattle at the University of Washington. I also developed a course which I have taught for several years in Seattle entitled "Becoming Embodied." My full life background in movement has contributed to developing my ongoing work, but the base is definitely within the Laban/Bartenieff framework.



Irmgard Bartenieff on her 80th birthday.

I have offered this chapter of memories of working with Irmgard in the hopes that readers who have studied Fundamentals and those who haven't will be inspired, and will realize that **the life of one individual does make a lasting difference even in this ever-changing world of movement. If you are concerned about “connectivity” in your own body, you have received an inheritance from Irmgard.** She used to ask students to address the question, “What is fundamental about Fundamentals?” as an ending to each course. I would like to address this in a more global way in the next chapter as a way of entering the body of the work.



Irmgard Bartenieff and Peggy Hackney.

Notes

1. Effort describes the dynamics of movement—the mover's inner attitude toward Flow (Bound/Free), Weight (Strong/Light), Time (Sudden/Sustained), Space (Direct/Indirect). Combinations of these elements create the feeling-tones and texture of movement. Laban also developed theories about sequences of movement in Space called "Space Harmony;" and with his colleague, Warren Lamb, worked with the area of Shape—how the mover changes the shape or form of the body. A brief introduction to the components of Laban Movement Analysis is provided in the Appendix to this book.
2. Effort-Shape was the name used for Laban Movement Analysis until the mid-1970s in the United States of America.
3. Class notes, 9/11/67.
4. Notes from faculty meeting, 1/5/73.
5. Rudolf Laban, *A Vision of Dynamic Space*, p. 9.
6. Notes from video of session, 9/13/80.
7. Class notes, 9/11/67.
8. Symbols are provided in the text for clarity and to use the language system which was so much a part of Irmgard's heritage. Diagrams identifying the symbols are provided in the Appendix.
9. *The Soho News*, September 15, 1981.

CHAPTER 2

What Is Fundamental?

In the miracle of new life we recognize what is truly fundamental in movement. Momentous change occurs, relationship is created, and patterns of connection begin to set up which will continue throughout life. Let's return briefly to those beginnings

A human baby is within a womb, warm and one with its mother...awash in the unity of watery darkness...in synchrony with the rhythm of the mother's nearby heart. Moving, always moving. Rolling, turning, changing. Each cell is alive and involved in taking in nourishment, and releasing that which is not needed. All is in harmony.

As the baby comes out of the darkness into the light, entering the air-breathing world, still it is in unity with the mother and another nourishing source, the air. Now breathing on its own, filling and emptying its tiny rounded body, expanding and scrunching its whole being, tuning with its inner bodily impulse...seeming at one moment full and soft and at another moment wrinkled and small...still there is a synchronous way of being with itself, an undifferentiated unity. Wholeness, the pattern of Breath, is there.

Life continues. The baby manifests itself by moving, always moving. Movement that began in the womb continues—sometimes thrusting out away from a center, while at other times pulling into core. The baby radiates out away from its core, its navel center, and comes in toward it. Internal body connections are being patterned as phrases of freeing and binding its flow, growing and shrinking its shape continues. Relationships are being set up relative to its own being and, gradually, in interaction with the outside world. Total body opening and closing happens in patterns.¹ “I close into myself when I am on my belly and open out away from my center when I am on my back.” A patterned order of flexion-extension is emerging. “If I am extended and you scratch my foot, I withdraw it. If I am flexed into my core and you do the same thing, I thrust out. If I am lying with one leg out and one leg in and you scratch one foot, I will reverse the leg relationship. I am already preparing for shifting my weight, for walking.” Primary Spinal Reflexes are at work.²

What was once whole begins to become differentiated, and each differentiation heralds new possibilities for creative interaction with the world. As limbs find their relationship to core, radiating out and coming in, a reaching toward the world and coming back in to self is possible. As the tiny baby is moved or moves into different relationships to space, postural reflexes are there to coordinate flexor and extensor tone which facilitates the progression toward movement through space.

Basic righting reactions orient the little being in its relationship to gravity. The vertical takes on new meaning and the outside world becomes more available. Soon the tiny one is lifting its head while lying on its stomach, and subsequently supporting the head and shoulders by yielding into the earth and pushing down with its forearms—a whole new world comes into view. Its head is free to turn, and in so doing turns the whole body over, all parts moving in relation to its spinal axis. Soon the little one is pushing and wriggling tailward and headward like an overly wide snake with extra limbs. Reaching and pulling with the head and tail continues the experimentation with what a spine can do. As the spine begins to stabilize and the enormous head is less of a liability, sitting begins to be possible. The baby also realizes the limbs on its upper body might actually be useful for something. When on its stomach and a desired object comes into view, it yields weight into the earth and pushes down through its arms, and, yes it moves, but surprise! It goes backward instead of forward at first. A brief disappointment, compared to the excitement of travel through space at all! It can push, and soon it can reach out for a goal. Gradually, it can get its legs underneath it and can push from the balls of the feet. Forward motion is now assured! The thrill is immense. Pushing from the lower continues to progress the infant toward the next stage—coordination of the body into halves for belly crawling.³ Then, as crawling continues and the young infant mobilizes its intent to go for a goal out in space, a reach with the hand toward something enticing and a pull toward it will bring in the opposite leg. Cross-lateral movement is now available. The baby progresses to creeping forward on hands and knees, and grabbing interesting things becomes a way of being in the world. Now the baby is on its way to achieving wondrous and fun goals, such as “researching” sister’s doll or daddy’s coffee cup. These playful actions engender both positive and negative responses in the family. As the little one expresses desires and curiosities ever more thoroughly bodily, expressive interaction is assured.

Once verticality is established solidly (through sitting), which frequently happens in an overlapping way with crawling, the right and left dimension (through right and left sidedness) and the full use of three-dimensional space starts to become possible. Going from sitting to crawling or creeping and back to sitting again is really a spiraling transverse movement!⁴ The baby can go from stable to mobile, and mobile to stable. It is able to choose its own place in space. This is a level of self-expression that is facilitated through physical developmental functioning. The baby is becoming an individual who is both functional and expressive. The two aspects are interrelated.

It is astounding to realize that for a human being this incredibly beautiful progression generally happens within the first nine months of life and that we traverse an equally astounding and yet startlingly similar progression of stages in movement at each new level of development—from lying to sitting, from creeping to standing, and from walking to running and going into the air. As we cast ourselves into the sky in an ecstatic leap, many successive layers of patterning in our physical, emotional, and spatial selves have brought us to that point. Essentially each of us is that tiny baby emerging from the womb, and each of us is that joyous leaping being! All of us have come from a unity, an unformed oneness of self with environment, through a very stage-specific process of differentiation until, hopefully, we can begin to reintegrate our differentiated parts and interact with the world from the wholeness of who we are.

In revisiting this process we are reminded of what is fundamental in movement.

1. **Change is fundamental.** The essence of movement is change. As we move, we are constantly changing.
2. **Relationship/Connection is fundamental.** It is in our process of moving/ changing that we create our embodied existence. But this change is not random. In the process of development, change is relational. As we move, we are always *making connections*, creating relationships, both within ourselves and between ourselves and the world.
3. **Patterning body connections is fundamental.** Relationships which are created within our body become patterned as we grow.

Let's discuss each one of these a bit more, beginning with Patterning, continuing with Relationship, and ending with Change.

Patterning Body Connections

Patterning Body Connections is Fundamental. We make connections within our own bodies through patterns or plans which our neuromuscular system develops for executing movement sequences, i.e., habitual firings of muscular pathways which come into play to meet a need or fulfill an intent. Habitual ways of organizing the body to deal with relationships within the body and with other people and the environment are constantly being laid down in the neuromuscular system.

Some patterns, such as the primitive reflexes, righting reactions, equilibrium responses, and the tendency to progress through stages of movement development mentioned below are built into our neuromuscular systems. Other patterns come through habits we choose later on in life. But every human being is physiologically mandated to fulfill certain developmental tasks bodily in order to be fully functional and expressive.

We have all gone through a developmental progression similar to the newborn baby we discussed as we began this chapter. This progression has hopefully enabled us to own our **Fundamental Patterns of Total Body Connectivity:**

- | | | | |
|------------------------------------|---|--------------------------------------|---|
| 1. Breath | ⊗ | 4. Upper-Lower Connectivity | ⊗ |
| 2. Core-Distal Connectivity | ⊗ | 5. Body-Half Connectivity | ⊗ |
| 3. Head-Tail Connectivity | ⊗ | 6. Cross-lateral Connectivity | ⊗ |

These Fundamental Patterns of Total Body Connectivity form the basis for our patterns of relationship and connection as we live our embodied lives. They provide models for our “connectedness.” When these patterns are not achieved, the individual will develop compensatory patterns that might not effectively support the next stage of development and may lead to either physical or psychological problems later on. But whether the patterning is maximally effective or not, patterning is happening as an individual grows and develops. Habitual ways of organizing the body to

deal with relationships within the body and with other people and the environment are being laid down in the neuromuscular system.

Each Fundamental Pattern of Total Body Connectivity represents a primary level of development and experience, and each is relational. Each organizes a way of relating to self and to the world. As human beings progress toward an integral stage, a stage of meaning and purpose in life, all previous stages of bodily organization become important and appropriate according to context. Even without our awareness, the Fundamental Patterns of Total Body Connectivity are with us. Indeed as we come from the darkness of sleep into the light of wakeful choice everyday we can and do reinvest in the beginnings of that progression. We confirm our relation to the life-giving basic flow of the breath as we lie in bed and yawn, taking in large amounts of new oxygen, filling us with energy (Breath pattern). We stretch out away from our navel and come back into it with our whole body (Core-Distal pattern). We explore our spine, as we wriggle and sense our flexibility returning for the day's ventures (Head-Tail pattern). We push to sit up. We reach our legs to the floor and push to stand (Upper-Lower pattern). Or perhaps we dip down with one side to assist in putting on slippers (Body-Half pattern). And then we walk (Cross-lateral pattern). All of this we probably do without even being consciously aware of it. Were we to go through the entire developmental progression each morning with intent to enjoy choosing our own connectivity we might discover new expressive areas opening as well.

I am aware that even as I sit here writing, I could use the Fundamental Patterns of Total Body Connectivity as a five-minute recuperation. I could inhale deeply, sensing my whole body grow and shrink. I could stretch out away from my core and release back into it. I could playfully have a conversation between my head and my tail. I could push away from my desk and pull myself back several times using either my arms or my legs. I could shift my body side-side several times, perhaps using my right side to grab a banana from a nearby bowl, and my left side to turn myself around in my swivel chair. As I reach across and down to file papers I could engage my cross-lateral functioning. And I could return to my computer refreshed. It is recuperative to give attention to fundamental movement.

As we become conscious of these stages of bodily development, we recognize that we are in a creative process at all times—creating our own embodied existence. And we can see that these stages and patterns are mirrored in the development of our other creative work as well. Each creative project we do begins its life within us in an unformed way, simply as part of our life breath. We live with it, gestating, for a while. Soon we begin to sense a core idea of the project, and possibilities radiate from there. Then comes a magical time of inspiration and playing with relationships until the spine of the project finds form. After this happens, playtime is over—it starts to seem like work. We have to push and pull to get anywhere and aspects of the project seem really polarized. It is a time of struggle and can be wonderfully challenging, like the push that is the beginning of crawling—or it can seem too daunting and we give up. If we continue, issues begin to clarify themselves and the form gets set—what is right is right and what is left is left (or left behind). We hone details and get everything coordinated again and in some relationship to the original inspiration—functioning as it should, just like an easy cross-lateral walk which gets

somewhere. And, hopefully we plan time for a meaningful relationship with what we have created to enter our lives. This is the integration stage.

As we become familiar with the stages, we can then know which stage we are in as we work, and perhaps give bodily support to that stage by moving in the corresponding developmental pattern. For instance, when I am writing an article, during the inspiration stage I might play with Head-Tail relationships, and at the struggle stage, I might work with Lower Body push patterns.⁵ In this way I can be congruent with myself, embodied.

Patterning body connections is fundamental and so are relationships and change. Let's spend some time looking at the words "relationship" and "change."

Relationship

Relationship is Fundamental—Relationship is Connection. The ability to create relationship begins "at home," within our own bodies and in the process of our development. But let's look at relationship in a larger context as well, because everything we learn in this book about relationships within our bodies can also be applied to relationships in our larger world. And what we know about relationships with other people can be applied to relationships within our own bodies.

Relationships. I am part of many, you are a part of many, we are all involved—sometimes reveling in the associations, sometimes cursing them. We spend our time fantasizing about them, talking about them, worrying about them, trying to make them "work." It is inescapable. We are connected. Vast networks of connections exist in which we are integrally linked, each of us a unique being, and each of us belonging to a common entity—the relationship. This means that for every two people, there are actually three entities (each person singly, and the dyad). When there are three people, there are seven entities!

Human beings function, like the brain does, in "associative bundles." The brain does not have single thoughts without having them contexted in associative webs. As individuals, we are always associated in many different interweavings of groups of people. Even in such a seemingly simple situation as making a date for lunch, we may have numerous "associative bundles" which we are juggling (i.e., relation to spouse, child, child-care provider, professional colleagues, etc.)—Throughout history we have gradually opened our cognizance of the numbers of people with whom we are involved in relationship.

At this point most of us have stretched ourselves to acknowledge relationship with everyone in the world even if we have not always moved with the action that such knowledge would imply. At the global level, we are paying lip service, and to a certain extent, the same is true at the other end of the spectrum, the personal level. Gradually, many people today are acknowledging that we are each responsible for our own life—that "a couple" needs to be two whole people rather than two halves coming together to make a whole. And even more intimately, that the "individual" is a unique system in itself, having many aspects which are in relationship and need to be integrated.

In a larger perspective, **"Relationship" seems to be the lesson of our time in culture.** We are charged to learn about how to relate to ourselves and to other human

beings. Our ability to do so makes the difference in couples connecting, a family that is lively together, a dance company that can continue to perform, a corporation that flourishes, or a world that survives.

What does all this mean? It means that at a micro level within ourselves and a macro level within our universe, we are always dealing with complex patterns of relationship—and those relationships are constantly changing. Just for fun, let's take a large metaphoric leap: it is possible that learning to appreciate relationships in the body will “pay off” in other areas of life. For instance, as I learn to accommodate in my pelvis to facilitate my torso and arms having more range, it is possible that I am also accustoming myself to learning how I might need to accommodate in myself to live with change in other areas of my life. I start to feel that more things are possible, that I am not stuck in things being the way they always were. I can make this “leap,” because what I learn bodily becomes part of my intelligence. Fundamentals is in this way “relationship technique,” and its daily practice prepares a bodily knowledge for understanding what relationship demands and how many types of relationships exist.

If we embrace this, then we will train ourselves at our most basic bodily core to confirm and enjoy the experience of multiple changing relationships rather than constantly longing for the solid unchanging ideals upon which our past depended. It is possible that coming from this place of body-world interplay will make a difference in the quality of life around me. This is obviously an enormous leap—from the personal body level to the global world. I recognize that this is a leap of faith. And I am willing to make it and to encourage others to do so. Clearly this is only one tiny part of the entire issue of relationship at a global level. But it is worth opening to the possibility that as movers and people training others to move and take action, we can influence the attitudinal context that initiates that action in our world. We can do this in the beginning by doing such radically simple things as, for instance:

1. **Stressing working the connection between body parts** rather than emphasizing holding one part and moving the others against it (as is frequently done in traditional physical therapy exercises).
2. **Acknowledging parts of the body (self) as separate but alive and interconnected voices.** If one part changes, the others have to listen and find their relationship; or all parts need to choose the participation desired.
3. **Teaching movement as a relating experience**—relating within the individual and to others and to the space; not simply working for greater joint range or accuracy of picking up movement sequences as an isolated soloist or star player.

All the above does not mean that we drop everything we have developed to increase joint range and virtuosity or complex movement sequences and skills, but that we stop identifying any one small part as the whole. We need to see the larger context of the mover, the human being in the world, and we need to acknowledge that this also becomes content. We must begin to interrelate the parts. **It is when we experience the relationship of the parts that we can begin the integration process.** We can

then experience how the parts co-create the whole (which is an active birth of a new being larger than the sum of its parts.)

It is also important to remember that “integration” is not the same as “unity.”⁶ I would like to utilize the words “unity” or “oneness” to refer to wholeness prior to differentiation and “integration” to refer to wholeness after differentiation. Integration maintains the integrity of the “integers” and brings them into a participatory whole. All aspects of an issue then become useful in their time. For instance, in developmental patterning each differentiation brings more articulation and different possible relationships both among body areas and in relation to the world. For some movement a cross-lateral connection within the body is essential to facilitate the desired expression. An “integrated” mover would have that facility in that moment at a highly complex level of articulation—perhaps doing transverse spiraling movement going into the area and onto the floor (seen frequently in dance and the martial arts). For other movement, functioning at an original unity level of Breath patterning is the most effective (for example, doing Tai Chi as a meditation after the form is already learned). Having that simple patterning available as part of an organism’s choice would be to be “integrated.” The rhythm of changing patterning allows for Exertion-Recuperation at a body level. **Each person is at a different stage developmentally in many life areas. It is important to look for what is the creative edge for each individual at any given moment.** (See [Chapter 12](#) for more discussion of integration.)

Change

Change is fundamental. As Irmgard often said, “The essence of movement is change.”⁷ She taught us that the process of living is a process of learning to live with change. She used to have a card on her mantel saying, **“Constant Change is Here to Stay.”** How can we educate ourselves or prepare ourselves to live with this stable fact and its mobile implications? One thing we can do is acknowledge and embrace it and incorporate it into our lives. The historian of science, Morris Berman, once said in a lecture he gave at Antioch University in Seattle,⁸ “The spongy uncertainty may be the solid place.”

As a matter of fact, when training to live in our world of constant change, training to enjoy the ever-changing relationships movement demands may be the most comprehensive training for basic intelligence!

Most people do not pick up a book or take a class in Fundamentals unless they are at a point of desiring change even if that desire is not totally conscious. Often people begin their study of Fundamentals with a statement such as, “I want to change how I move. I want to move better, function more efficiently.” We will discuss returning to early patterns, repatterning, and some possible steps in the change process in the next chapter.

What Is Fundamental?

In summary, let’s return to our original question, **“What is Fundamental?”**

1. **Change is Fundamental—The essence of movement is change.** But this change is not random. In the process of development, change is both relational and patterned. You can change your current movements patterns by revisiting early patterns. And, since it is axiomatic that change is inevitable, you will change, whether you want to or not. The question then becomes how much you want to actively choose in which ways you will change or in which ways you will interact with the change.⁹
2. **Relationship is Fundamental—Relationship is Connection.** The ability to create relationship begins “at home,” within our own bodies and in the process of our development. It is in our process of moving/changing that we become embodied by *making connections* both within ourselves and in interaction with the world.
3. **Patterning Body Connections is Fundamental.** We make connections within our own bodies through patterns or plans which our neuromuscular system develops for executing movement sequences, i.e., habitual firings of muscular pathways which come into play to meet a need or fulfill an intent. Fundamental Patterns of Total Bodily Organization underlie our patterns of relationship and connection in our lives.

As we claim the full development of our bodily connections through movement patterns, and recognize the role they play in forming who we are as feelingful, spirited, thoughtful human beings, we will increase our options for a lively interplay with our world. We will feel more alive.

Notes

1. By the word “pattern,” I mean that the neuromuscular system has developed a plan or model for executing movement sequences which has become an habitual firing of neuromuscular pathways that come into play to fulfill an intent. Some of these patterns are set up by basic reflexes (which I am alluding to in this example), righting reactions, equilibrium responses, and all the neurophysiological patterns of development which are discussed throughout this book. Others come from movement habits established in the process of living life.
2. The entire discussion on reflexes which follows is based on “The Neurophysiological Component of Body Movement,” Chapter 21, in an unpublished manuscript by Irmgard Bartenieff. I have integrated this with the developmental progression outlined by Bonnie Bainbridge Cohen, because I believe that Irmgard’s Fundamentals gain form and cohesion when seen within the framework which Bonnie has elucidated. See also Bonnie Bainbridge Cohen’s, “The Alphabet of Movement: Primitive Reflexes, Righting Reactions, and Equilibrium Responses,” in *Sensing, Feeling, and Action*, published by Contact Editions, 1993, for more on this material.
3. This homolateral type of movement was begun much earlier in the asymmetric tonic neck reflex (ATNR). Homolateral movement is described in [Chapter 10](#).
4. A transverse movement is one which cuts through three-dimensional space. This type of movement is not purely in one plane, but is changing vertical, sagittal, and horizontal components of space in a gradated way. (Like a 3-D spiral, or portions thereof) The baby is now able to accommodate with its pelvis and change level in this complex way, by sweeping around and through the space as it goes from creeping to sitting and vice-versa. The path of

its pelvis creates a portion of a spiral. Transverse movement is described in more detail in Appendix—Concepts under the concept of “Spatial Pull or Spatial Intent” and in [Chapter 11](#).

5. Charles M. Johnston has delineated a stage-specific progression for the creative process in his book, *The Creative Imperative*, Celestial Arts, 1984. In my experience, each stage of the creative process seems to have a related stage of body patterning: Breath—gestating; Core-Distal—finding a kernel or seed from which to spark ideas; Head-Tail—playful improvisation with ideas; Upper-Lower—struggling with what is going to be the form of the idea and what is important; Body-Half—continued struggle with clarifying issues and coming to form; Cross-lateral—refining and honing the complex form; Integration—finding a meaningful relationship with what we have created as it integrates back into our lives. See [Chapters 6–12](#) for more on each pattern.
6. This confusion is sometimes called by psychologists “the pre-trans fallacy” (wholeness preconscious of distinction versus wholeness after noticing distinction).
7. Irmgard Bartenieff, manuscript.
8. 7/11/86. Morris Berman is an historian of science who has written *The Reenchantment of the World* and *Coming to Our Senses*.
9. For more discussion of Change as a process, see [Chapter 3](#).

CHAPTER 3

Why Return to Fundamental Patterns?

In [Chapter 2](#), we discovered that **Patterning Body Connections is Fundamental**, and relational connections are built in. But sometimes certain ones need to be experienced and expressed again by the body members. They need re-remembering (re-member-ing). The study of body movement is a prime example of a field in which a “systems perspective” is paramount. Our human system lives and moves effectively through both the perception of patterns of connection and the actual accomplishment of specific ones.

Irmgard Bartenieff developed her “Fundamentals” as a “re-education into body connection.”¹ She utilized adult versions of primal connective patterns. Irmgard described working with Fundamentals as “being one with yourself because you are giving over to those primitive controls.” In the same class, she spoke specifically about dance saying, “Everyone who goes into dance should have the primitive patterns of genetic development mastered.” Unfortunately, even many dance students or aspiring athletes do not have the early Patterns of Total Body Connectivity solidly mastered. Children and adults with learning disabilities and difficulties relating to themselves and other people frequently lack mastery of these patterns as well.²

Functional capacities underlie expressive capabilities. We need to be able to rely on the foundations laid by the early patterns of movement development to support brain development and more detailed expressivity in the Body, in Effort, in Shape, and in Space³ later on. Functional capacity and efficient movement functioning result from using the body in a way that is anatomically and kinesiology sound. The original patterning provides a way of knowing bodily this efficiency through organizing the whole body in action sequences. Frequently, however, the original most efficient pattern does not get practiced for a variety of reasons (i.e., imitation of parent’s habit patterns, illness or acute trauma during the specific learning time, etc.). The developmental patterns are laid down originally in a specific order and sequence. Each new pattern challenges the individual in new physical ways and makes possible additional development in psychological process as well.⁴ If the individual does not accomplish the patterns bodily in a timely way, later development will be impeded, or inefficient compensations will occur, and the individual’s capacity for a full range of expression in the world may be limited. This means the individual may want to return to fundamental movement and re-pattern later in life to support his/her own psychophysical health. But there are other reasons to return to fundamental patterns as well; reasons which relate to virtuosity and artistry.

In Fundamentals we return to early movement patterns to address:

1. Weak or underdeveloped patterns—for support of psychophysical health.

Fundamentals provides a possibility to return and address patterns that are weak or underdeveloped and hence are not providing adequate psychophysical support for the basic skills needed by the organism. This approach facilitates rehabilitation from injury, or repatterning basic movement abilities which support psychophysical security and basic functional/expressive skills.

2. Skill-development requiring sophisticated coordination and phrasing of movement—to facilitate technical virtuosity.

Returning to fundamental patterns is useful for persons who decide to go into fields such as dance or athletics that demand highly articulate bodies performing skills which require sophisticated coordination of patterns—an ability to move facily between simple and complex patterns of bodily organization. Fundamentals provides the possibility for movers to expand their movement range by mastering each basic pattern and then learning to interweave them rapidly, phrasing with the subtlety required in highly technical movement.

3. Purpose-oriented expression reflecting and impacting an individual's creative style—to increase personal artistry.

Fundamentals also provides opportunities to work with purpose-oriented or personally motivated expression by returning to fundamental patterns which reflect or impact the individual's own creativity, style or capacity for expression.

We will now look at each of these areas in greater detail.

Returning To Early Patterns To Address Weak Or Underdeveloped Foundations For Movement

Early reflexes underlie the developmental progression we explored in the first chapter. Spinal level reflexes, the tonic reflexes at the brain stem level, and the neck and body Righting Reactions of the mid-brain level serve important coordinative functions in the body. The Righting Reactions result in head righting to vertical in relation to the earth and head/torso integration in rolling. Although they do not continue to function totally as “reflexes” (automatic patterns) in the adult, they contribute to the quality of motor performance. Even though the early reflexes are submerged and subsumed by the higher regulatory centers of the cortex, they are still there in the lower brain. They have been integrated as bodily knowledge into more complex patterns, they underlie all motor coordination. A sense of motor well-being and security is engendered in the reactivation of these primal connections as organizing principles for total body movement. Although adult movement is not reflexive, and Bartenieff Fundamentals does not usually work on stimulating reflexive behavior in adults, Fundamentals does incorporate the patterns of connections utilized in the early Reflexes, Righting Reactions, and Equilibrium Responses. We give adults a chance to choose to return to and re-member aspects of their

movement that moved out of conscious awareness when those aspects were integrated into larger movement patterns in the normal process of growth and development.

Part of the beauty of working within this system of body training is the chance to become conscious of what choices in movement could be available if all the fundamental patterns were effectively functioning. For instance, many people lack a sense of internal support and core connections in their body. They try to put their body parts into the “right” place but do not feel any internal relationships between all the parts. Sometimes their limbs flail in space and seem to be disconnected from each other and from the central impulse of the movement. They lack the pattern of Core-Distal Connectivity.⁵ These people may feel limited in their movement choices and yearn for a way to feel organized and whole when they move. Frequently, they are confused by the fact that moving in a coordinated way seems so difficult. When they take time to lie on the floor and engage in movements of total body opening and closing, consciously initiating these actions in the center of the body, frequently these people first experience an ease of being with themselves in their bodies, a wholeness. Later they realize that their body actually functions in a centrally coordinated way more easily. They feel able to give up holding their external musculature, because they feel activated and supported at core. Moving in a simple pattern of total body flexion and extension with all limbs finding their connection to the core and their relation to breath is one basic way to find Core-Distal Connectivity and the beginnings of internal support for all movement. This type of movement which we do in a Fundamentals class has early reflexive foundations found in utero and in newborns. We are re-confirming primal movement.

Sometimes early aspects were patterned ineffectively when the individual was an infant or in childhood, and now as the foundation of more complex movement, the simple building blocks are not adequate to the task. In the Core-Distal pattern each limb must find its connection into the core of the body. For instance, the leg finds connections from the foot through the inner leg into the core in order to accomplish a simple flexion at the iliofemoral joint. This is used in all walking or jogging. When an ineffective pattern of Core-Distal Connectivity for femoral flexion is utilized while jogging (perhaps hiking up the hip rather than flexing purely in the femoral joint), the movement might feel slightly uncoordinated or uncomfortable and the runner will not progress forward through space efficiently because movement will be wasted in going up and down with each hip-hike. Over the course of many years, this could put strain on the lower back, the femoral joint, and perhaps even the way the knee and ankle track. By returning to basic patterns of flexion and extension, many people are able to repattern this ineffective pattern and jog enjoyably without injury.

In a more complex situation with the same basic missing pattern (i.e., lack of clarity in femoral flexion and Core-Distal Connectivity causing hip-hiking), a ballet dancer attempting an adagio finds balance difficult to achieve and her leg will not extend as high as would be possible if the basic pattern of femoral flexion were there supporting her movement. This is frustrating and sometimes undermines her own confidence in her body. She begins to feel she cannot depend on her connections internally for support, and so she begins trying to “hold herself together” from the external musculature. In turn, that binding of the flow limits her options for movement.

It is clear from scientific research that primal movement is still within us; for when the graduated motor response of the cortex is damaged, an individual will be seen to revert to the reflexive movement of a baby. A specific intentional reach to delicately and deliberately grasp an object in space (for instance, reaching for a fine crystal glass) reverts to an undifferentiated flailing or groping or thrusting. Complex adjustment in shape and space with intentional dynamic involvement (for example, directly lacing a shoe and tying a bow) reverts to the baby's ungraded growing and shrinking in shape flow and freeing and binding of tension flow.

Likewise, "movement therapists see a return to earlier patterns of behavior or coping and defending when the adult organism feels threatened, overwhelmed by environmental demand or trauma. In trauma the organism often reverts to more primitive patterns of accommodation and adjustment."⁶ **Sometimes returning to earlier patterns in movement also brings up memories and feelings from early pleasurable or traumatic times in an individual's life. When this happens, it is important that the movement facilitator be aware of stages of early patterning in order to be able to provide a safe environment for the movement explorer.**

As opposed to the early reflexes, the labyrinthine righting and optical righting reactions of the mid-brain level and the equilibrium reactions at the fore-brain level do remain operative throughout life. In this way, primitive changes of upright posture and locomotion are made nearly automatic in diverse movement and an awareness of self in relationship to orientation in space is confirmed. The basic structure needed for survival and locomotion is already laid down and does not have to be constantly re-created at every moment. This allows us to go beyond the struggle to stand and walk. In addition, the cortical level automatically sorts input from other levels and integrates it into action sequences which can be performed with conscious awareness—such as walking to the refrigerator, locating the milk, and stooping to reach for it in the door. This cortical level also makes it possible for a mother to choose to integrate subcortical limbic impulses to lovingly rock her crying baby, accommodating her body, her touch, her rhythm to his, even when she might know that dinner is burning in the oven. Movement connects us from our central core out into action in the world. And the possibility for that kind of connection is patterned very early in life.

This book is not about the very earliest Reflexes, Righting Reactions, and Equilibrium Responses per se, however. That material is beautifully covered by Bonnie Bainbridge Cohen in her book, *Sensing, Feeling and Action*. My purpose here is to take a broader view of Fundamentals and adult movement patterning/repatterning, while still acknowledging the important and formative early movement aspects underlying Irmgard's work.

Let's take a moment to look at the phenomenon of a simple walk or jog. Sometimes exaggerated examples can help to bring unconscious aspects into focus. Cartoonists work on this principle. Let's use caricatures and ask the question, "What's missing here?" What basic body pattern is probably weak or underdeveloped in these "people on the street"?

- a. A person is charging down the street pushing with his chest or head.
- b. Someone else is leading with her toes and nose in a "pecking" movement, the entire rest of her body collapsed.

- c. A jogger is pummeling his body along by flinging his calves backward in an effort to go forward.

Of course, there is no single “right” answer to the question, “What’s missing?” because clearly more than basic body patterning is operative. In each individual circumstance, one would have to consider many factors, including momentary mood (feeling exhausted and defeated by work problems) and context (running to catch a bus on a crowded street versus striding to an important meeting). But let’s pretend that we could isolate body level considerations for this one moment.

When I see people like the ones mentioned above, I sense in my own body a lifelessness in my pelvis and femoral joint area, almost as if they had been erased from my body. I am kinesthetically identifying “What is missing.”

In other words, what’s missing is lower body support for locomotion (i.e., a lower body connected to core that is actively participating in moving from the lowest part of the pelvis and through the femoral joint down into the feet with the feet connected into the earth.). Irmgard used to refer to the common syndrome in our society of the inactive pelvic-femoral area as “the Dead Seven Inches.”⁷

Even a simple walk or jog is a cross-lateral phenomenon (i.e., a highly complex coordination event) and requires the support of all earlier patterns, including Breath, Core-Distal Connectivity, Head-Tail, Upper-Lower, and Body-Half. For simplicity’s sake, let’s focus on how a basic ability to push into the floor with the foot and sequence that into a reach with the opposite arm out into space makes possible walking or running. The propulsion of the body weight through space can be most effectively accomplished through beginning the intent to forward action in the lowest part of the pelvis; supporting that intent with a push through the grounded leg, sequencing through the internal core, letting the arm get the message and providing counterbalance cross-laterally, while at the same time reaching forward with the free leg to accept the weight.

Remember, this simple walking action began with the pelvis. That sounds easy. However, in the process of socialization many of us have blocked or lost touch with the lowest part of our pelvises, so that what should be a basic and fundamental movement pattern—i.e., getting the weight going from the lower body and feeling a connection to the ground as a solid support—needs to be retrained into our bodies. Many of us have so deadened the pelvic area that it plays a minimal role in facilitating locomotion. Without the effective support of the pelvis and lower body, we are missing our power source.

As in the caricatures above, we have patterned many less efficient muscular habits to make up for this lack. In repatterning, this means those old patterns will need to be evaluated.⁸ And any new patterns will have to be integrated into the whole functional/expressive system of the individual. The person will need to practice the new patterns many times in his/her own movement, sequencing and phrasing them in numerous different ways until they are easily available and can be relied upon automatically as movement options. Fundamentals helps the individual re-pattern and re-enliven effective kinetic chains in the muscles by providing a perspective on patterning, a few basic exercises, and a lot of chance to use the newly discovered patterns in personal ways. In doing

this, the individual also discovers expressive possibilities which might evolve out of the new basic connectivity.

It is not only “people on the street” who are missing basic movement patterns. It has been my experience both in dancing and in teaching dancers, athletes, and non-professional movers, that there are often major gaps in our primary movement patterning. For instance, many dancers do not breathe in an easy, full way while doing a complex movement sequence. They might hold their breath unconsciously, thus preventing a natural flow of movement through the body and failing to oxygenate the muscles. This missing pattern, Breath, is even more primal than lower body support for locomotion. Returning to the Breath Pattern, which provides the individual with a basic sense of being nourished and at ease on a cellular level, is very valuable for such a person.⁹

Another gap in primary patterning can be seen when a mover separates his/her head from the rest of the movement. A common phenomenon in cultures which encourage a mind-body dichotomy, this break in the Head-Tail relationship prevents total body action and certainly makes moving less enjoyable. Awareness of Head-Tail connection and practice in utilizing it to organize the whole body can help an individual run faster, jump higher, or simply relish movement more. When the previous evolutionary levels are not solidly there to support us, we feel a wash in complexity and will frantically do almost anything to make the outside form of the movement look “correct,” whether we are learning a golf stroke or a dance combination. There is a tendency in our movement training to encourage ourselves and our students to imitate an outward form rather than making the movement live comfortably from within. We do this rather than take the time necessary to return to basic patterns. Why do we do this? Perhaps we lack an understanding of how to return to more fundamental movement which underlies the complexity. Perhaps we fear it will take too much time. **“Returning” does take both understanding and time, but it is well worth it!**

I approached this whole section by asking the question, “What’s Missing?” This is one way to enter the area of dealing with the pattern that is unsupported and needs development or skills practice. Other questions one might ask are the following:

“What’s Wrong?” (“Wrong” is not my personal favorite, since this word generally connotes a moral judgment which tends to set an unsafe environment for exploration.)

“What’s Weak?”

“What’s Rigid?”

“What’s Wanting to Change?”

Whatever the original question, because we are dealing in a systems perspective, we must also ask “How does it contribute to the whole?” Any body level concerns, whether coming from injury or habit patterns, are a part of the larger scope of an individual’s life. This brings us to the process of change itself.

The Process Of Change—Some Possible Steps

Almost everyone has something about themselves or their lives which they would like to change. Perhaps you have decided you want to revise the fundamental patterns we have been talking about, because you are interested in changing the way you move or the way

you relate in your life. You might be very clear about what you want to change or you might simply know that you want something to be different. Perhaps you are in pain, perhaps you are looking for greater efficiency in performance of a skill, or perhaps you want to be able to do something new.

Movement is one of the best ways to approach change, because the essence of movement is change. In our everyday speech we acknowledge this by expressions such as, “There was movement in that situation, now things are different.” In this way movement is a metaphor for change. But it is also an actualization of change. You are changing the habitual way you use your body and relate within yourself and to your world as you practice moving in new ways. Your neuromuscular system is getting new information. By being actively involved in your own movement patterns, you can participate thoroughly and be in charge of your own change. Of course, this is not a short-term process. Changing old movement habits can take many months or even years. The amount of time varies according to the person, the issue, and the consistency of attending to the change process. Of course, if you are in pain or are dissatisfied with the way things are, any progress will be wonderful! Then you can choose how long you want to work. Here are a few of the possible steps you might expect in any change or repatterning process approached through movement.

Steps In The Change Process

1. **Notice what you are already doing.** This means becoming aware of what is happening in your body as you move, becoming cognizant. It may mean staying with “the way it is” and not pushing for immediate change—staying with it until you are able to really perceive what it is that is going on in your present pattern. You may need help from a Movement Analyst or you may be able to do this research on your own. You will want to notice things like where in your body movement begins (initiation). Does it begin in the center of your body or does it begin in your hands or feet? You might notice how your breath relates to the movement. Do you tend to hold your breath as you move or is your breath free and easy? Does your movement sequence and spread through your whole body or does one part seem isolated from the rest of your body? (People who are in pain frequently focus only on the injured part rather than working with the whole body.) Where is your weight during the action? And what do you tend to do immediately following the action? (For instance, do you collapse? Do you become more tense?) Knowing what you are doing is important as you approach change.

2. **Accept what you are doing and how it serves you.** This may entail a bit of personal historical research, “re-membering” when a certain movement pattern was truly appropriate, or at least adequate. Troublesome patterns may start early in life or may start as a compensation when you are in pain. (For instance, lifting your leg by hiking up your hip might have been perfectly functional when putting on a snowsuit as a child or when first out of surgery, but hip-hiking is not appropriate when walking normally or when taking a dance class.)

Accepting what you are presently doing may require acknowledging relationship with a part of yourself you have not wanted to integrate. (For instance, if you want to run

forward with ease, it might be difficult, but essential, to acknowledge the part of yourself psychologically that holds you back even though a more conscious part of yourself wants to go forward.)

3. **Know what it is that you want to do, your intent.** Goals pattern your brain. Sometimes you do not choose to change because you do not yet know what it is that you want to do, or even what is possible. (For instance, you may not realize that you could let your leg swing forward from underneath the pelvis in an easy flowing way when walking rather than hiking-up your hip.) Other times you know what you want to do but do not know how to intentionally direct the new pattern, or cannot recognize the opportunity when it arises due to fixed habits. In either case, working with Fundamentals can be helpful to clarify your intent.

4. **Clarify your intent even further.** The clearer you are about your intent in movement, the easier it is for your neuromuscular system to function properly. You won't then be giving it mixed messages. Once you know what it is that you want to do in a general way, become specific in one of the following ways:

- a. **Use Imagery**—Let your mind's eye form an image of yourself doing exactly what you want to do, such as running with long easy strides with energy to spare as you cross the finish line. Or, let a metaphoric image spontaneously come to you, such as running like the wind sweeping across a grassy plain.
- b. **Work from Movement Principles**—With help from Fundamentals you can understand how your body needs to move in order for it to function efficiently. Fundamentals is based on fundamental truths about the nature of movement and how your body is made. It's fun to find out a bit about your own anatomy or kinesiology, and you can use any new information to direct your imagery.¹⁰
- c. **Let your whole body be involved in the movement.** Don't focus on just one part—one part may be the primary mover, but an active relationship with the rest of your body is needed to ground and stabilize. For instance, if you are focusing on moving your arm, you still need to know that your arm is supported in your torso and your torso is utilizing its connective pathways down into the earth. The whole body is connected. Activate the connections between the joints and the alive connection into the earth rather than "locking" in one part to move another.
- d. **Tune-in to your own emotional feelings as you move.** Movement can bring up feelings, and becoming specific about how you're feeling allows you to move more dynamically. You might notice that softening in your chest brings a feeling of sadness (or joy). You can then use that feeling to help you move more softly (or exuberantly with power). Exercises are less boring when they are personalized!
- e. **Work with the space around you.** Let yourself reveal lines of spatial energy. For instance, as you run, let the underside of your thighs reach forward in space. Envision your center of weight propelling you forward with no deviations. Be like a laser beam. You might even want to repeat the word, "Forward, Forward, Forward." You can also let the clarity of space organize your body connections. For instance, as you arch your back in dance or yoga, let your head reach back and up rather than back and down. (This will keep your spine from "crunching.")

5. Give yourself a lot of time and many different situations in which to practice your new pattern. A Fundamentals Practitioner can help you create specific exercises in which you can practice your new movement patterns. You need to be attentive to doing them. New patterns do not happen without skill drill. It is also important that you find “real life” situations which utilize the new patterns and in which you are really being yourself, not an exercise student. New ways of moving must be contexted in your own life.

6. Know that change is a process. It will be ongoing. Change may surprise you! Many times the first reaction to a new way of moving or an absence of tension is a kind of shock and a feeling of residual tensions in other body parts (sometimes even pain in the area which had been holding tension). This is often part of the process. You might want to check with your Fundamentals Practitioner if you are concerned.

Change may be depressing. Change may be uplifting. You will inevitably fall back into old patterns...and you will go ahead into the new. On the one hand, you will need a firm resolve; on the other hand, you will want to be gentle with yourself. It will be an alive, involving journey.

Some people love to explore change and will eagerly try new ways of moving, while other people enjoy consistency and will feel more comfortable with really gradual changes in their movement habits. Whichever way you feel, it's fine. You can work in your own way. Some change is inevitable; it's part of life. Working in movement is one way in which you can be an active participant in your own change process. It can be an exciting personal adventure!

I recommend that you return to these steps as you read later chapters in this book when we are repatterning specific body connections. These steps in repatterning and change are also applicable when returning to fundamental patterns to facilitate technical virtuosity or personal expression. Let's talk about those aspects now....

Returning To Fundamental Patterns To Facilitate Skill Development For Technical Virtuosity

Many people do not come to Fundamentals because they are injured or sense that they are missing basic patterns. They come because they want to understand more about the nature of movement in order to develop their own skills and/or their personal creative expression. Let's discuss skill development.

The area of virtuosic skill development has been emphasized in movement training recently. In the creative rhythm between Feeling and Form, our society has most recently stressed Form. This has provided us with amazing dancers and athletes who have achieved their technical goals and astonished audiences.

Professional movement fields (such as dance or athletics) require highly articulate bodies. I have taught a course called “Exploring Your Articulate Body” for many years. Being “articulate” fascinates me. It means being able to speak clearly, using language easily and fluently, with facility. In dance or athletics we “speak” with the language of movement — performing skills which require sophisticated coordination of patterns. We need an ability to move facily between simple and complex patterns of bodily organization.

“To articulate” also means “to connect by joints.”¹¹ Another definition is “composed of segments.”¹² Both aspects are important. The fact that our body is articulated with joints equips us with the possibility for being both highly differentiated and for uniting diverse parts into an integrated whole. Fundamentals provides information about, and practice in utilizing, joint articulations both to serve distinction between body parts and connection through them. Perhaps my favorite definitions of “articulate” are “clear, distinct, and precise in relation to other parts: *an articulate form*” and “organized into a coherent or meaningful whole: *an articulate system of philosophy*.”¹³ Again, this brings aspects of both differentiation and integration and addresses the systems perspective mentioned earlier.

The study of Fundamentals brings:

1. Ease with the intricate language of movement. Fundamentals provides possibility for movers to broaden their movement range by mastering all the basic connective patterns and learning to interweave them rapidly, giving attention to the transitions between major movement statements. The ability to move in complete phrases with subtlety is required in all highly technical movement.
2. Understanding of and practice in joint articulation—both distinction and connection at a body level, utilizing the support of scientific findings.
3. Practice in making movement statements that reflect the whole person that is moving. This last area brings us to our next reason to return to fundamental patterns.

Returning To Fundamental Patterns To Facilitate Personal Creativity And Artistry

Much scientific progress has been made in illuminating the inner workings of our bodies—functional aspects of joint function, range of motion, strength, and flexibility. This information has been tremendously valuable to us as movers. By utilizing it, we cut down on the possibility for injury and enhance possibilities for success in movement tasks. We can work more effectively. The unfortunate aspect in the current usage of this information is that we frequently utilize it in a context of isolated mechanistic training, attempting to achieve physical excellence apart from who we are as alive human beings.

I find it an enlightening exercise to notice how many times each day I find myself and others referring to human beings as machines. Mechanical references abound—“Get your motor going,” “Crank up your leg,” “Fix me.” We run our bodies through our paces each day, almost like oiling creaky hinges. This world view is so pervasive it is practically unconscious, and we are almost equally unaware of the price that is sometimes paid for using this unconscious metaphor. Recently, training in movement has become more and more mechanistic and, like certain machines, athletes and dancers are reaching near perfection of an ideal.

In other words, the machine image *does work* in some senses. This perfection of an idealized form has allowed human beings to accomplish more virtuosic movement than ever before in history. Dancers achieve more turns and higher leaps, athletes race faster, even making or breaking an entire career by .001 seconds. Movement this exacting is both

thrilling to do and exhilarating to watch. The people who accomplish it fill an almost shamanistic role in culture—transporting us to another “realm.” The questions then are: “What realm?” and “For what purpose are we transported?” **It is my hope that the purpose of virtuosic movement skill is to enable us to find a new place of possibility in ourselves as human beings—to open a space within us to know we can be more.**

And if that hope is to be fulfilled, as we train for virtuosic movement, it is important that physical skills remain integrated with the whole of who the individual is, not becoming an isolated and split-off part. To remain integrated as we train physically, we need to deal with our physicality in alive connections with ourselves and the world—including our spirit, our emotions, and our intellect. If we are to move into action that is not simply an imitation of an outer form, part and parcel of training must be dealing with fundamental questions related to inner purpose. Specific examples of how we might do this in the Fundamentals classroom are given later in this book in the chapters concerning each of the patterns.

We encourage students to “carry” their own personal questions as they train in movement, and we provide classroom time in which to do internal imagery processes, move, and write in journals about questions such as the following: “Where am I in all this moving? How does movement speak for who I really am? What do I really want to say/do to express myself or respond to the world?” In Fundamentals classes:

- ...we go back to reclaim primal movement and its role in function and expression;
 - ...we identify where we are in our current lives with movement—how is it serving us, how is it inhibiting us, what we value, and what we want to change;
 - ...and we go forward to engage movement as a way of knowing and being in our lives.
- We learn to “listen” to our inner bodily knowing and “speak” with our bodies from the truth of who we are. **The heart of that lively expression is movement—movement in patterns of changing relationships.**

Notes

1. Irmgard Bartenieff, Class notes, 1/26/73.
2. Developmental Movement Therapists, such as Bette Lamont and Florence Scott, feel that early movement patterns contribute to the development of connections in the brain. They find that an individualized program of movement which returns to early patterns ameliorates learning and relational difficulties.
3. For a brief introduction to these terms from Laban Movement Analysis, see the Appendix-LMA.
4. For example, lying on the belly pushing down through the forearms to push away from the earth (the Upper Body Yield and Push Pattern which is illustrated in [Chapter 9](#) on p.) relates to an individual’s psychological ability to set boundaries and make space for her/himself by pushing away. In [Chapters 8–11](#) each pattern and its relationship to psychological growth and expressive abilities are discussed.
5. See [Chapter 7](#).
6. Pam Schick, psychotherapist, personal communication, 5/20/89.

7. See [Chapter 9](#) for more discussion of this syndrome.
8. See p. 24 for steps in the change process.
9. See [Chapter 6](#) for how this pattern can organize the whole body.
10. [Chapter 5](#) contains 12 major movement principles. Choose one or two to apply to your next movement experience, and see if working with support from a fundamental truth will make your movement easier. [Chapters 6–11](#) give quite a bit of useful information on anatomy, which can also be used to inform your moving process.
11. *Webster's New World Dictionary*, 1984, p. 34.
12. *Random House College Dictionary*, 1988, p. 77.
13. *Ibid.*, p. 77.

CHAPTER 4

What Is Bartenieff Fundamentals? What Is Its Goal? What Is Core to Approaching This Study?

What Is Bartenieff Fundamentals?

Bartenieff Fundamentals is an approach to basic body training that deals with patterning connections in the body according to principles of efficient movement functioning within a context which encourages personal expression and full psychophysical involvement.

“...an approach to basic body training....”

Fundamentals approaches training the body for full movement capacity by recognizing that learning is a creative process—and as such there can be no one “right” way to teach or learn. The approach is multifaceted, determined by the learning style of the individual and the stage in the creative learning process. There are times in learning where it is important to be merged kinesthetically with the moving experience. There are times when sounds and images spur the process. There are times when feelings and emotional dynamics are the primary teachers. There are times when repetitive practice in doing particular actions are important (i.e., exercises). And there are times when understanding conceptual material or clear spatial organization is what will bring the training process to the next level. This multifaceted approach is part and parcel of the “content” of Fundamentals.

At this point, I’d like to say a bit more about “exercises” because they are important in the training process, yet should not be confused with the essence of the system. Even though certain types of exercises may turn up in almost every class, Fundamentals is not a system of set exercises. On the other hand, this approach does recognize that at certain points in the learning process moving in action sequences which are organized in specific ways enables the neuromuscular system to practice and confirm new ways of moving. Therefore, set sequences are frequently used and students are encouraged to master them. But the purpose in doing these exercises is not to perform those specific movements. Rather it is to pattern inner connective pathways in the neuromuscular system. Most practitioners continue to use some sequences developed by Irmgard Bartenieff and also develop their own to support the principles and concepts they are working on with each individual class or client. I encourage you to develop your own

exercises once you have understood the principles and concepts presented in this book and have found the connective pathways in your own body.

“...patterning the body according to principles of efficient movement functioning”

In Chapters 2 and 3, we discussed the concept of patterning body connections for efficient movement functioning—both the original progression of development during the first years of life and the prospect of repatterning and “re-membling” similar stages of development later as adults. I also stated that efficient movement results from using the body in a way that is anatomically and kinesiology sound, and that this usage is patterned originally in a developmental progression. Inner body connections are confirmed in action phrases during the time of the original neurophysiological patterning. It is to this proprioceptive and kinesthetic knowledge that we later return when repatterning. As opposed to systems of body work where the client is passive and the body work practitioner does the major active movement, **the student of Fundamentals is actively moving while in class. In this way, Fundamentals confirms the primary importance of bodily knowing.**

As adults, however, we can also use many different inroads to knowledge as we repattern. Sometimes it is helpful while learning and repatterning to give the conscious mind an understanding of a few aspects of anatomy that support each stage-specific movement pattern. For this reason I have included brief bits of anatomical data which underlie the actual movement work in Chapters 8–13. The section called “Approach to Scientific Information” in Chapter 6 gives suggestions about how to make best use of this material. This aspect is an important approach to body training as mentioned above and can be very effective in catalyzing new movement connections. Which brings us to an important point of awareness: it is the experience of inner connectivity, rather than information about it, that is a part of the goal of Fundamentals. Efficient functioning does not come as an automatic result of anatomical information. *Functioning comes from functioning—actually putting the knowledge to use in movement.*

“...within a context that encourages personal expression and full psychophysical involvement”

In order to develop a context which encourages personal expression and full psychological involvement, the Fundamentals practitioner must have respect for the commonalities of human beings as a species, as well as respect for the uniqueness of each individual human being. This means having a broad view of movement and its meaning in human life and a curiosity about how each person becomes engaged or motivated at core to make his/her own movement choices. It means working with many different inroads to personal expression (imagery, metaphor, inner characterizations, etc.) which will elicit movement that comes from the inside and connects to the world. It means taking time to be with yourself, as well as with set movement sequences or anatomical knowledge. This is why

moving spontaneously with personal images or concepts is an important part of the “Movement Explorations” suggested in [Chapters 8–13](#).

“Come back to the life of the movement!,” Irmgard encouraged. “Fill it with yourself. To fill it with yourself you have to come back to the inside, to feel yourself. Otherwise, it is simply an imitation.”¹ For anyone who trains in movement, this is a true challenge for our time because most movement classes train us to produce a form external to ourselves and separate from connection with the rest of our lives. But Irmgard reminds us “Movement is an event that leads to consequences!”² Fundamentals is a type of body training which encourages me to sense and feel what is fundamental in my own organism and what is fundamental about how I relate to the world. Without this type of approach, I lack the base for integrating movement study into my life, and movement runs the risk of being isolated into a separate sphere (dance or athletics). If this happens, my fullness as a human being is compromised. **Movement is a way of knowing in all of life. Fundamentals recognizes this truth and trains with it in mind.**

How does Fundamentals address movement in a framework large enough to embrace issues of purpose and integration in life? This is difficult to answer but an important part of the overall picture of Fundamentals and its place in the world of Body Studies or Body Therapies. Because Fundamentals is housed within the framework of Laban Movement Analysis, its work with the body is part of a larger matrix and system of changing movement elements³, including:

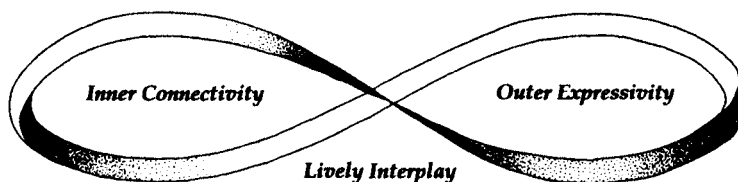
- a. change in Body level neuromuscular patterning;
- b. change in Effort (expression of inner dynamic feelingful impulses);
- c. change in Shape (expression of the forming of the self-environment relationship);
- d. change in Space (expression of crystalline form in the world).

This matrix can be entered at any point. Within Laban Movement Analysis the interrelationships of anatomical functioning, personal feeling and form aspects, and spatial clarity are taken into consideration at all times in the educational process.⁴ We deal with moving more effectively and also with the awareness that movement both initiates and changes emotional feelings and about how we think conceptually. These connections make it possible to link body training with many areas of life experience.

Let’s look at how this might happen in an actual class. For instance, in a Fundamentals class, I may be focusing on initiating movement clearly from my pelvis, shifting my weight forward in space. I might be exposed to some basic anatomy about the pelvis and the muscular connections between the pelvis and femur and spine. But I may also be given a chance to explore my own inner images of my pelvis, as well as my own personal experience of “forward,” perhaps as a metaphor in my life. In addition, I might begin to explore dynamic variation in the weight effort—playing with “speaking” powerfully, using strength from my pelvis or investing in a delightful buoyancy. In doing all of these, I might become more aware of how I am feeling (e.g., that I feel jubilant, confident, or even powerful). I might notice that I associate “forward” with going into unknown and scary places. I could then evaluate whether I want to respect holding back and move in the space behind my body for a while, or whether I want to challenge myself to find positive

1. Inner Connectivity (including efficient Body Function)

2. Outer Expressivity



motivation for moving forward. By using imagery I might discover that my image of my pelvis is a “bowl of riches and jewels” and choose to dig-in and enjoy the wealth that moving with my pelvis has to offer. Through experiencing all of these inroads, I will begin to notice that more of myself is available to me in movement, that I feel connected to my own impulses. I will begin to receive more from world, because more channels will be open in me. And I will be able to express myself in the world. As Irmgard stated, “Body Movement is not a symbol for expression, it is the expression.”⁵

The practice of Fundamentals integrates exploring the body through movement and metaphor with analysis of function and the challenge to expression. This kind of training leads to perceiving the world bodily—it is truly both functional and expressive. The two are integrated.⁶

We are now able to state the possible outcome or goal of training in Fundamentals.

What Is Our Goal?

The Goal of Bartenieff Fundamentals is to facilitate a lively interplay of Inner Connectivity with Outer Expressivity to enrich life.

Goal: **LIVELY INTERPLAY** of two aspects of moving:

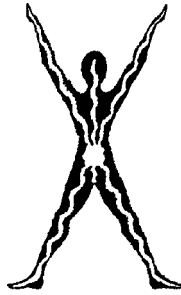
This means we are dealing with a fundamentally different type of goal than most goals. Most goals direct energy toward the achievement of a specific stable, knowable result. Entire fields of study have been developed around such goals. If our goal were simply to become more connected and functional on a body level, we would be working in an area that has been the province recently of many Body Therapies and Sports Medicine clinics and has traditionally been addressed by physical therapists. Inner connectivity, of course, has also been the province of psychotherapists and psychiatrists.

If our goal were simply to become more outwardly expressive with our movement and manifest that in the world, we would be working in territory that has been traditionally dealt with in the training of performing artists for centuries.

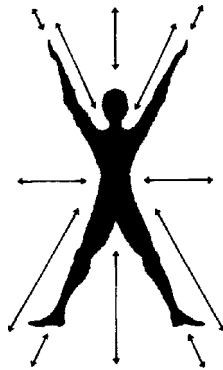
But the fact is that neither one of these goals is the goal of Fundamentals. It is the **INTERPLAY** between the two which is being facilitated in the Fundamentals classroom and which will lead to a richer, more embodied life.

A series of simple diagrams might be helpful:

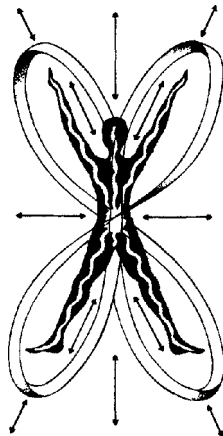
Inner Connectivity:



Outer Expressivity:



GOAL:



This means that **Inner Connectivity and Outer Expressivity are in a co-creative relationship to each other. And that relationship is always changing.** It is a creative rhythm. Obviously, this type of goal is unusual. It is not a linear phenomenon. There are many ways, both ancient and new, for achieving success in

reaching this lively interplay. Bartenieff Fundamentals within the context of Laban Movement Analysis is a rich and enlivening one. **Whether one is a dancer, an actor, an athlete, or a business person, a fully functioning expressive body increases life's possibilities. Bartenieff Fundamentals activates connections to facilitate integration and enrich life.**

What is Core in Approaching the Study of Fundamentals?

Goals can sometimes seem quite far from where we are in our own lives. How can we begin to facilitate the lively interplay of inner connectivity and outer expressivity we have just talked about? Perhaps one place to begin is discovering what will be required of us as we come to this kind of study. By moving this goal in your own body you will locate its nature for yourself and you will discover what is needed within yourself as an initiating attitude in order to participate fully in the study of Fundamentals. You will discover what is CORE in approaching Fundamentals...

A. Begin moving the center core of your body, deep within your torso near your navel, involving your spine. Gently find the flow within. Easy breathing will help this process. Continue moving, letting waves of movement surge through the inside of your body until your whole body is involved. Close your eyes and allow your focus to stay inside yourself. When you feel that you have a sense of inner connections and that the space inside you is alive with energy, enjoy it for a moment and then rest. (See illustration of Inner Connectivity, above.)

B. Now change your approach totally. Open your eyes to the space outside your body and move in relation to it. For now allow the energy field to be most alive outside of your body and in the world. Put your attention on being out in the world with your movement, sending energy out to and pulling energy in from the world, Rest when you are ready to stop moving. (See illustration of Outer Expressivity, above.)

C. Now play with the INTERPLAY of the two. Begin again, letting yourself find the flow within your own body, sensing your inner connections. When your whole body is moving in this way, take your flow out into space, letting your movement sequence in a [figure-8](#) that comes into yourself and goes out to the world. As you come in, let your movement be voluminous and three-dimensional, encompassing many parts of yourself and carrying all of those out to the world to interact three-dimensionally with what is outside of you. (See illustration of Goal, above.)

As you do this movement through your whole body, you will notice that every part of your body is constantly changing. For instance, your pelvis is accommodating to the reach of your arm, staying in touch with the fullness in the center while also facilitating connections at the edge of your moving sphere. Relationships throughout your body are changing in a graduated, proportionate way. You can go further "out" by coming further "in" and vice versa. You might notice a rhythm developing. Notice how long you stay "in" before you go through yourself and "out" again. Notice what the proportion of time is that you stay out exploring the world. What feels like the right distance "out" for you? This might change as you move into different levels or areas of your "kinesphere" (your own movement bubble, the space that is yours). Keep playing with exploration. Do you notice patterns emerging? Tune in to those changing patterns. You are gaining knowledge in your body about what is CORE in approaching Fundamentals.

Although movement speaks louder than words can ever do when dealing with constantly changing systems, I will translate into words my experience of what is CORE in approaching Fundamentals.

Core: *A willingness to value and actively participate in changing patterns of relationships or patterns of changing relationships.* In other words, what is CORE is *a way of approaching or participating in movement study, an initiating attitude.* **“I am willing to participate actively in changing patterns of relationship both within myself and in inter-relationships between myself and the world. I know that how I move affects my environment and that my outer environment is in interaction with my inner experience.”**




Indeed, being willing to perceive and participate in changing relationships is what will make possible the type of INTERPLAY mentioned earlier as the Goal of Fundamentals. It is Core to achieving that goal.⁷ To study Fundamentals I have to be willing to participate in changing relationships within, and from within my body to the outer world all the time. Of course, there is no one recipe for the correct proportions of inner and outer. What is sure, however, is that they will be in a creative relationship. If the interplay is to be truly lively, to go further out, I will have to connect further into my core in order to discover what is of import that needs to be brought to the world. At the same time, to come further in, I will need to go further out. My inner meanderings will seem purposeless without expression within their larger context of relationship to what is outside of me. As this rhythm continues, relationships are changing.⁸

If the Core of Fundamentals is “a willingness to participate in changing relationships” and the goal or Distal end is “a lively interplay of inner connectivity with outer expressivity,” then we are metaphorically discussing the pattern of Core-Distal Connectivity in terms of the system of Fundamentals. This “Core-Distal” underlies all later work we will come to in this book or in the Fundamentals work. And, like the developmental pattern, it is so basic we must continue to reinvest in it. If you find yourself confused as you read this book or study Fundamentals, check to see if you are initiating your work from a willingness to participate in changing patterns of relationship. Check also to see if you are investing in the *interplay* of Inner Connectivity and Outer Expressivity. It is easy to get stuck with an emphasis in one or the other. Our next chapter will deal with the spine of the system, the Principles of Bartenieff Fundamentals.

Notes

1. Irmgard Bartenieff, Class notes, 9/67.
2. Irmgard Bartenieff, Class notes, 9/13/65.
3. Many books, including Irmgard Bartenieff’s “*Body Movement: Coping with the Environment*” cover these elements of movement. For those readers not familiar with the Laban Movement Analysis system, an extremely brief overview is included in the Appendix of this book.
4. Body, Effort, Shape, Space—sometimes referred to as BESS.
5. Irmgard Bartenieff, Gems Manuscript.
6. See [Chapter 12](#) for more about Integration.

7. This core was implied by Irmgard in her constant reference to perceiving changing constellations and in her own style of teaching (see [Chapter 1](#)) but was not made explicit and was not taught as subject matter up until this point.
8. Readers who are familiar with the entire system of Laban Movement Analysis (see Appendix) will recognize in the above movement explorations (A., B., and C.) a progression in

Mode of Shape Change from Shape Flow () to Directional () to Carving (.

Mode of Shape Change in the LMA system refers to the quality of the movement which reveals an inner attitude about changing the form of the body. This inner attitude, which need not be conscious to be operative, establishes a type of relationship between the self and the environment. The Shape Flow mode creates a sensation that the movement is not “about” the environment at all, but is about the mover and the mover’s responses to what is going on, “Me and my responses.” Directional Movement is location- or goal-oriented. It creates a bridge to the environment, “Me out to the world.” And Carving provides a quality of movement that leads to integrating the self and the world, “I am involved in a co-creative relationship with the world.” What interests me as a writer is that I did not set out to make an exercise on Modes of Shape Change. I posed a question to myself, “What is CORE to Fundamentals?” Then I simply began moving, staying attuned to what my body wanted to do as I moved and also to my verbal associations. I found myself automatically doing a version of what I have described in the above movement explorations (A., B., and C.). Even at that point, I did not specifically focus on it as Mode of Shape Change—I was focused on the CORE of Fundamentals. Later, after I had written the entire sequence and drawn diagrams, I was hit with the realization—there is something CORE about Mode of Shape Change in the entire realm of movement study. It is probably one of the easiest understood aspects of LMA; only three basic concepts. Yet it is a potent progression both in the movement development of an individual human being and in the movement of whole cultures. It is important to note that “Carving” per se is not the movement metaphor for what is CORE in Fundamentals. What is CORE is related to an ability to enjoy phrasing Modes of Shape Change, having all three possibilities available and using them when appropriate. For instance, at a certain stage in my life I might need to spend a larger proportion of time working on inner connectivity than on outer expressivity or vice versa. As I am doing this, however, I will maintain perspective that what I am doing is part of a larger whole and is constantly in relationship to it. As a moving metaphor for staying attuned to appropriate changing relationship between the self and the world, Modes of Shape Change are worth exploring. How an individual approaches forming himself/herself in relation to the world is significant in determining the ultimate resulting form of the relationship. It is like the initiating attitude. It is a process orientation in a living system.

CHAPTER 5

What Are Principles of Bartenieff Fundamentals?

In this book thus far we have discovered that the life breath of movement is change, and we have explored the core of Fundamentals and have found it to be understanding patterns of changing relationships. To follow the developmental metaphor further, what then is the bony spine of this system? Our spines provide central support for our bodies. Thus, the spine of Fundamentals will be the principles, or fundamental truths, which provide central support for the system. Since these are fundamental truths, they will be operative whether or not the mover is aware of them. However, I have found that giving attention to each of these principles will enable movers to enjoy moving more fully and feel more totally involved and embodied in their movement.

Principles Of Bartenieff Fundamentals

1. **Total Body Connectivity:** The whole body is connected, all parts are in relationship. Change in one part changes the whole. Acknowledging relationship between parts of the body brings the possibility for both differentiation of the parts and integration of the whole.
2. **Breath Support:** Breath brings life and movement. It is a physiological support for all life processes and, hence, all movement. Breath enlivens.
3. **Grounding:** The earth provides support, a ground for being and moving. Human beings move in relationship to the earth and gravity.
4. **Developmental Progression:** Basic body connections are established through a stage-specific developmental progression early in life. These basic connective patterns¹ become integrated in the adult and function as Patterns of Total Body Connectivity which are then available for timely use and phrasing according to context.
5. **Intent:** Organic connections are influenced by intent. Intent organizes the neuromuscular system. Clarity of intent enables the body to find the motor pattern to fulfill that intent.
6. **Complexity:** Movement is multifaceted. There is always more than one thing going on in any movement event. Every movement event is a whole system, highly orchestrated with interactive elements of Body, Effort, Shape, and Space.

7. **Inner-Outer:** Inner impulses are expressed in outer form. Involvement in the outer world in turn influences inner experience. In short, Outer reflects Inner. Inner reflects Outer. Movement is meaningful.
8. **Function-Expression:** Functional and expressive aspects of movement are in an intimate relationship. Their integration in a specific context creates movement meaning.
9. **Stability-Mobility:** Stabilizing and mobilizing elements interact continuously to produce effective movement.
10. **Exertion-Recuperation:** Exertion followed by recuperation is an active natural cycle which the body utilizes to replenish itself and maintain movement vitality.
11. **Phrasing:** Movement happens in phrases. The preparation and initiation determine the entire course of action for the phrase.² Kinetic chains of muscular action are set up in the moment of the initiation which sequence and follow-through to complete the phrase. Muscle sequencing is more important than muscle strength in producing coordinated movement.
12. **Personal Uniqueness:** Movement Patterning, like life, is a uniquely personal journey, an adventure.

As you read through these principles you probably noticed that they are interrelated and that the point of delineation of one from another may seem fuzzy. This is inherent in dealing with fundamental truths.

I encourage you to rephrase and list them in your own way. I do it frequently. Now, however, let's look at each one of the fundamental truths and see in what way these principles might have implications for teaching movement or repatterning. As you read this next section, I suggest that you envision yourself moving or teaching movement. Let yourself sense how that moving or teaching might be different if you were intending to embody each of these principles one at a time. Pick a specific type of movement which you can return to with each principle. For instance, if you choose tennis, how would your tennis serve be different if you were utilizing Breath Support; or confirming your relationship to the earth through Grounding?

1. Total Body Connectivity: The whole body is connected, all parts are in relationship. Change in one part changes the whole. Acknowledging relationship between parts of the body brings the possibility for both differentiation of the parts and integration of the whole.

As Irmgard Bartenieff has said, "There is an interrelationship of all body parts in any movement. The whole body participates in any movement; different parts either serving as movers or supporters of movement."³ "You must remember that the total body is changing; see the total constellation change when you change any one thing. One muscle out of interplay can affect everything else, the body is highly orchestrated."⁴

You have probably noticed that even if you only have a slight injury in your little toe or finger, your whole coordination in walking and/or handling objects is affected. And you may have noticed that if you are sitting in an enclosed body shape, simply opening your palm

can alter your whole feeling. These are simple examples, but this principle has larger implications as well.

By keeping this principle of Total Body Connectivity in mind we can make a major difference in our training process for dancers and other skilled movers or for any process of rehabilitation. For example, a problem in the lower back or a lack of range of motion in the femoral joint might be addressed by dealing with patterning the entire connective pathway from the earth through the legs and spine to the head with an emphasis on supporting from the internal core of the body. It is important to discover how the whole body is organizing to produce the movement even if what seems to be the focal point is the highly articulated parts. When learning or teaching one might ask, “What is the underlying Pattern of Total Body Connectivity which could support and organize the articulation I am seeking?” (See list of patterns below under Developmental Progression.)

2. Breath Support: Breath brings life and movement. Breath is a physiological support for all life processes and, hence, all movement. Breath enlivens.

When you support your movement with breath, you move with more fluidity and ease. Breath influences every aspect of movement. In patterning or repatterning, Irmgard Bartenieff frequently suggested that we deal with the breath first, because . . .

- a. Breath (including both cellular and lung respiration) is the key to life connections at the physiological level. Breath brings life—it enlivens!
- b. Breath is the fluid ground from which all movement emerges. It provides the baseline of flow for Effort. “It is the central liberator and controller.”⁵
- c. Breath is an inner Shaping experience. It provides the baseline of flow for Shape change—ever alternating, growing and shrinking. Every movement is either an opening or a closing, and Breath is support for those changes.
- d. Breath is the first experience of Space—the fullness of inner three-dimensional space is discovered in the breathing process. “It is the regulator of inner space.”⁶
- e. “Breathing is also a key to Phrasing and, therefore, to the functional/expressive content of the communication.”⁷

3. Grounding: The earth provides support, a ground for being and moving. Human beings move in relationship to the earth and gravity.

Although many human beings do not acknowledge their relationship to the earth, we are dependent upon the earth for our support. Indeed, our ability to sense our weighted mass which makes possible our assertion of strength and lightness is possible only because of earth’s gravity. The ability to contact the earth, yielding weight into the earth and feeling an outpouring of flow which is met and matched by the earth as it provides support, precedes the ability to push down into the earth and use power to take a stand on the earth as an individual. In everyday language, to say that someone is “grounded” implies that that person has a stable sense of him/herself. This presence of self requires an embodied relationship to the earth.

This relationship can be practiced.⁸ When teaching movement or repatterning, one can remind the mover through words or touch that every cell which is in contact with the

earth (oftentimes the soles of the feet) can experience connection by yielding weight into the earth and feeling matched by the earth's support. Movement can then travel through the body utilizing that sense of grounded stability as a base from which to move. A simple question is often helpful, "How am I connecting with the earth?"

4. Developmental Progression: Basic body connections are established through a stage-specific developmental progression early in life. These basic connective patterns become integrated in the adult and function as Patterns of Total Body Connectivity, which are then available for timely use and phrasing according to context.

Our human organism has been physiologically mandated to fulfill certain movement tasks in the first years of life. These movement tasks lay down patterns in the whole organism, including the neuromuscular system. These patterns, which are habitual firings of muscular pathways that come into play to fulfill an intent, influence the individual's capacities for being in and moving in the world. If the person has not accomplished these patterns bodily,⁹ development will be impeded. In the developmental progression, each stage underlies and supports each successive stage. Each stage is necessary. As adults, it is beneficial to re-member each stage. Having the abilities of each stage available allows for integration, that is, timely use according to context.

Early primitive postural reflexes, righting reactions, and equilibrium responses are a few of the first patterns. They are fundamental to human movement. They establish basic patterns of gross body function and an ability to deal with the demands of gravity. They set up pathways of muscle sequencing. These become integrated into larger neurological patterns of movement through which the human being organizes the total body, providing neuromuscular coordination, "connectedness," and a sense of basic comfort and being "at home" on earth in an embodied way.







As a physical therapist, Irmgard Bartenieff was well aware of what was known in her era about the neurophysiological aspects of movement control. The specific exercises she used in the Fundamentals classroom were clearly based in these understandings, and she wrote about them in Chapter 21 of her unpublished manuscript, *The Art of Body Movement as a Key to Perception*, 1979. But in her teaching she did not stress a theory of developmental progression, even though it provided a foundation for her work.

I have found it very helpful in my own understanding of Fundamentals to explore how the work is based in a larger framework of development, both in relation to other human beings and in relation to other animal species in our world. For me, this makes the work more universal and, hence, more truly "fundamental."

Bonnie Bainbridge Cohen has illuminated this developmental process in rich detail in her Body-Mind Centering work. She frequently speaks about how "the development of movement in human infants, from fetal movement, through crawling and creeping, to walking (ontogenetic development), closely parallels the development of movement in the animal kingdom, from the one-celled animals through the primates (phylogenetic development)." She also points out that, "Development is not a linear process but occurs in overlapping waves with each stage containing elements of all the others. Because each previous stage underlies and supports each successive stage, any incomplete development or skipping of any stage leads to perceptual/movement problems. By returning to these

basic patterns, we can re-pattern our responses and establish more efficient nervous pathways to support our movement.”¹⁰ The Fundamentals work provides one way to return and re-pattern.

I am using the term “Developmental Patterns” in this book as a shorthand, an all-inclusive term to refer to what Cohen calls “The Basic Neurological Patterns.”¹¹ In my own work I have shortened the list of Developmental Patterns to a basic six, which I find useful for helping adults remember early patterns in Fundamentals classes. These are:

- Breath** (both cellular and lung respiration)¹² 
- Core-Distal Connectivity** (Navel Radiation—including the underlying Pulsation) 
- Head-Tail Connectivity** (Spinal—including the underlying Mouthing and Pre-Spinal) 
- Upper-Lower Connectivity** (Homologous) 
- Body-Half Connectivity** (Homolateral) 
- Cross-lateral Connectivity** (Contra-lateral) 

When I am not revisiting the baby versions of these patterns, but am doing adult movement based on these, I refer to them as **“Patterns of Total Body Connectivity.”**

5. Intent: Organic connections are influenced by intent. Intent organizes the neuromuscular system. Clarity of intent enables the body to find the motor pattern to fulfill that intent.

Soma and psyche (body and mind) are in relationship. They are connected. The inner intent of each unique human being influences how his/her body moves and patterns movement. (This inner attitude need not be conscious to be operative.)

The individual may have an intent in any of the following areas and generally operates in several simultaneously.¹³

- a. **BODY**—A body-level intent might include clarifying where in the body movement initiates and how the movement sequences through the body parts to complete the phrase. A knowledge of anatomy and an ability to translate it into images or metaphors is useful in repatterning utilizing intent at a body level, (for instance, “As you do your massage stroke, let the movement initiate in your left leg and travel in a cross-lateral connection through your torso, flowing out from the lowest point on your scapula through your arm into your right hand.”)
- b. **EFFORT**—An intent in Effort might include being in or revealing an inner mood, a feeling, or making a dynamic statement in movement (such as strength with directness to “take a stand” on an issue, or lightness with free flow to express a soft “dreamy” feeling). An ability to facilitate the expression of feelings and emotions or to provide tasks which demand specific dynamic commitment is useful in repatterning movement utilizing Effort intent.
- c. **SHAPE**—An intent in Shape might include forming the body to reveal a particular “shape” (for instance, a choreographer might choose an enclosed rounded form, a ball shape, to depict someone who is turning inward); or changing the form of the

body to bring about a specific type of relationship to other people or the environment (using a spoke-like directional shape change when going toward a goal, for example); or reveal an investment in the process of shape change (rising when happy, retreating in fear, etc.). A knowledge of form and its relation to feeling is useful when utilizing intent in Shape to repattern movement.

- d. SPACE—An intent in space might include moving in order to go in a particular direction or spatial pull (i.e., Runners benefit from propelling the center of weight continuously *forward* toward the finish line, for instance), moving in order to reveal a specific crystalline form (i.e., moving in the *octahedron*, as is often seen in ballet), or moving to reveal an approach to the kinesphere (i.e., Central, Peripheral, Transverse). Spatial intent organizes and clarifies body connections by establishing a clear pathway/goal for the movement. An ability to think about and visualize space is useful when repatterning movement utilizing Spatial Intent.¹⁴

6. Complexity: Movement is multifaceted. There is always more than one thing going on in any movement event. Every movement event is a whole system, highly orchestrated with interactive elements of Body, Effort, Shape, and Space.

Irmgard Bartenieff constantly reminded her students that “There is always more than one thing going on.” She implored us to look at the whole system and see the orchestration. Taking a systems perspective in relation to movement requires practice. In patterning or repatterning, it is important to look for the interrelationship of movement elements, not simply focus on one element in isolation. Inroads to learning or change can come through any element (Body, Effort, Shape, Space). It is through awareness of the multiple possibilities at any one moment in time that we can offer students and clients a range of options for an individualized change process.

“Out of a clear sense of the body—anatomically and with inner space—a sense of moving into outer space develops. Effort is the initiating impulse that carries the internal (anatomical) shape into the external (spatial) shape.”¹⁵

“In all movement—from the small isolated gesture to a major total body action—more than one factor is operating.”¹⁶ Anatomical (Body), Dynamic (Effort), Shape, and Spatial elements are happening at all times and form constellations that are meaningful for both function and expression.

7. Inner-Outer: Inner impulses are expressed in outer form. Involvement in the outer world in turn influences inner experience. In short, Outer reflects Inner. Inner reflects Outer. Movement is meaningful.

This may seem at first glance to be an obvious statement. However, many people in the 20th century spend quite a bit of time trying to hide their inner impulses and hope that the outer world does not perceive them. Thus the principle that “Outer reflects Inner” may be upsetting to some people. Rudolf Laban felt very strongly that inner impulses do reveal themselves in the movement, whether that movement is large and intended movement, or whether that movement is fleeting, small less intentional movement that surrounds and perhaps frames the major movement, i.e., what Laban called “Shadow Movement.”¹⁷

Many people also spend time trying to deny that they are influenced in any significant way by the rhythm, pace, love, violence, etc. of other people and the outer world. Thus the principle that “Inner reflects Outer” might be equally distressing. I sometimes pretend that I am not affected by tightly scheduled days or by hostile comments—that I am “cool, calm, and collected.” However, usually in such situations, if I check in with my own movement, I find that I have tightened in my core, have started breathing in a shallow way, and that my movement is less coordinated. I might state this realization in this way, “I know that how I move affects my environment and that my outer environment is in interaction with my inner experience.”

As opposed to being upsetting, this principle of Inner-Outer can also be uplifting to many people. It is frequently a relief to recognize that coherence exists between Inner and Outer and that movement has significance. We do not have to ignore it and pretend that movement is not happening. This realization is empowering, and engenders a sense of aliveness in people. Let’s take a very basic example: When I notice that my foot is urgently tapping the floor as I sit in a long meeting, if I acknowledge that it has meaning, it might lead me to recognize that a part of me is already mobilized and ready to go. In fact I am already “running” to my next commitment inside myself. I could then clarify this verbally for other people who might have detected that I am not totally present in the meeting. It will be confirming for all of us to hear me say, “I am ready to go.” A more general statement of the realization of Inner-Outer might be stated, “Since Inner and Outer are in relationship in movement and movement is meaningful, I might as well enjoy that fact and really choose to listen to or see the coherence and use movement to help me make sense of what is going on. Perhaps I can learn something about what I feel/know by observing how I move in a given situation, or how others move.” Indeed, Laban felt that “some failures of our civilization are surely influenced, if not produced” by the fact that we do not “pay more attention to human movement—bodily and mental—which is obviously at the basis of all human activity.”¹⁸

Movement both initiates and changes emotional feelings and how we think conceptually. It is thus possible to link body training with many areas of life experience and, hence, bring more integration into an individual’s life. This has powerful implications for any kind of education, and particularly for training which is already movement based, such as dance or sports. Often, unfortunately, training in dance and sports does not acknowledge that the movement one does over and over again is influencing the inner life of those doing it. Rarely do teachers or trainers encourage their students to check-in with their inner feelings, thoughts, or sensations after completing a demanding class, performance, or competition. “How is this movement you have been doing moving inside you? What meaning does it have for you?” Perhaps this is why dancers and athletes “burn out” at such a young age. Conversely, many psychotherapists spend years delving into inner feelings with their clients and fail to recognize the movement expression of those feelings that is right there in the room and goes immediately out into the world.

Inner and Outer are always in a creative relationship. As we discussed Inner and Outer extensively in [Chapter 4](#), “To actively go further out into expression in the world, I will have to connect further into my core in order to discover what is of import that needs to

be brought to the world. At the same time, to come further in, I will need to go further out, because my inner meanderings will seem purposeless without expression within their larger context of relationship to what is outside of me.”

8. Function-Expression: Functional and expressive aspects of movement are in an intimate relationship. Their integration in a specific context creates movement meaning.

“Body movement is not a symbol for expression; it *is* the expression. Anatomical and spatial relationships create sequences of effort rhythms with emotional concomitants.”¹⁹ The slightest change in any movement element (Body/Effort/Shape/Space) affects the functional as well as the expressive content of the communication. In patterning or repatterning it is worth discovering what purpose the movement is serving for the individual before embarking on a change process. What is the movement “about” for that person? How is function (or the specific limited function which is available) serving this person’s expression in the world? And conversely, how is the expression really functioning for this person?

I had a client with pain in her pelvis and legs who had tried many doctors and physical therapists and had done a lot of muscle strengthening, but the functional problems in using her lower body still existed. She could not walk without a limp and she grimaced with every step. We discovered in our work together that she had a desire within her to dance, but had never allowed herself to do it, because she felt disabled and ugly. We worked rhythmically, moving to music with closed eyes, letting the movement be guided by her desire to express her “inner dancer.” By working from expressivity the functional problems improved. Her muscles strengthened in their natural kinetic chains and she moved with full coordination, because she had not isolated the function from her desire to be expressive. In this specific instance the Function/Expression integration meaning had something to do with her own sense of “inner beauty and grace.”

It can be equally true that someone is aided in their expressivity by taking time to practice muscle strengthening or other aspects which shed light on Function. One dancer I knew was profusely outpouring in her mobile expressivity, but was unable to express a sense of calm stability on one leg. She wanted to use movement such as this in a piece of choreography she was doing. Only after she strengthened her iliopsoas, hamstrings, and adductors was she able to make the expressive statement she desired. The meaning she associated with this Function/Expression situation was “gaining the ability to stand firm and simply Be, balanced where I am.” She found this statement had meaning in her larger life as well.

Function and expression are intertwined in relationship. Sometimes one speaks more loudly than the other. An effective practitioner can follow the client’s clues as to which inroad is timely and appropriate.²⁰

9. Stability-Mobility: Stabilizing elements and mobilizing elements interact continuously to produce effective movement.

Fundamentals stresses the interaction of stabilizing elements and mobilizing elements. For both Stability and Mobility, Fundamentals concentrates on finding the active connections from the core of the body out into the limbs. These connections are then either activated for grounding (stability) or activated to move the body part (mobility).

Fundamentals does not emphasize holding one part and moving another against it, for example, “Hold your shoulders down to move your arm.” The Fundamentals practitioner might say instead, “Stabilize by visualizing, or sensing, a connective relationship from your scapula to your coccyx. Mobilize by initiating your arm movement from the lowest border of your scapula.”

As the common-folk saying goes, “You only need to give your children two things: roots and wings.” When patterning or repatterning movement, it is important to focus on both stabilizing and mobilizing elements, and especially their interrelationship. Frequently emphasizing the stabilizing aspect of connectivity will make mobility more available. A sense of grounding provides security and a feeling of freedom to move because there is support. Sometimes, however, tension in the external musculature is preventing true stability in the core. In this case, working for mobilizing a connective pathway from the limb through the proximal joints into the core will release held tension around the joints, allowing even deeper connections through the core of the body to emerge. This will in turn bring greater stability, and the individual will feel safe to move with more mobility.

Laban taught that stability and mobility alternate ceaselessly.²¹ Because human beings frequently seem to have trouble finding an easy verticality (what our parents might have thought of as “beautiful posture”), it is important to mention here that Fundamentals’ approach to alignment is dynamic, not static. Alignment is achieved through energized action. Even in “standing still” a dynamic process, a relationship of mobility and stability, is ongoing to create a through-line of energy in the vertical.

10. Exertion-Recuperation: Exertion followed by recuperation is an active natural cycle which the body utilizes to replenish itself and maintain movement vitality.

“Each movement creates its own rebound to return or shift to the next movement.”²² Sometimes even fundamental truths like this one need conscious attention for full benefit. Unfortunately our culture has trained us to think of recuperation in terms of “collapse,” rather than an active rebound to different movement for replenishing ourselves. Thus, many people are not finding their own natural recuperative phrasing in their lives, and are not regenerating and refreshing themselves. In Fundamentals recuperation is active, not usually a collapse. For instance, if the exertion phase of an action demands prolonged direct pinpointed focus (such as doing computer work), effective recuperation may not be going home and watching TV or sleeping, but may be giving attention in a more multifocused way every few minutes—perhaps letting the focus meander around the office, sensing relationships between people and things. In some individuals this exact sequence, going from Direct Effort on the exertion to a multifocused Indirect Effort for a recuperation, might happen naturally. Others might need a reminder of the need to release their direct focus to allow the multifocus to happen. Still others might recuperate from computer work by changing Body-part relationships (crossing and uncrossing their legs, stretching, etc.) or by making a Shape and Space change (spiraling to reach around back and up to get something from a shelf). There is not one “right” way to recuperate from a given exertion. The process is individual.

When patterning or repatterning it is important to discover the individual’s own unique tendency to rebound or recuperate in Body, Effort, Shape, and Space. Confirming

this will allow the individual to complete phases and continue into the next phrase without undue stress and exhaustion.

11. Phrasing: Movement happens in phrases. The preparation and initiation determine the entire course of action for the phrase. Kinetic chains of muscular action are set up in the moment of the initiation which sequence and follow-through to complete the phrase. Muscular sequencing in kinetic chains is more important than muscle strength in producing coordinated movement.

Every individual organizes and sequences his/her movement into *perceivable units which are in some sense meaningful, i.e., phrases*. A movement phrase generally contains an inner preparation (intent), the moment of the initiation (beginning of movement in the body), the main action (exertion), a follow-through, and recuperation.²³ The internal preparation (through Body part, Effort, Shape, or Spatial intent) organizes where the movement needs to initiate in the body in order to effectively fulfill the intent. **The moment of initiation determines the entire process and path the movement will take. Therefore, any training process in dance, theater, sport, or therapy must look at the entire phrase from the moment of the initiation if the training is to be effective.**

When patterning or repatterning, it is important to consider the whole phrase and not simply the main action. It is also important to teach movement in total phrases, not in fragments. Clarity in phrasing encourages full commitment to the movement because the individual is able to come to full intention through an inner preparation and then confidently rely on the neuromuscular system to sequence the action. **When attempting to make corrections in movement, always go back to the beginning of the phrase, because the preparation and initiation determine the process and path of the movement. Once the movement is initiated, the action fulfills itself!**

Muscular sequencing in kinetic chains is more important than muscle strength in producing coordinated movement.

I have included this principle under phrasing, because muscle sequencing is phrasing at a muscular, physiological level. Fundamentals emphasizes sequencing of muscle groups in the context of the whole movement rather than simple muscle strength. A focus on muscle strength, frequently seen in training for dance, sport, or rehabilitation, tends to fragment moving into isolated repetitive two-phasic movement, such as flexion-extension. Fundamentals builds function and strength through a variety of related experiences for a body part—not only for different roles of muscular action, using repetition, but also variation in dynamics, rhythm, shaping, and spatial pattern. This multifaceted training reflects the complexity of functioning in the world. Training in this way was especially important to Irmgard Bartenieff in her work as a physical therapist when working with people who had limited contractile strength in their muscles. It is also useful for athletes and dancers who are working for high-level efficiency in muscular usage without overdeveloping muscle bulk. Muscles must, of course, be strong enough to activate

the bones. A focus on what Bartenieff called “Mobility Process” stresses the use of kinetic chains, which enable weak muscles to be helped by stronger ones as they rehabilitate. “Recognition of kinetic muscular chains—the sequences of muscles used in a movement—diminishes the exclusive dependence on individual muscle strength for movement power.... It is the activated chains, configurations of connection, that control the movement process.”²⁴

12. Personal Uniqueness: Movement Patterning, like life, is a uniquely personal journey, an adventure.

When I asked George Bartenieff, Irmgard’s son, what he thought set Irmgard apart, he said, “Well, other therapists and teachers are always trying to fix people. She never tried to fix anyone. To her, working with someone was like an adventure the two of them were on together. She was fascinated and curious about what would happen.”²⁵

There are basic patterns and principles of movement, but there is no one pathway for all persons to achieve full functioning. Human beings pattern their movement responses in ways in which they originally perceive will enable them to function in their environment, and each individual history is unique. Therefore, any training process must be done with an awareness of *personal and cultural contexting*, recognizing that personal history and motivation are operating continuously.

The dictionary defines “adventure” as “an undertaking involving risk, unexpected excitement, remarkable experiences.”²⁶ Just as life is an adventure, so too is movement patterning. It seems almost too basic to mention this, yet it is important to remember that no patterning or repatterning process will ever be exactly the same as any other.

Each human being has certain commonalities with all others in the species, both anatomically and in terms of movement development. Each human being, however, is also unique and is creatively responsive to his/her own inner world (soma-psyche) and to the external environment (including culture). In addition, human beings and the environment co-influence each other. The environment both conditions us and challenges us to a creative response. And as we engage the environment/world, we transform it.

These relatively obvious statements have important implications for movement training. **As the developmental patterns are being established, each individual is at the same time forming his/her expressive interaction with the world and, therefore, that interaction is included within the body patterning.**

The above series of statements lead to the conclusion that when teaching or repatterning movement, the following must be considered at all times:

- a. the developmental and anatomical organization common to all humans;
- b. the individual’s personal soma-psyche;
- c. his/her own creative interaction with the environment.

...an adventure indeed!

*A shortened list of reminders for the 12 Principles of
Fundamentals*

1. **Connectivity**—The whole body is connected.
2. **Breath Support**—Breath brings life and movement.
3. **Grounding**—The earth provides support, a ground for Being and moving.
4. **Developmental Progression**—Basic body connections are patterned through a stage-specific developmental sequence.
5. **Intent**—Intent organizes the neuromuscular system.
6. **Complexity**—Movement is multifaceted, orchestrating Body/Effort/Shape/Space.
7. **Inner-Outer**—Movement is meaningful. Outer reflects Inner. Inner reflects Outer.
8. **Function-Expression**—Function and expression integrate to create meaning in movement.
9. **Stability-Mobility**—Stabilizing and mobilizing elements interact continuously to produce effective movement.
10. **Exertion-Recuperation**—Exertion-Recuperation is a natural cycle which replenishes movement vitality.
11. **Phrasing**—Movement happens in phrases. The preparation and initiation determine the entire course of the phrase.
12. **Personal Uniqueness**—Patterning is an adventure. There is no one pathway for all persons to achieve full movement functioning.

Notes

1. A pattern is a plan or model for executing movement sequences which the neuromuscular system develops, i.e., habitual firing of muscular pathways which come into play to fulfill an intent.
2. For more detailed information on phrases and phrasing, see Appendix—Concepts.
3. Irmgard Bartenieff, manuscript, *The Art of Body Movement as a Key to Perception*, 1979, p. 637.
4. Irmgard Bartenieff, Manuscript, p. 639. (This statement also relates to Principle number 6, “Complexity.”)
5. Irmgard Bartenieff, manuscript.
6. Irmgard Bartenieff, manuscript.
7. Irmgard Bartenieff, manuscript.
8. Yield and push patterns are useful for practicing connection to the earth. For more information on these, see Chapters 8, 9, and 10. For more information on the concept of Grounding, see Appendix—Concepts.
9. Many psychologists acknowledge developmental stages in the psyche, but few adequately focus on the bodily component of those critical stages.
10. From her article entitled “The Dancer’s Warm-up through Body-Mind Centering,” in *Sensing, Feeling, and Action*, Contact Editions, Northampton, MA, 1993.
11. i.e., Cellular Breathing, Pulsation, Navel Radiation, Mouthing, Pre-Spinal, Spinal, Homologous, Homolateral, and Contra-lateral. More detailed explanation of her work in this area may be found in her book entitled, *Sensing, Feeling, and Action*.
12. Words in parentheses are ones which Bonnie Bainbridge Cohen uses for similar stages. She also is continuing to develop more subtle transitions between the stages, but I have chosen to

use only six for the sake of simplicity and because they relate more directly to the historic legacy from Irmgard Bartenieff.

13. See Appendix for more about each of these areas of Laban Movement Analysis.
14. See Appendix—Concepts for additional information on the concept of Spatial Intent.
15. Irmgard Bartenieff, manuscript, p. 640.
16. Irmgard Bartenieff, *Body Movement*, p. 21.
17. In *The Mastery of Movement* (MacDonald and Evans Limited, 1975 edition), Laban speaks about Shadow Movement. “Shadow movement tells us about such inner processes; and many of a person’s most characteristic movements are those which he does unconsciously and which precede, accompany, or shadow his deliberate actions.” (p. 116) “They are tiny muscular movements such as the raising of the brow, the jerking of the hand, or the tapping of the foot, which have no other than expressive value. They are usually done unconsciously and often accompany movement of purposeful action like a shadow—hence the term.” (p. 12)
18. Rudolf Laban, *A Vision of Dynamic Space*, The Falmer Press, Philadelphia, Pa, 1984, p. 9.
19. Irmgard Bartenieff, manuscript, p. 637.
20. For other examples of the interaction of Function and Expression in artistic and therapeutic contexts, see the concept called “Countertension” in the Appendix.
21. For a sense of Laban’s musings on Stability and Mobility see his poem “Stillness and Stir” in *A Vision of Dynamic Space*, pp. 68–70.
22. Irmgard Bartenieff, manuscript, p. 638.
23. For more detailed information on Phrasing see Appendix—Concepts.
24. Irmgard Bartenieff, *Body Movement*, p. 21.
25. Personal communication, Seattle, WA.,
26. *Random House College Dictionary*, 1988.

CHAPTER 6

Breath



- ...*One with the life giving universe*
- ...*One with nature's fluidity*
- ...*filling and emptying in an ever on-going cycle*
- ...*being nourished, getting rid of what is no longer needed*
- ...*feeling whole*
- ...*no aims, no goals*
- ...*simply BEING*

Imagine, if you will, a situation where all is in harmony, complete in its rhythm... emptying to fill, filling then emptying in an ongoing ever-flowing wholeness. Life-giving fluid enters the system, rich in nourishment, swirling, laden with life energy.... A great whoosh connects what is outside, air of the world, with the inside of me...connects the inside of me with myself. Every cell receives its portion of food, healthy and at one with the environment... ready to pour out what is not needed, ready to release the waste, to open a space to make room to expand for new food. Emptying and filling, the circle is complete and the cycle continues. There is no goal to be reached and no targeted task. It is sufficient to BE, simple and whole, connected within, in unity with the universe.

You might ask, "How can I be in this wondrous place of perfect unity? How can I partake of this wholeness?" Simply by participating in the primal pattern of **BREATH**.

All human beings breathe. We breathe to keep ourselves alive. Our cells respire even within the womb, before our lungs develop and call for air. We have an active relationship within us that brings life and nourishment from our mother, and takes away waste in a basic pattern: Cellular Respiration—Cellular Breathing. When we are born, the cellular breath of life coming through the blood is fed by lung respiration, nourishment from the world mother, and the rhythm continues. We are aware that our lives depend on this pattern. Yet we give it little thought. In fact, part of the beauty is that it **requires no conscious thought to breathe. It happens automatically. Why mention Breath at all then?** For several reasons:

Breath is the key to life, movement, and rhythm. "Breathing is the central biological process among the core functions of the live organism. It is a rhythmical act, repeated incessantly all through our waking days and sleep-filled nights."¹

We breathe automatically, but breath can be influenced by and is reflective of changes in consciousness, feelings, and thoughts. We can attend to our breathing and become attuned to changes in our own inner attitude as we go through our day. (For instance, noticing tension building up and breathing becoming shallow as we approach fearful situations.) And we can consciously choose to alter our breathing to affect our feelings, thoughts, and patterns of moving. (For instance, when I take time to breathe fully before rushing into a meeting or performance, it changes my way of being in that situation. I feel more sense of presence and ease.) This gives breathing a special place among our life-sustaining processes. It is possible to influence breath through conscious intention. Thus breath can be an ally in any desired approach to change.

As the first developmental pattern in the infant, breathing is the foundation, a ground base, for all patterns which follow. “Wherever the breathing is blocked in the body, future patterns will be blocked; wherever the breathing is free, the future patterns will develop efficiently.”²

Conscious cultivation of breath is recognized in many cultures to be an important part of attuning to a spiritual connection between the individual and the universe. This is very clear in disciplines such as Tai Chi or Zazen. Breathing also plays an important role in ritual as well as in attaining changes in bodily or mental awareness (as in the study of Yoga). The healing arts in numerous parts of the world are cognizant of the spiritual aspect of their task. In such cultures, breath awareness is frequently central in training for these professions.

Healing of the Body-Mind is directly connected with restoring full functioning respiration. Health requires each cell to be doing its job. “Cellular breathing forms the building blocks of our ‘life process’. Where it is not taking place, the cells are dead, where there is difficulty, the cells are struggling; and where it is occurring freely the cells are alive and healthy.”³

Many people have disturbances in their breathing pattern and/or are not breathing fully. This can happen for numerous reasons including the following:

- a. birth defects
- b. accidents (acute trauma to the system, such as a motor vehicle accident)
- c. feelings and emotions (such as fear, anger, frustration, etc.)
- d. movement habit patterns (such as slumping or holding in the abdomen)
- e. addictions (such as smoking)
- f. misconceptions about the nature of breathing (for instance, trying to “make it happen”)
- g. environmental stress (such as pollution or pollen)

It is obvious from the preceding that probably most people are enjoying less than their complete breath support.

In Summary, we study the nature of breathing because Breath⁴ influences every aspect of movement. **Everyone could benefit from spending some time each day tuning-in to his/her own breath.** By doing so, you confirm your own life connection.

As stated earlier, the importance of Breath in all aspects of movement is an underlying truth of Fundamentals. A basic principle in teaching or rehabilitation using Fundamentals is the following: **In patterning or repatterning, deal with the breath first.** If you are not sure why this might be recommended, I suggest that you return to [Chapter 5](#) and reread the section on Principle #2: Breath Support on p. 41.

Tuning-In To Your Breathing

Above I mention that everyone could benefit from spending some time each day tuning-in to his/her own breath. If the idea of “tuning-in to your breath” is new to you, that phrase means giving yourself a chance to perceive what is going on as you breathe. It is taking time for sensate awareness, which might include any or all of the following:

- a. Noticing where in your body you feel the filling and emptying to be happening. Do you swell mainly in your chest area, your belly? Both simultaneously? Where does the emptying begin? There is no need to change your normal way of breathing, just notice.
- b. Notice whether the inhalation or the exhalation is longer. Notice if there is a time that you feel no need to do either—there is a natural pause as part of your breath phrase.
- c. When you breathe are you aware of any areas of your body moving subtly? Try putting your hand on an area that is moving to give yourself a touch sensation of the nature of the movement quality of Breath. Just let it happen.
- d. Are you aware of any areas in your body that feel tight and that are not moving, but feel like they would like to? Try putting your hand on that area. Notice what happens as you bring attention to that area through breath and touch. If you are patient, your touch may let you sense a subtle growing and shrinking in this area, bringing a feeling of new life and flow.
- e. Notice any adjustments in your posture that you want to make to feel more comfortable and able to put your awareness on your breath. Let your body adjust.
- f. If you close your eyes do you have a greater sense for the centrality of breath to your liveliness? Try it.
- g. Is there anything about your breath you are curious to try? Go ahead.

These are a few suggestions for “tuning-in.” You will find more on your own, and there are many more movement experiences later in this chapter under the heading “Movement Exploration.” As you read the following section, which deals with situations when you might want to tune-in to your breath, confirm for yourself when circumstances such as these occur in your own life. The next time one occurs, experiment with “tuning-in.”

*Some Situations When You Might Want To Take Time To Tune-
In To Your Breath:*

1. When you're feeling exhausted, "dead".

Breath brings liveliness. Taking time to be moved by Breath Patterning is a way of cultivating aliveness.

2. When you're feeling far away from yourself.

Breath helps put you in touch with your own internal state. It is a link to your proprioceptive self. It can help you locate where you are in the moment, what you are feeling.

3. When you're feeling tense or are under a great deal of pressure.

Participation in the rhythmic phrasing of breathing allows you to release unwanted tensions, since at least half of the cycle is given over to removing waste from every cell. Quite frequently stress comes from "taking-on" or "taking-in" unneeded or unwanted responsibilities, noxious substances, etc. With every breath you have the chance to expel what does not nourish and is not useful to you. With every breath you also have the chance to take in sustenance, life energy.

4. When you are healing from an illness or injury.

Healing is accelerated when oxygen reaches an area that has been injured. It brings new life to those cells. By using your active imagination to envision cells in the injured area filling and emptying, you can maintain a conscious connection with that area. I call this "Breathing-into" the area. In my experience there is a relationship between physiological processes and metaphorical images in my body-mind. The medical field of Psychoimmunology is exploring this relationship and is making important discoveries about a patient's contribution to his/her own healing.⁵

5. When you want more Mobility.

Flow is the key to mobility. Breath creates flow in your body. The word "flow" in the English language refers to movement that is characteristic of fluids, and fluids are substances readily able to change shape. Both liquids and gasses are fluids. In the process of breathing, the fluid of the *liquid* blood carries the *gaseous* fluid (oxygen), streaming and circulating to enter our cells and bring them life food. Thus, breathing gives us a chance to enjoy both the wateriness and the airiness of fluids. By attending to our breathing we physically bring life and also remind ourselves metaphorically that we are fluid by nature, just as our universe is mostly water and air. The breath pattern aids me in becoming more mobile by enabling me in my mind's eye to open spaces in my body (similar to making more space in the lungs) and letting the fluid rush into the space facilitating mobility and change.

6. When you want more Stability.

Stability is increased by sensing connection within the body, and from the body down into the earth. Stability is also aided by sensing the volume of the container for our fluid nature—as in the common reference in our language to a statement being valid or solid, "it holds water." Breath gives both a sense of the body as container and the body as connected spaces which can be filled. Indeed, in every cell, the cell membrane can be relied upon to contribute to stability by embracing and containing

the cellular fluid. Giving attention to your cell membranes as you breathe will bring a sense of “presence” in your body. In addition, lung respiration is stabilizing in the clarity of its phrasing. The cycle can be counted upon—inhale, exhale, pause. You can trust that the inhale will come when it is right for your organism. There is security in that knowledge. It allows for a stabilizing sense of being in the Now moment. You do not have to worry about the past breath or anticipate any future one. You can be completely present and stable.

7. **When you want to connect and communicate with another person.**

Attuning to another’s breath pattern is one of the best ways to connect, whether that connection is in conversation or in a movement event such as playing tennis, dancing, or making-love. Tune-in to another person’s breathing and you know something about that person and are able to be with them at a core level. Most of the time we build this rapport unconsciously. But it is also valuable to be able to choose to be in-synchrony through breath. The connective power of breath is so strong that even when consciously attended to, the connection feels magical! Its mystery remains.

If you noticed situations on this list that are of concern to you in your life, you are now aware of one extremely powerful yet gentle way of dealing with them: Breath.

Let’s move on to delving into some movement experiences with Breath. But first I’d like to talk a little bit about my general approach to designing movement explorations.

Approach To Movement Exploration

When I work with classes exploring the Breath Pattern, I approach it from many different ways, because I want the learning experience to be as rich as possible for people with different learning styles. Some people learn best through touch and proprioceptive knowing. Others learn through moving and knowing kinesthetically, while still other people are attuned to sound. Some have an immediate response to images in their mind’s eye and/or actual visual experiences. Some individuals connect experiences immediately to spiritual feelings, others tap inner emotions, others respond to clear conceptual statements, perhaps backed with scientific findings. Multiple inroads to learning are also important even if only one person is involved (perhaps yourself, or a one-on-one tutorial). Any experience is enriched and amplified as more senses become involved. Because learning is a creative process and these different ways of knowing are part of the creative process,⁶ I include several diverse types of work in each class or individual session, even when just working by myself. There is no one way—it is always a matter of being sensitive in the moment to yourself and those you are working with. Sometimes people need to know the anatomy before they feel free to release into open-ended movement exploration.⁷ Other times the specific detailed information about a phenomenon has no meaning until there is a movement experience.⁸

Attending to Cellular Breathing (as described below) can bring back very early memories. It is an ancient embryonic pattern and frequently people feel “unformed” when doing it. Lying on the floor and simply Being may feel like life’s greatest luxury or it can

feel disorienting, because it is so far removed from our very structured daily existence. I always encourage people to listen to their own bodies and stop when they want to, then continue when they feel ready.

In addition to working individually, I suggest exploring in duets or in groups. In this way there is a chance to experience the relationship issues which emerge from the pattern. Again, this can feel uncomfortable to some people. I suggest they stay attuned to their feelings and keep working as long as they can. One Engineering student who was in my class and was used to achieving alone asked in a pointed way, “Why do we have to do all this stuff working with other people? Why can’t we just work by ourselves?” I replied that I had noticed that most companies (whether dance companies or engineering firms) did not succeed merely on the strength of individual excellence, but on the success of people in the company being able to move into action together, appreciating both commonalities and differences. Another person in the class mentioned that this is also true in romantic relationships. We all acknowledged that in our culture we rarely have the chance to build relationship skills. Since movement is one of the primary ways we connect, it is quite appropriate to know more about relating to people through moving with them.

The above conversation was biased toward developing a “reasonable” justification for working in partners or groups. A question might just as easily come from the other end of the spectrum. I have also had students who have said, “I really feel like I need to spend more time just moving and being a part of other people. Why are we cutting ourselves off and working alone?” To this I might respond that in my experience being able to be with myself is equally a part of the rhythm of relationship as being with another. Again, our culture does not provide much support for taking time to be with ourselves and, hence, most of us have difficulty doing it. Being with yourself in movement, especially when supported by breath, is one very satisfying way to begin.

Movement Exploration

The following movement explorations are suggestions for finding the richness available in putting your attention on moving from the Breath Pattern. They are in no way a formula that should be followed. As you proceed you will find your own ways of being with your movement through Breath. The first time through each experience, some people find it helpful to ask a friend to guide them through the experiences by reading slowly, leaving long gaps of silence for experiencing the movement. Another possibility is to record your own voice on a tape recorder.⁹ Of course neither of the above are necessary. Simply reading the paragraph, getting the gist, and beginning to move might be the best for you. Whatever you choose, follow your own movement impulses and enjoy yourself. There is no need to rush. Let yourself stay with an experience until you feel complete.

As you explore you might want to surround yourself with fluid ongoing sound—perhaps the sound of the ocean, voices chanting in long tones, or the Australian instrument which is played with circular breathing, the Didjeridu.

A. Find a warm comfortable place where you can lie down or sit. Allow your eyes to close as you gradually leave the problems and experiences of your daily life behind for a while. Feel the total

support of the earth beneath you and release your weight even more into it. Begin to notice that you are continually filling and emptying. Don't change it, just notice it and enjoy the inner experience of growing and shrinking that it brings. Your shape is subtly flowing and changing, supported by your breath. If sound comes naturally as you breathe, let it happen. You might find you want to sigh, moan, hiss, or make pitched tones.

B. Put your attention into your cells and relish the nourishment that is coming into them, filling them. Confirm for yourself also that you are letting go of all that is not needed, emptying to make room for new life energy. You may want to put your hand on a part of your body to help direct your attention to cells in a particular area. You will probably notice that you can feel the filling and emptying clearly. You may also notice that you can feel a fluid "inner ocean." Spend quite a bit of time just Being with your cells in the area of your hand, then let your hand move to another area. Your skin is a sensitive perceiver. Touch is a wonderful way to gain knowledge and give knowledge.

C. Notice that you are already moving ever so slightly as you breathe. Enjoy that very small movement. You may notice that, almost without any effort, the Breath could lead you into larger movement. Go ahead and allow yourself to be moved by the Breath. Let go of any set shape you are maintaining and allow yourself to close a little. Feel how satisfying it is to release into yourself, emptying any unneeded concerns. After a moment of being closed, yield to your desire to open spaces in your body. Whichever space your attention goes to, allow that area to open and fill voluminously. For instance you might want to fill the bowl of your pelvis and let it open the space at your femoral joint and down into your legs. Your legs may want to expand away from each other, almost like lungs. As you fill, let the spaces between your ribs open, feel your shoulder blades spread, sending a breath of air down into your arms and moving them. Continue playing with closing and opening, letting your breath move your whole body.

D. Open your mind's eye and become aware of the image that is there for moving in this way. Let your own image give life to your movement. Perhaps your image is of an amoeba, yourself as a single cell, an enormous bag full of sloshing water, a balloon, or an ever-expanding and contracting universe. Whatever your image, let it move you.

E. Try a different relationship to the earth. If you have been lying on your back, let your belly greet the earth and vice versa. Even though you may be lying on the floor, you can sense a connection with the earth. Open the cells of your skin and spend quite a bit of time breathing into the earth.

F. Gradually you may become aware that you want to roll from side to side. Go ahead and roll, melting into the ground as each part of your skin comes into contact with it. Open the cells of your skin to the earth and breathe into the earth.

G. If you feel you get stuck in a shape, spend time breathing within the shape and its own "way out" will come naturally. You may even want to condense or congeal the shape even more momentarily to heighten the experience of easy release that the Breath can bring as it follows its own flowing journey into a new form.

H. Spend time finding where your weight wants to shift. Do very small shifts as you discover how your breath is related to your weight center.

I. Experiment with gradually coming to a stillness, noticing what body parts are supporting you. Explore equipoise relationships on one, two, three, or four body parts. Find how your breath relates to balance and stability.

J. Let your breath move you toward more mobility and level change. Play with changing level, going into and out of the floor "riding" your breath like a wave. (See [Figure 1](#))

K. Play the game of “automatic moving”—noticing which part of your body is already moving (even in the tiniest subtle way) and following it with breath until its phrase is complete, then noticing the next movement that is already starting to happen somewhere in your body and following it to its completion. Notice which part of the breath cycle is the most satisfying to you, the closing or the opening. When you have done this for a while you might start to notice how the closing and opening relate to the exhalation and inhalation. Is emptying or filling the most gratifying today? Keep going until you want to stop. This can be done even while sitting at a desk.

L. Let the breath pattern your movement in structured forms as well as improvisation. Work with very simple movement structures which you already know well. Choose from everyday life, such as climbing stairs or going into and out of a chair from standing. Or choose from a sport movement, such as a tennis serve, or a dance “plie.” Do the movement several times, just noticing how your breath is serving you. Don’t try to push the breath or the movement to happen in a specific way.

M. Pick a movement sequence you usually find difficult to do. Do it several times while attending solely to your breath. Be aware of how moving from your breath is different from focusing on the task . . . just flow along from your breath.

N. Develop your own ritual form of subtle opening and closing involving weight shift with breath support. Experiment until you find several movement sequences which feel like “home,” core to who you are, and are gratifying to do over and over again. Treat yourself to this ritual every morning as a way of greeting yourself and the earth. (Many people around the world use Tai Chi or Yoga in this way.)

O. As you go through your day and are aware of a mood change in yourself or in other people, notice your breathing. Does your breathing change in different situations? (For instance, when you feel comfortable, when you are anxious, when you are speaking to someone, when you are singing, when you are running.) Notice how your mood and the situation interact and are reflected immediately in your breathing. Simply become aware of Breath in your everyday life.

Movement Explorations With A Partner

The experiences above are primarily suggestions for your own individual explorations. It is also very valuable to spend time with a partner tuning-in to breath.

P. Spend time with your partner, simply becoming aware of your individual breathing. Without attempting to change how you breathe, stay with your own breathing and just be in close proximity with your partner as he/she is being with his/her own breath. Notice whether you sense that you are in a common kinesphere (movement sphere).

Q. When you feel comfortable with your partner, allow some part of your body to come into contact with his/her body. Give your attention particularly to the area of contact and “breathe into” the cells in that area, enlivening them and opening a flow channel between your two bodies. It is not necessary to try to change your breath pattern, nor is it necessary to try to change your partner’s pattern. Just be there in contact, attuned to filling and emptying. After a while, gradually let the contact flow to another part of both bodies. (For instance, if you began with your hand on your partner’s belly, perhaps you will roll through to being back to back.) Keep experimenting.

R. If it seems satisfying to both of you, allow yourselves to merge into a similar breath pattern while you are in contact. Let your growing and shrinkings come into synchrony. Become aware of the movement that wants to happen and gradually let it happen. Notice that you move easily in contact

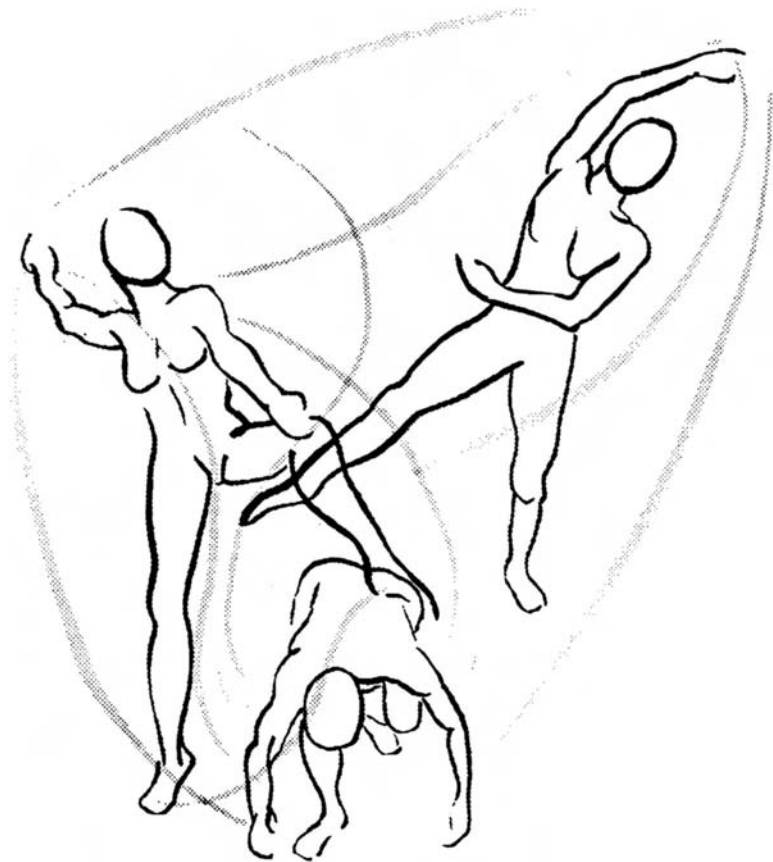


Figure 1. “Riding” breath like a wave for more mobility and change.

together, each person seeming to automatically sense what the other is doing. If this is enjoyable stay with it for a long while. Notice what you are discovering about relationship possibilities in the Breath Pattern.

S. Continue moving with your partner, but not necessarily in contact. Stay attuned to your breath and your partner will stay attuned to his/her own breath, which may or may not be in synchrony with yours. See what kind of duet emerges. Spend time afterwards dialoguing with your partner about what you both experienced. What was your experience of being connected when your breath was in synchrony? When it wasn't? Was the nature of the connection different? Which was most enjoyable to you?

It is also possible to be with another person utilizing Breath as your central organizing awareness even though you are not moving in large movement, but are simply watching him/her move.

T. As your partner continues moving in whatever way is satisfying to him/her, watch and participate by actively being attuned to his/her breath. When this feels comfortable, release the intent

to stay attuned to your partner's breath and simply continue to watch, but remain attuned to your own breath pattern. Be with yourself while also attending to another person. Spend time afterwards discussing this experience together. What new knowledge do you both have? How did you feel as the observer and how did your partner feel while being observed? How was this similar or different from previous observer/observee experiences in your life?

Bonnie Bainbridge Cohen might refer to what we have been doing in this and previous exercises as participating in the “Mind” of Breathing (i.e., utilizing Breath as your central organizing awareness). I sometimes refer to this as a “World View” (i.e., moving in a way that the nature of reality for you is experienced as the rhythm of a particular bodily organization, such as the Breath pattern).

U. Ask your partner to travel through space, challenging him/herself to move fully in types of movement that might previously have been difficult (for instance, a demanding movement combination from a dance technique class, a martial art, or a sport). Be with him/her again from the “Mind” of Breath and also begin to notice where in the body the movement could be fuller. (You might notice a holding in the neck, ankles, pelvis, etc., or you may simply kinesthetically identify with wanting to breathe more fully into a area.) As your partner continues to move, gently touch the area of his/her body or mention it verbally, saying “breathe into the back of your neck.” Continue until both people feel complete. Then discuss what happened. How was this experience different or the same as other previous life experiences you have had in teacher/student relationships or in situations where correction was involved?

Empathy

The type of sharing and ability to be with a partner which you experienced in all of the above explorations is a part of what is commonly called “empathy.” You now have a bodily knowledge of what it is to be empathetically attuned to another person through the Breath pattern in both merging and maintaining separateness. You are also aware that it is possible to be truly “with” someone while also staying “with” yourself. In other words, you do not have to give up yourself to be with someone else. This has important implications for all relationships, but is especially crucial in therapist/client or teacher/student interactions.

Group Movement Exploration

V. If you are working with a group of people, gradually move into a group form where you can be in body contact with each other. Staying with the breath, experience the group slightly growing and shrinking together, letting the shape subtly flow as the group fills and empties. Put your attention to every part of the group body even as you are also attuned to every cell in your own body. Feel the new life, yet also the continuity of Beingness. As you continue to be with the group, remember that change is a natural part of Being, and it is not necessary to decide to change (i.e., allow the group to do what it needs but don't feel it has to change. It is fine just Being.) Let this experience continue until it comes to its own completion. Take time to discuss the experience as a group.

Approach To Medical/Scientific Information

After you have experienced moving while attending to the Breath Pattern, you might be interested in a short bit of anatomical information which I have found useful in my own understanding of Breath and its importance for me and my students. Only brief information is included here and it is preceded by a statement concerning my own approach to using such information.

Anatomy, physiology, kinesiology, and other medical-scientific fields overlap extensively with the study of Fundamentals and provide rich information which can be utilized by the student of movement. Such knowledge does not automatically increase one's skill in *moving*, however. **The key element in usefulness of medical-scientific information to increase movement facility is the degree to which it facilitates a more lively moving image (and, hence, an active understanding) of physiological or neuromuscular connections within the body.** I encourage you to seek the latest medical-scientific information and utilize it for yourself to creatively engage your body-mind in what *for you* would be meaningful images in your current life. There is no *one bit* of information that would be crucial for every person. Medical science is so vast, it is important to frame the search for information within larger questions that might be of concern.

For instance, when I first began studying breathing in relation to movement, my own movement concern was to be able to connect my upper body with my lower body. I had a habit of breaking the coordination and connective flow of movement from my lower to my upper at my waist area. When I moved my arms fully, I tended to hold my breath slightly and lose my grounding. This was disturbing and I needed anatomical support for an image that could let me experience how my whole body was related through my central core. When I discovered the integrating relationship of the diaphragm and the psoas (how breathing supported connection into the lower body, see below pp. 62–64), I was intrigued and kept studying more. Gradually my own internal understanding grew, aided by the anatomical information. But also as my own creative involvement with that anatomical information kept developing, I was excited about its implications for movement connectivity. Scientific information was important because I had a larger purpose than simply accumulating facts and I was able to translate the information into useful metaphors for inviting efficient, connected movement.

As I became more aware of “Whole Systems” through the ecology movement in the United States, I wanted to know more about my own intimate relationship with the world “out there.” Simultaneously, I wanted to be more in touch intimately with my world “in here” (a desire to tune-in to myself in a sensate way). Bonnie Bainbridge Cohen began teaching about Cellular Breathing, and I explored moving with that awareness. It seemed to fill a need and was a new approach to breathing. At this point I found it valuable to deal with the physiology of respiration in the way I do below. All this is simply to say that my approach to scientific information in Fundamentals is to attempt to keep knowing bodily as I take on more “facts.” I seek out information which will actively serve me and shed light on curiosities I have about moving at that time. Then I attempt to find the most movement-oriented way of understanding the information (generally in terms of a

metaphor or image). In the future, I look forward to an ever-continuing development of scientific metaphors, “facts of the imagination” which will emerge.

Here are a few ways in which I might utilize physiology in my work to support an understanding of Cellular Breathing and amplify the metaphor of universal connection implied in that “World View.”

Cellular Breathing Within The Lungs:

When I read about the process of respiration in physiology books, I am drawn to such aspects as the oxygen/carbon dioxide exchange through the tiny sacs called alveoli, which are the ends of the smallest branches coming down the bronchial tree of the wind-pipe (trachea). These tiny sacs are surrounded by minute blood vessels (capillaries) which embrace the sacs in a weblike net, so that the capillaries are touching the sacs in an ongoing “contact improvisation.” The alveolar wall is only one cell thick and the traffic through the cell wall is two way. In the inhalation phase the alveoli expand and fill with air, taking in oxygen from the environment outside. In their contact with the capillaries through the permeable cell wall they release their oxygen into the bloodstream to be circulated and given as nourishment to cells throughout the body. In turn the alveoli through this “dance” of cellular contact, accept the carbon dioxide from the capillaries and dispose of this waste product through exhalation, releasing it out the bronchial tubes and into the world.

With every breath we connect and have an exchange with the environment outside of ourselves. The fuller our respiration, the more each and every cell of our bodies is dialoguing with the world.

Cellular Breathing Throughout The Body:

Frequently when I suggest “breathing into” a part of the body, for instance the feet, and feeling the feet respond to the air in the environment, a student will say, “That’s impossible. I don’t have lungs in my feet!” Of course I agree that the lungs are not located in the feet. But physiologically each cell is like a metaphorical lung. Consider the following imagistic re-framing of physiology:

As I inhale, I take in oxygen from the world which is welcomed into my bloodstream in the lungs (see above) and is then carried to every cell in my body by the circulatory system. I imagine each cell swelling and becoming satiated with oxygen-rich nutriment. Inside each cell the oxygen is used in a metaphoric “life-bonfire,” fueling the job of that cell. In this process of energy production it releases carbon dioxide, which then pours out of the cell carried by the blood, emptying the cell of what is no longer useful. My carbon-dioxide-rich blood is then transported back to my lungs where it is released into the world again and can be utilized by plants for life. My cycle connecting the world with my insides and my insides with themselves is complete.

When I am attending to Cellular Breathing I feel a unity with the universe, a harmony with all living beings. I sense that I am part of a larger ongoing round rhythm that is comforting. It is useful to me to know that my own body perception is supported by

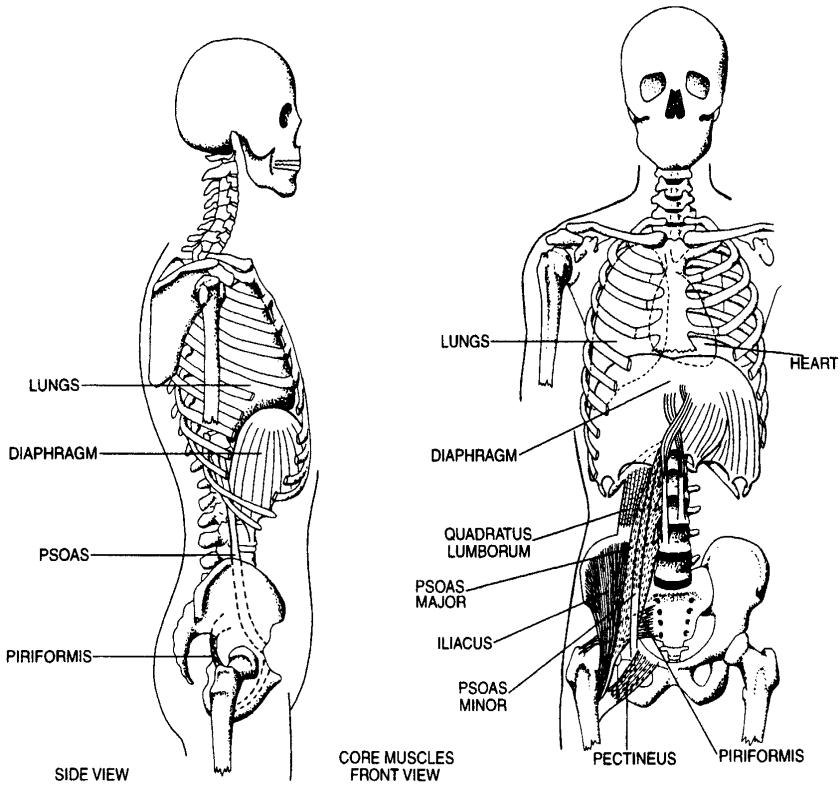
physiology. As Bonnie Bainbridge Cohen points out, “The air that comes into our lungs is of a different quality than the air leaving our lungs. The carbon dioxide that we breath out is breathed in by the plants and is necessary for their survival. The plants, in turn, transform the carbon dioxide into oxygen in their cells and release the oxygen back into the outer environment for our use. The in-coming air is a gift from our outer environment, rich in oxygen. The out-going air is a gift from our inner space back to the world, rich in carbon dioxide.”¹⁰

Anatomy and Kinesiology have also been quite useful to me in exploring the nature of Breath and how it facilitates connectivity. As you read this you will no doubt notice that my discussion of lung respiration emphasizes different aspects than did my discussion of cellular respiration.

Upper-Lower Connectivity In Relation To Lung Respiration:

Sometimes people think of breathing as an upper body activity—associated totally with the lungs. But air rushes into the lungs because of muscular action lower down in the body. Anatomy and Kinesiology tell us that respiration is an activity facilitated mainly by the diaphragm, aided by the abdominals. The diaphragm contracts and descends (like a piston going down), increasing the internal volume in the upper body and automatically pulling air into the lungs. The diaphragm then releases and ascends upward (again, somewhat like a piston) and the air is expelled from the lungs. This simple process continues to repeat itself all of our waking and sleeping lives. How does this relate to Upper-Lower connectivity?

The diaphragm is a muscle which is like a dome forming the floor of the thorax (i.e., the chest area, which contains the heart and lungs) and simultaneously the roof for the abdominal contents (see [Figure 2 & 3](#)). In other words, it is a muscle that is more “central core” than “upper.” Even more interesting is the fact that the muscle fibers of this dome radiate out from its apex to attach to the costal cartilages, the lowest ribs (11 and 12), the costal arch, and even as far down as the 3rd and 4th lumbar vertebrae (by means of the crura). Thus, the diaphragm connects far down into the pelvic basin. In this process, its fibers interdigitate, like fingers crossing through one another, with fibers of the psoas muscle and other muscles which form the internal muscular wall of the abdomen, such as the quadratus lumborum. Since the psoas major connects the lesser trochanter of the femur with the lumbar vertebrae traveling all the way up to the 12th thoracic vertebrae (level of the lowest rib), it is also not simply a “lower body” muscle, but is also (like the diaphragm) a muscle of the “central core.” The psoas is a link from the legs to the spine and can form a “kinetic chain” with the diaphragm to integrate upper and lower body activity through the breath. In other words, there is an internal communication pathway set up between the upper body and the lower body through the diaphragm/psoas interrelationship. This will be seen to be a major factor when we discuss limb-torso connections, weight shift, and travel ing in later chapters. Because the psoas is a powerful flexor of the femur and an important part of the pelvic floor as well as a major element in postural alignment, its central location in relation to the major muscle of “life breath,” the diaphragm, cannot be ignored.



Figures 2 & 3. Relationship of diaphragm and iliopsoas.

Upper and lower body are also in an intimate relationship through the synergistic and complementarily opposite roles of the diaphragm and abdominal muscles. The diaphragm would be less effective in the absence of abdominal muscles that are actively alive to change. A held abdominal area will cut down on efficiency of breathing and will eventually begin to “deadened” that area for sensate movement, perhaps leading to what in Fundamentals we might refer to as an Upper/Lower disconnection. This has implications for dance and sports training which frequently stress *holding* in the abdominal area in order to look thin (i.e., “suck in that gut and keep it there!”)—The diaphragm and abdominal muscles “are always in active contraction but their activity varies reciprocally. Thus, during inspiration the tonus of the diaphragm increases while that of the abdominal muscles decreases, and vice versa during expiration. Hence, there exists between these two muscle groups a ‘floating equilibrium’ constantly shifting in both directions....”¹¹ This also indicates that the whole torso is involved in breathing. It is certainly not simply

an adventure of the upper. I imagine the experience of breathing to be like an internal massage, with the movement of the organs (viscera) massaging the muscles which then feel more alive to movement. **By fully breathing I am surging sensation throughout my torso. I am “in contact” with my internal core.**

Let's be more specific about the relationship of the diaphragm and the abdominals:

In order to **inhale**, the diaphragm contracts and the central tendon is pulled down, thus making more space in the thoracic cavity and decreasing the intrathoracic pressure relative to the outside atmosphere. This difference in pressure pulls air into the trachea and lungs. The excursions of the diaphragm downward pushes on the internal organs in the abdominal area, causing them to move subtly, slightly decreasing contraction in the abdominal muscles. But because the internal organs are contained within an abdominal “girdle” (formed by the rectus muscles, the transversus muscles, and the internal and external obliques), the abdominal contents are not totally displaced forward and downward (anteriorly and inferiorly) but are able to stabilize the central tendon to allow the diaphragm to elevate the ribs. “This antagonistic-synergistic action of the abdominal muscles therefore is essential for the efficiency of the diaphragm. This is borne out in disease, e.g., in poliomyelitis, where the paralysis of the abdominal muscles reduces the ventilatory efficiency of the diaphragm.”¹²

During **exhalation** the diaphragm relaxes slightly and recoils upward and the abdominal muscles contract. Since the diaphragm is no longer pulling down on the diaphragm's central tendon and elevating the ribs, the ribs release in toward the center of the body. As the diaphragm excursions upward and the ribs release, the thoracic space is diminished and internal pressure in the thoracic area is increased relative to the outside atmosphere. This causes the air in the lungs to rush out to the external world. The abdominals are an aid in this whole process. They contract as the diaphragm relaxes, and in doing so they increase the intra-abdominal pressure and push the internal organs (viscera) upwards. This movement of the viscera helps to raise the central tendon of the diaphragm and contributes to full respiration. In my own body I experience this sequence as a slight sensation of suctioning inward and upward at the end of the exhalation which I imagine to be happening along a line of energy that is similar to that of my psoas. It feels like a subtle internal massage. This contributes to my ability to feel alive in my internal support system. The resulting internal “lift” may be one aspect of what is sometimes referred to in dance training as “standing above one's legs” or “pull up.” It is important to notice, however, that this is **an alive activity within the body and is not about holding the abdominals**. In fact, holding the abdominals keeps them from participating in their natural ongoing reciprocal action with the diaphragm and will lessen the sense of internal connectivity.

Breathing is not only about connectivity, **Breathing is also our first experience of inner space**. In our form-defined world, space reveals itself in three dimensions, vertical (up-down), sagittal (forward-back), and horizontal (side-side). With each breath we have the possibility of experiencing change in all three of these dimensions.

The above statement is supported anatomically as we discover a bit more about the action of the diaphragm. On the inhalation, the diaphragm increases all three dimensions of the thoracic cavity.

- a. It increases the vertical dimension by pulling down the central tendon.
- b. It increases the horizontal dimension by elevating the lower ribs.
- c. It increases the sagittal dimension by elevating the upper ribs with the help of the sternum.

During exhalation, action of the diaphragm (assisted by the abdominals) decreases all three dimensions of the thoracic area.¹³

Movement Exploration—A Spatial Approach To Breath

In a very basic way we can begin to experience our relationship to space simply by tuning-in to our breathing. I suggest that you *begin to notice which dimension feels most emphasized in your own natural breathing process. Enjoy letting your breath move you into space. Then, just for fun experiment with other spatial emphases in your breathing, noticing how each emphasis in space affects your feeling about yourself in the world and how it influences your expressivity. Now return to your own easy breathing and enjoy how it supports your own preferred way of moving.*

You might find it helpful to experience the spatial aspect of the anatomy material in movement. There is no one correct way to do this. Use your imagination in relation to the anatomical information which interests you. For instance... *In a group form it is possible to move the action of the diaphragm, pulling down on the inhalation and releasing upward on the exhalation. Let the entire group experience descending while filling and rising while emptying...* Now explore the action of the ribs—spreading away from the center of the group on the inhalation and releasing into a “soft embrace” around the center on the exhalation. Let the whole group experience this aspect. Then divide the group into two parts, letting one part reveal the diaphragm and the other part of the group reveal the ribs. In this process a beautiful rhythmic “movement choir” will emerge if you stay with the breathing and amplify the spatial feeling.

As we come to the end of this chapter, take a moment to return to the more basic general experiences of “tuning-in” to your breath, which you were encouraged to try at the beginning of this chapter (p. 53). Notice how your experience of breathing has changed as you have invested in the Pattern of Breath in many different ways. Relish the fullness of your experience.

Notes

1. Irmgard Bartenieff, manuscript, p. 239.
2. Bonnie Bainbridge Cohen, *Contact Quarterly*, Fall 88.
3. Bonnie Bainbridge Cohen, *Evolutionary Origins of Movement*, p. 11.
4. Henceforth in the text, I have chosen to capitalize the word “Breath” whenever I am referring to the whole gestalt of the breath pattern as a way of organizing the body-mind. This includes the metaphoric aspects of breath as a connector with the life-giving universe as well as the actual physiological process of bringing oxygen to the lungs and cells. Using Breath as a central organizing awareness is like living in a very special “world.” The view of reality from inside that world is different from the complex work-a-day world of the 20th

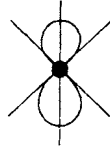
century, or even from the view of the world that is possible when organizing from another pattern of bodily organization, such as Head-Tail. This “World View” concept is dealt with in detail in a later chapter.

5. This field is changing so rapidly it is not useful to site specific data. I recommend that the reader explore the latest scientific findings for him/herself.
6. See Charles Johnston’s, *The Creative Imperative*.
7. If you have this need, you may want to skip ahead and read the anatomical information on Breath in this chapter, pp. 60–64, and then return for the movement experiences.
8. I happen to be biased toward moving first, but this could be because I am a kinesthetic learner myself—or it could be because I trained with Irmgard Bartenieff, who very much believed in learning through action.
9. Italics in the text below imply the reading voice.
10. Bonnie Bainbridge Cohen, *The Evolutionary Origins of Movement*, p. 11.
11. Kapandji, *The Physiology of the Joints*, Churchill Livingstone, NY, 1974, p. 150.
12. *Ibid*, p. 150.
13. *Ibid*, p. 146.

To speak only about the diaphragm doesn’t cover every aspect of spatial change while breathing, of course, because both cellular and lung respiration involve the whole body. Further anatomical discussion is beyond the range of this book and the little that is included here is meant as an enticement for you to continue exploring on your own.

CHAPTER 7

Core-Distal Connectivity



*Coming into my innermost core,
all parts of me find relationship.*

*I experience support within and
life lines of connection through which
I pulsate and radiate bright with internal energy.*

*I can go out from my core,
because I know I can return.
I am centered, supported by my core.*

Connectedness: Finding Core to Distal Relationships

Before I can confidently move on my own in the world, I need to have a sense of my own center. I need to know that my whole body is connected through my central core and that I am supported there. I need to understand bodily that I will not “fall apart” and my limbs will not “fly away,” that all parts move in relationship to each other, that they are neuromuscularly coordinated. In other words, I have to feel connected within myself and able to claim my own movement sphere (kinesphere) before I feel comfortable moving in the world. These needs sound quite complex and advanced, both in terms of movement and in terms of personal psychological growth—and they are. However, a beginning of movement support for meeting these needs comes quite early in an individual’s development, even within the womb. And this early pattern of Core-Distal Connection can be returned to often by adults to reclaim a sense of core support for torso and limbs moving in harmony.

One of the principles of Fundamentals is: “The whole body is connected, all parts are in relationship. Change in one part changes the whole. When we acknowledge relationship between parts of the body, it makes possible both differentiation of the parts and integration of the whole.”¹

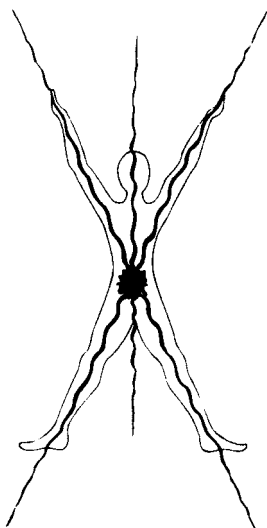


Figure 4. Core-Distal Connectivity

The question then arises, “How do human beings gain a sense of this connectedness in their own bodies?” It is one thing to say that the whole body is in relationship and quite another to actually experience that fundamental truth in one’s own body. Frequently, as movement becomes complex, movers “forget” that their whole body is connected and begin trying to “stick their limbs into the right places” to fulfill tasks in a sort of helter-skelter way, without any organizing framework. Connective pathways seem broken. Limbs sometimes seem to fly away or get left behind, no longer connected to the alive action. When this happens, it is important to return again to simple movement and spend time rediscovering that **the whole body can be organized by a pattern of connectivity that begins in the center core of the body and radiates out through the torso to the proximal joints, the mid-limbs and all the way to the distal ends of the extremities.** (See [Figure 4.](#))

Let’s look at this basic pattern: Coming into and going away from my center I take in and pour out, taking from my environment and giving to it. The “in-out” rhythm is fundamental in this pattern as in the previous one, Breath, but there is a difference. The Breath pattern is beautiful as an organizer of our whole body in a fluid way. But if we never left the Breath pattern we would fail to develop highly articulate limbs. Our movement might seem amorphous, without delineated form—almost like a one-celled animal growing and shrinking. So now we move on to discover how our torso and limbs begin the process of individuation and integration, finding relationship and support in our body’s central core, near our navel. Again we will be working with a basic in-out rhythm, but this next pattern—that which connects our core to our distal ends—is less circular than the Breath Pattern. It is more like a star, pulsating and emitting energy from the

center to move the distal ends, or bringing energy and sensory awareness from the ends of the extremities back into the center.

Fundamentals classes taught by Irmgard Bartenieff quite often began with total body “Closing and Opening,” “Condensing and Expanding,” or “Concaving and Convexing.” These basic changes in total body form were an important preliminary warm-up for any later movement, preparing students to be willing to invest in change within the entire body constellation, everything happening together. In this practice of connectivity Irmgard stressed working within the body’s central core to initiate the condensing or expanding. Students sometimes wondered why we did so many simple actions of closing and opening. I later realized that we did them repeatedly because most of us were not initiating in our central core, or we were not letting all limbs respond together to change the total shape. We did not sense the simplicity of letting the center move and the limbs “get the message” or vice versa. There was not one unifying pattern to our movement. Irmgard was trying to stimulate us to find this pattern of Core-Distal Connectivity. When I found the pattern, I was thrilled. It was so basic! Even complex movement could be coordinated using this pattern. Let’s discuss this more fully:

As we move into this pattern, each of us begins to locate our own individual center for organizing movement. We are no longer totally at one with the environment as we were with Breath (even though, of course, the Breath pattern supports everything we now do). We begin to discover a place of central importance within ourselves where we can connect and organize all aspects of our own movement. We begin to establish our own kinesphere and discover its center. We exercise our whole body moving into and away from center. In this way we begin to know where we are—what is “me” and what is “not me.” And we also learn to follow our own rhythm of coming into self and going out to the world. These are vital lessons to learn.

I call this pattern “Core-Distal Connectivity.” In Body-Mind Centering it is called “Navel Radiation.”² It is a pattern of radial symmetry with the center of control in the middle of the body. All of the limbs are directly connected to the center. Each finds its relationship to all others through this navel core and each finds its individuation by coming into and away from the support in the center as shown in [Figure 5](#). As Bonnie Bainbridge Cohen states, “In the human, the navel functions as a primitive center of control.... This pattern is apparent when you are holding a newborn baby. You have to be continually aware of its head, because the baby will suddenly throw it backwards. If you watch, you will see that the movement is initiated not from the neck but from the navel. As the baby snuggles into you, you can also see that their total body flexion is from the navel.”

The pattern of Core-Distal Connectivity is a comforting reminder of primal beginnings within your mother’s womb, when the life support system poured directly into your body at your center. Your navel is but a residual scar of separation from this lifeline of the umbilical cord. Deep within each of us we know and bodily remember organizing life around this stream flowing into our innermost body, a natural centering. We might curl in toward the cord, even grasping it. We might open slightly away while still contained and protected within the womb, all limbs still in relationship to the center. In the fluid environment of the uterus, the one connection was the umbilical cord. In the beginning of life this was “home,” security. Even though this early pattern is the basis of what we now

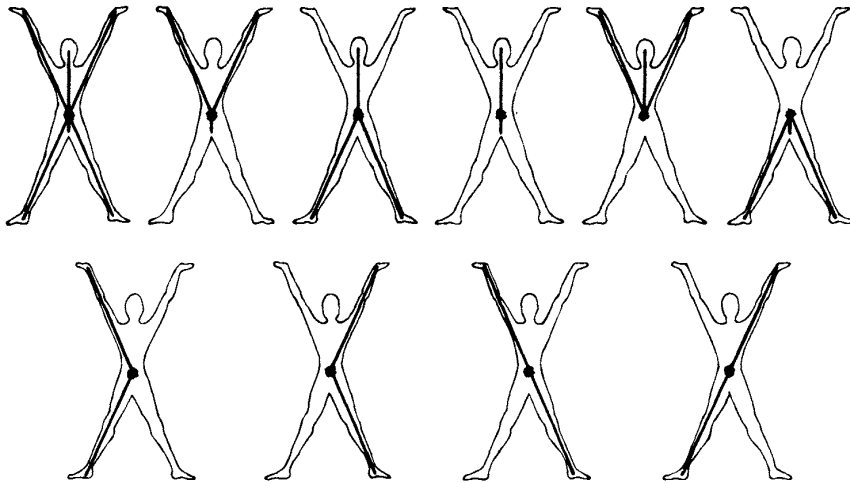


Figure 5. Core-Distal Connectivity: Each limb finds its relationship to core and through core to each of the other limbs.

call Core Support, its manifestation in utero is not about support and stability but is about mobility—moving in relation to a center. Indeed, especially later in pregnancy, the support is provided by the wall of the uterus. All limbs are able to practice moving into and away from the center of pulsating blood flow with no chance that they will not be supported. Martha Eddy points out³ that this neurological movement experience in utero cannot be overlooked in its importance for later full movement functioning. She states that what is mobilizing in one stage (i.e., this pattern of “Core-Distal Connectivity” or “Navel Radiation”) becomes stabilizing in the next stage (i.e., as a support for Head-Tail relationships at the spinal level of patterning). In essence, what we later refer to as **“Core Support” for limb-torso connections is available to us expressly because those internal body connections have already been explored and strengthened in actual movement while in utero.**

Patterns of total body flexion and total body extension develop during the last trimester of life in utero. They are called Physiological Flexion and Physiological Extension and both reflect and contribute to basic postural tone.⁴ Once the baby is born, other reflexes come into play—the Tonic Labyrinthine Prone and the Tonic Labyrinthine Supine. When the infant is lying prone, there will be an increase of flexor tone throughout the body. And when the infant is lying supine, there will be an increase of extensor tone throughout the body. Both reflexes draw the infant toward the earth and provide a sense of grounding. Bonnie Bainbridge Cohen feels that this “bonding with the earth” is an important predecessor of “the infant’s bonding (embracing or drawing toward) with its parents and others when held.”⁵

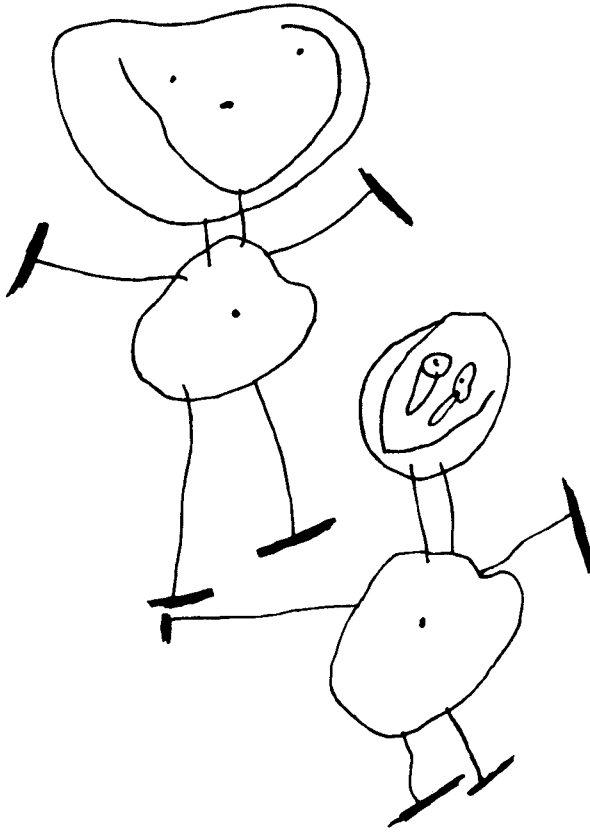


Figure 6. Happy person and crying person, by Ashby Anglin, age 4. (Note prominent navel)

As an adult these early reflexes (which are some of the reflexes underlying Core-distal Connectivity) are no longer automatic. They have become integrated into your total possible range of movement responses. Yet the bodily re-mem-bering of such basic movement brings a sense of satisfaction and ease to adult human beings. As we grow beyond reflexes we can explore innumerable relationships between parts of our bodies, but the ability to sense connection of these parts through the central core retains its primary importance if we are to feel whole and supported, able to coordinate our movement. Young children seem to recognize the importance of the navel center. Several two-year-olds I know like to rub their navels in a self-comforting movement. Frequently “first pictures” of people (ages 3–5) highlight the navel or show limbs connected to it. (See [Figure 6](#)).

And, of course, adults are fond of the “I’m gonna get you” game which playfully approaches infants or young children at the belly button causing a characteristic total body response of excitement in all six limbs (including head, tail, arms, and legs).

As we mature, we begin to distinguish self from environment. Core-Distal Connectivity is a pattern deep within our body that is there to support basic relationship rhythms of coming into “self” and going out to “other” or the world. This is an important part of this pattern, but before we discuss it further, it would be worthwhile to take some time to explore the basic pattern in movement.

Movement Exploration

The following movement explorations are suggestions for discovering what it is like to organize your whole body by putting your attention on Core-Distal Connectivity, letting your whole body action evolve from that pattern. Since you are an adult, your movement will not be a primitive reflex (it will not happen automatically), but the early reflexes which have been integrated into your neuromuscular system will be there underlying your choiceful movement. Enjoy returning to a basic movement pattern and letting that pattern provide a baseline of organization for all your more complex movement. These suggestions need not be followed rigidly. As you proceed you will find your own ways of moving within the pattern.

Again, as with the Breath Pattern, you might want to surround yourself with fluid ongoing sound—perhaps of the ocean or voices chanting in long tones. Sometimes with this pattern of Core-Distal Connectivity, however, it helps to have brief periodic accents such as bird calls or bell sounds above the fluid drone. This contrast in sound facilitates moving all the way out to the environment through the limbs.

Find a warm, comfortable place where you can lie down. Experiment with whether you want to be on your belly, your back, or your side. Close your eyes for the moment and let any current problems from your daily life be left behind as you tune-in to your breathing. Feel your weight supported by the earth, or in your mind’s eye by a watery womb-like environment. Stay with this experience for a while.

As your breathing releases any tensions your body is holding, notice that there is movement in the area of your navel, supported by your breath. You may want to put your hands there to give you a fuller perception of the movement. Notice that movement energy pulsates and radiates out from your navel center. Tune into the distance out away from your navel that you can perceive movement happening. Experience the full radius of the energized area. Notice that it can go equally in all directions. And conversely, energy pours back into the center from all directions. (See illustration Figure 4, p. 68.)

*As you perceive energy radiating out away from and pouring back into your navel center supported by your breath, you may find that, almost without any effort, your whole body wants to move gradually into larger movement—opening all six limbs (including your “tail,” your coccyx) away from center, and closing all six limbs in toward center. Let this begin to happen, opening out only as far as you feel the energy radiating. You may find you want to roll to your side or come to sitting as you open and close. Stay with this movement for quite a while. As you continue, put your attention on letting **all six limbs respond equally to the energy from the center.***

*As you are moving, open your mind’s eye and become aware of the image that is there for moving in this way...**your whole body moving because the center moves.** Let your movement become enlivened by your own image as you continue to move. Perhaps you feel radiant and bright*

like a child's drawing of the sun, shining warmth and inner energy out to the world. Perhaps you are like a starfish traveling using all limbs. Or maybe you feel more like a turtle, able to conceal yourself or reveal yourself at will, carrying your home with you. (See Figure 7.)

When you feel all six limbs able to move in relationship via your navel center, increase your awareness at the ends of all your limbs. Gather information from your environment through touch and bring it back into yourself. When this is comfortable, let your eyes open, inviting more sensory input from your environment. You might even want to imagine that you become like a starfish with "eyes" which perceive at the ends of its extremities and a mouth at the center. Go out from your center through your torso, your shoulders and femoral joints, your elbows and knees—all the way to the ends of your fingertips, toes, head, and tail to perceive your world and bring the knowledge home to center, letting your whole body respond.

As you continue to move, notice if your opening and closing are similar or different in quality. Do you tend to open in fluid ease and come in a more controlled way, or do you send yourself out while in control and release into center with free flow? Perhaps you want to open suddenly and close in a more luxurious sustained way, or maybe you tend to extend out into your environment gradually and come back into yourself more quickly. Do you go out to the world asserting your strength and come in softly? Or do you open to the world delicately and come in powerfully? Experiment with your own possibilities, letting the quality of your movement change. As you do this, take time to tune-in to any changes in your own inner feelings that are engendered, perhaps pleasure, fear, etc.

When you are ready, begin to change level. See if you can do this by letting your center radiate out into a spatial direction, activating all six limbs. Play with going toward and away from places in your environment in this way. Notice that you feel totally committed to your movement, and that your limbs tend to find their own alive balancing relationships. If you find that you are not balanced, check to see if all six limbs are equally active. You may be using one or two limbs more than the others; for instance, the head without the tail, or arms more than legs.

Choose a structured movement event that is very familiar for you from sports, dance, or everyday life. Experiment with doing this movement several times, organizing your whole body from an awareness of the Core-Distal pattern. For instance, if you choose a tennis serve, let the movement radiate out from your center into all six limbs. Even though this complex movement seems to stress one limb over another, in actuality the coordination facilitating the serve is supported by an underlying pattern connecting all six limbs through center. The same is true of a "tendue," a "plie," or an "arabesque" in dance—or even simply stepping up onto a chair and reaching for something on a top shelf in everyday life. (See Figure 8.)

Play with movement that is a bit more challenging, risk taking your center off-vertical and come to a balance, or let yourself really travel from center, sweeping through space. As you do this imagine that you have elastics from all six limbs through your center. Play with extending those elastics away from center, all six at the same time, as you suspend or come to an equipoise. Notice the tensile support that you feel in space. Let the elastics release and bring your limbs closer to center as you travel before you suspend again. If you have been working symmetrically, now let yourself work asymmetrically. Begin to take your center into the air or into the floor. Fly and fall! Enjoy the rhythm of going out to the world and into yourself, opening and closing. Sense the coordination in your whole being in relation to moving actively in your world. When you feel complete, rest.

At this point you might want to take a moment to draw or record in some way your bodily experience of this pattern of Core-Distal Connectivity. Maybe you sensed colorful

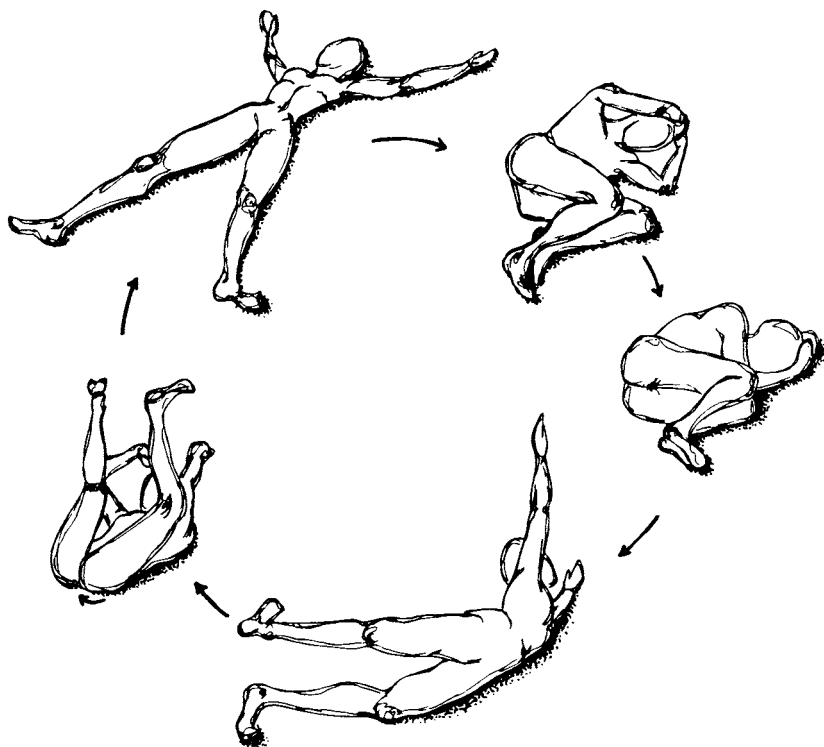


Figure 7. Total Body Closing and Opening: All six limbs move because your center moves.

connections in your body. Perhaps you found yourself singing a rhythm. Or you may want to jot down words associated to the experience, perhaps in a poetic manner.

The previous explorations have stressed all six limbs in equal active relationship through the central core. This is an important first experience and brings with it a feeling of wholeness. For later complex movement to develop, individuation of each limb in relation to the navel center is also important, as is the development of relationship between two and three extremities.

Partner Work with Core-Distal

Work with a partner in this experience. Lie down and begin tuning-in to your breath while your partner places both hands on your belly. As your partner senses the energy radiating out from center s/he gently traces a pathway on your body going out from center into any one of the six extremities (preferably whichever feels most energized). S/he leaves one hand on the belly and traces all the way out to the end, giving you a chance to put your total attention into that open channel, noticing that the extremity is directly connected into center. This experience is heightened if your partner's touch can convey the volume of the limb and the feeling of an interior, open, three-dimensional connection.

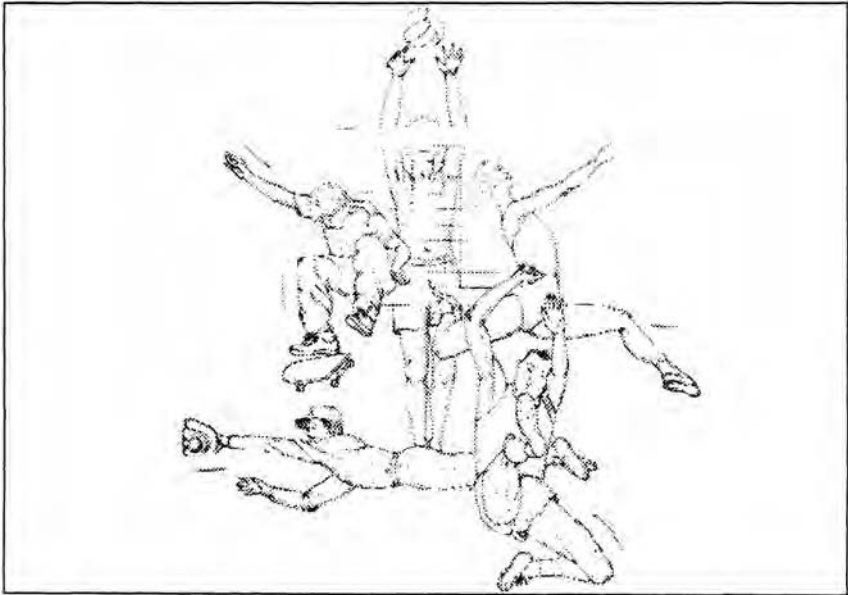


Figure 8. Core-Distal Connectivity underlies all movement—sports, dance, everyday life.

It also helps to gently rock the limb, surging energy back into your center. Proceed through all six limbs in this way, taking time to proprioceptively perceive connection and then kinesthetically perceive it.

Womb-like Exploration: It can also be helpful to have your partner enclose you in a ball shape (almost like the uterine wall) and give pressure as you open each limb out from center, so that you can feel the core connections out to the distal end through a closed kinetic chain. (For instance, giving pressure on the ball of one foot underneath your second toe as your leg extends while also surrounding the rest of your body and the top of your head with a firm touch.)

*After all limbs are experienced singly, you will probably want time to explore moving by yourself, personally activating the connections. **The limb moves because the center moves—the center moves because the limb moves.** If you are having trouble connecting while you move, move slowly as your partner traces the connections again.*

When you have experimented moving each connection singly, begin exploring two or three at the same time, always connecting them via the navel center. Try using one, two, or three points of support and moving the rest of your limbs, experiencing and challenging your core support.⁶

With your partner providing an awareness of one limb-center connection (by maintaining touch contact with one limb and the center), move two other limbs in relation to it. For instance, if your partner is providing awareness of the connection of your tail with your center, move both arms, fully sensing their relationship to the tail via the navel center. This is useful, for example, making “angel wings” or a ballet “port de bras.” The exercise can also be done while traveling slowly.

The pattern of Core-Distal Connectivity lends itself to discoveries about connectivity in relationships as well as within one body.

With a partner, come into contact and breathe together until you feel that you are a part of one energy source (i.e., you share a breath rhythm and a common space or kinesphere). First let both of you open out away from and come back to that energy center. Then experiment with one person maintaining a stable relationship in the center, perhaps supporting the partner in a counter balance as s/he extends away. Amplify this until the more mobile person is traveling away from center and returning to it. Maintain a sense of energy connection with your partner, even when physical touch is no longer possible.

Experiment with both persons going away from center and returning to the same central energy spot. It may be necessary at first to retain at least one point of contact to feel a lifeline connection through the center. After you have finished moving, take time to discuss with your partner any images, feelings, or thoughts that came up about relationships as you moved. How have your own experiences in relationships in your everyday life been similar or different? In love relationships? In family?

If you are working with a large group of people, you might want to experiment with Core-Distal Connectivity as a metaphor for group relationships as well: follow a similar progression as the duet outlined above. Discuss with your group any situations when this might be an effective form (metaphorically) of a group working together.

Working in a group form can also provide a wonderful experience of Spatial Tension, particularly how Core-Distal is an underlying pattern for Central Spatial Tension as an approach to Kinesphere.

The above experiences have provided bodily knowledge of the basic pattern of Core-Distal Connectivity, both as a primal pattern in itself and as an underlying foundation for more complex movement. If you moved through the experiences outlined, you may have noticed (as I do) that previously difficult movement, such as balancing, becomes easier when the whole body is organized by one pattern. Frequently, as movement becomes complex, we “forget” that we are connected. We scramble to produce shapes and fulfill tasks dictated from external sources (teachers, coaches, etc.) as if we had no center and were not in command of our own sphere of movement. If this happens to you, take time to return to the patterns of Breath and Core-Distal Connectivity. They are the basis of body “connectedness.”⁷ **Neuromuscular knowledge is patterned knowledge.** Confirming and practicing these simple patterns of relationships daily will enable you to move fully, initiating in your core and following through to your distal ends or vice versa. This makes intricate orchestrations of bodily countertensions possible. Without this underlying neuromuscular knowledge, confident movement is difficult, because core support is lacking.

Core Support

When I perceive “core support” in someone, I experience in that person an alive, central core which actively engages to both uphold the body and energize interaction within the individual and with his/her environment. The word “support,” according to Webster, means “to carry the weight of.” The weight of the body is carried or borne up effectively, so that there is an ease in being in his/her body in either movement or stillness. The word

“support” also means “to encourage, help, advocate.” When I think of “core support” in this sense, I think of being able to do what I want to do effectively, with faith that I can function as a mover. I have faith that my organism will follow its intent into function without having to shut down other parts of the system in order to accomplish the task. My organism encourages me.

Both of these types of support seem to be facilitated on the body level by establishing a lively connection in the inner core of the body, including (but not limited to):

1. Cells which are nourished through breath to provide a fullness and fluid presence, a sense of a ground of Being.
2. Healthy organs which provide adequate volume and inner shaping experiences as they move in accommodation to one another.
3. Muscles with vital tonus and balanced work around a joint, able to engage in a serial elastic effect to create and re-create proper spacing in the bony structure.
4. A bony structure (legs through spine to head), which functions more like a tent pole than a column, but is utilizing both aspects of support (i.e., with upward thrust provided by tensile support as well as downward compression).

Central to this kind of support is the rhythm of breath in relation to psoas function, heart and lungs in relation to sexual organs, pelvic floor in relation to diaphragm, and abdominals in relation to back extensors.

All of the above provide inner networking which give a physiological basis for a Core Support. This facilitates a psychological core which can say, “I accept who I am, and move in action as myself. I can be an ‘advocate’ for myself.”

When I do not see Core Support I see an individual moving in a way which seems strained or inefficient, pushed or held up by something other than the core. I frequently see extra muscular holding, generally in the head/neck and chest or in the lower back, coupled with spinal misalignment. I sense an effort intensity unwarranted by the situation, as if the person is trying too hard yet “doesn’t have his heart in it.” This is one manifestation of lack of Core Support.

I frequently also see the opposite—rather than an overly involved external intense musculature, I see an individual whose body seems totally amorphous, an unformed “mush” or “blob,” with internal organs, muscles, and spine hanging passively into gravity. This individual seems to be asking for motivation, for involvement from core-activation of weight; waiting for a sense of an active support from self.

Both of these problems can be addressed in a most basic way by beginning with activating the breath at a cellular level (cellular respiration) and progressing through the developmental progression.⁸

But unfortunately, there is no one magical solution for gaining Core Support. As the discussion above implies, inroads from any different facets may be appropriate, depending on the individual person. This is sometimes discouraging to students or clients who are looking for a “quick fix,” but one underlying truth of Fundamentals is that patterning is a personal adventure. If you do not feel supported in your core, you might want to consider any or all of the following, staying attuned to what feels most vital to you in the moment.

1. Nourish your Core—your cells, fluids, organs, muscles, bones, and life-spirit.
2. Activate your internal muscles. Rely less on your external muscles for support.
3. Orient yourself spatially. Acknowledge that you are the center of your kinesphere.
4. Find Core Purpose. Locate what matters in your life, and live your life from that place of Purpose. By living from what matters, you allow your feelingful core to shape your life. Let's deal with each of these briefly.

Nourishing Your Core

Healthy cells, fluids, organs, muscles, bones, and life-spirit are important to Core Support. They require nourishment. They can be nourished by Cellular Breathing. I recommend that you return to [Chapter 6](#) and take time to “tune-in” to your breath as described there. Nourishing your core is also related to the clean air you breathe and the healthy food you eat. Breathing polluted air or smoking cigarettes is not nourishing to your cells. Nutrition is also an important part of feeling that your organism supports you. If you need help in this area, it is wise to seek help from a nutrition expert.

It is also possible to feel your organs more alive (and thus your inner core more vital) by practicing putting your attention into your organs, visualizing them in their full three-dimensional relationships with each other. (Use anatomy books to help you find out more about where the organs are in relation to one another and how they nestle together.) Become familiar with the shape of the organs and their location. When you can sense their volume, you can begin moving from that knowledge, letting your movement be guided by inner shaping changes, such as the lungs enclosing and embracing the heart, or your kidneys (which voluminosely fill the area back and up from your pelvis near your last ribs) sending energy sinking and advancing down and forward to the bladder along the urethra (running a somewhat similar pathway as the psoas). Try this as you lunge forward low.

Activating Your Internal Muscular Core

A very important aspect of Core Support, which Fundamentals addresses through movement experiences, is the muscular/physical one. Some individuals find that they can begin to feel supported in their inner core by locating ways to become more active in their internal muscles. This conscious awareness of internal muscular action is empowering for both people who tend to hang passively into their weight and for persons who habitually overuse external muscles. I have found the following exercise (A.) to be very useful in that it puts me in a situation where I can experience support in a new way—sort of an upside-down approach that doesn't let old patterns get in the way. Because this exercise produces a reflex that is a fundamental part of breathing, it reveals also that again Breath is the underlying pattern for core support. In this exercise we use the breath to locate internal kinetic chains that are a part of Core-Distal Connectivity. The exercise provides a way to engage a beginning of internal “lift” within the pelvis, sequencing through the navel center and up into the upper body. In Fundamentals we sometimes call the initiatory moment in this sequence “Hollowing,”⁹ or the “Hollowing impulse.” This

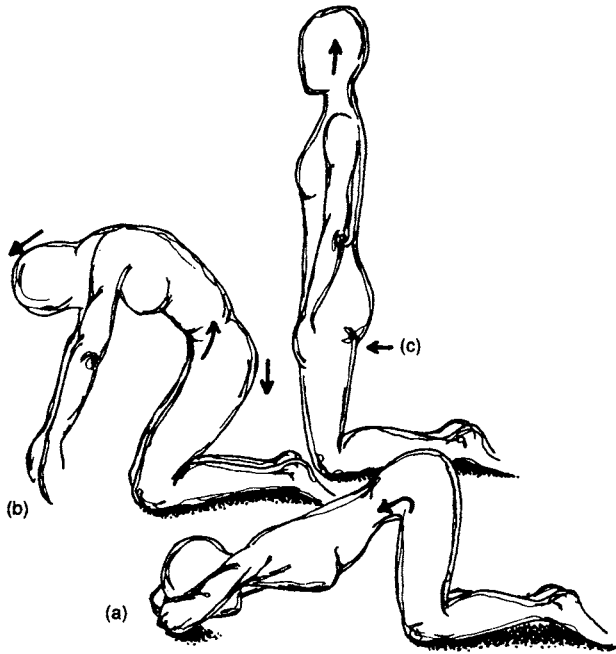


Figure 9. Hang and Hollow.

part of Core Support is the beginning preparation for almost any more complex movement.

If you are interested in the medical-scientific support for this “hollowing” sensation, review the section on the Diaphragm-psoas and Abdominals interrelationship in [Chapter 6](#). It addresses what is described below as a “suctioning” sensation. To visualize the psoas as close to core, see cross-section, p. 127.

Movement Experience

A. Hang and Hollow (Figure 9): (a) To locate this hollowing impulse for yourself, support yourself on your knees and lower arms with your forehead resting on your crossed hands. Let your whole torso drain forward and down from your femoral joint, which is directly above your knees. It is important to really hang—do not hold your back. Let your self release into the position. Now take time to tune into your breathing, filling fully down into your pelvis (as if it had lungs) on the inhalation, allowing your breath to flow easily through your body and out the top of your head on the exhalation. It is not necessary to push the breath out. Let it run out like a stream. Continue for a while until this feels comfortable. Notice that at the end of your exhalation your abdomen becomes very concave, hollow and soft and you feel a slight internal tugging sensation on both sides down by your pubic bone. It is as if there is a tiny suction, a feeling that your viscera are falling back and in toward the thoracic area of your spine. You do not have to make this happen. It is a reflex. Continue

to notice this moment at the end of your exhalation during several more breaths. (b) **When you have located the sensation, you will be able to utilize it to help you actively initiate movement at the very most central core of your body.** In this next stage, we move from sensation into action. **You will be activating connection.** At the end of your next exhalation, use the sensation of the slight internal tugging or suctioning to help you locate the area low in your pelvic basin where the movement of falling back and in toward your spine from your pubic bone is occurring. It is from this place that you can begin to activate your core to support for verticality. At the very most hollow moment, actively engage the muscles you located in that area and use them to begin to roll your spine towards vertical, allowing your coccyx to reach toward the floor like a tail. To accomplish this, as you engage in the lowest part of your pelvis, sequence through a kinetic chain following the flow line of your suctioning sensation, rolling through your spine towards your twelfth thoracic vertebrae. (Imagine the action running along your psoas.) At first, go only halfway to vertical. Let the impulse travel up through the inside of your body until you are unrolled part way through your spine. Let your head and arms hang passively into gravity, so that you are truly supporting from low in your core and through your hamstrings. Now release down to your original position, sending energy out away from your center. Repeat the sequence several times, coming halfway up, until you have confirmed for yourself a sensation of initiating movement by coming into your core and going away from it using the hollowing impulse. (c) When this feels secure, at the **halfway point, initiate in your hamstrings to bring your pelvis to vertical over your legs, connecting through your adductors as well,** then continue to unroll through your internal core until you arrive vertically over your knees. As you do this, you will notice that you feel supported in your internal core. You have not simply hoisted yourself up from your external musculature, but have experienced a natural unfurling like a fern. This is successive movement. Enjoy how the movement passes through your body gradually. (As you come to mid-chest area in your unrolling, do not pull back with your chest or head. This will break the internal flow and will not lead to supported connection.) Experiment with following this internal support impulse several times until you have an alive sense of muscular usage in your internal core. Then use this sensation when sitting, standing, or walking. To prepare to utilize this when standing, pay particular attention to actively engaging in your hamstrings and adductor muscles as you initiate the roll through to vertical. (But make sure that you have not tucked your pelvis as you arrive over your legs.) Your spine will have its own natural curves and your head and tail will be free, supported through your core by your “legs to head” connection.

In order to gain a greater sensation and understanding of how your internal core travels all the way through the center of your body, spend time exploring the following image lying down and then again transfer the sensation to sitting, standing, or walking. This stream image helps to engender a sensation which can be used to locate the moment of internal connection deep in the pelvic basin that is needed for lengthening and supporting in your core when you are vertical, and also to initiate an effective total body closing or opening (as in Exercise C., which follows, or in the Head-Tail abdominal strengthening exercises in [Chapter 8](#)).

B. Streams—Vertical Throughness (Figure 10): Lie on your back with your feet “planted” on the floor, knees up to the ceiling. Breathe fully, filling into your pelvis as if it had lungs. On the exhalation, in your mind’s eye watch two streams flowing through your pelvic basin, down a slight hill from both sides of your pubic crest to your twelfth thoracic vertebra, along the lines

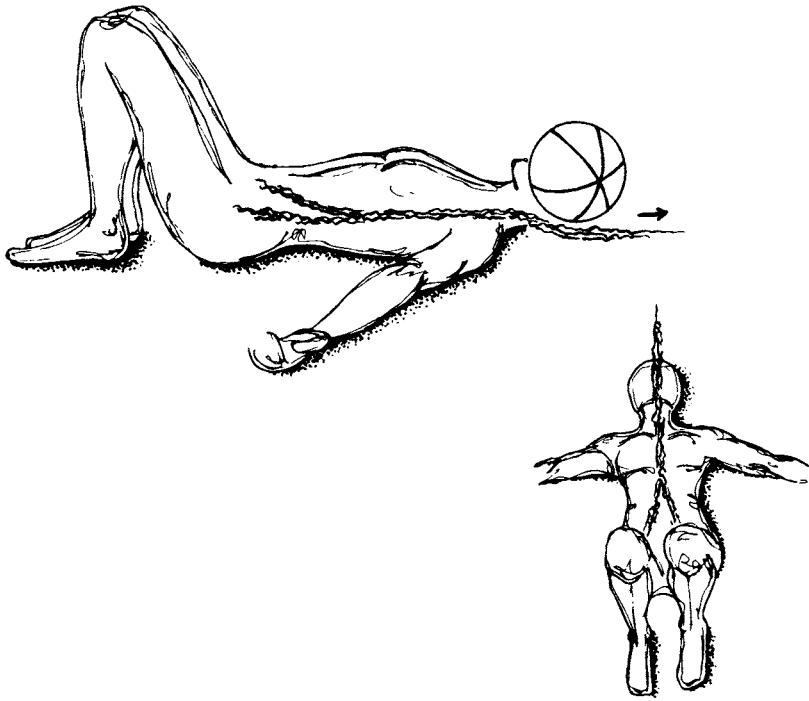


Figure 10. Streams-Vertical Throughness.

of your psoas. At the level of your lowest rib (T-12), these streams join to form a river which continues flowing neckward through a beautiful verdant valley in your chest area. (The river bed is deep in between luscious green mountains.) When it reaches your neck (C-7 vertebra), watch it flow down a slight hill to the level of your ears, then continue headward. Imagine that your head is a ball which is floating on top of the river and it is floating away. If you watch the river in your neck flowing deeply, sensing the fast-flowing motion of the water at the lower levels of the river (riverbed), while the ball is floating away on top of the river, it will prevent you from tucking your chin. You will sense that both the front and the back of your neck are open and lengthening.

This image is a very helpful one for setting up the connection of legs to head, because the psoas provides a connection from the legs through to the spine, and the image continues that connection through the central core up and out the head. When this connection is operative, I apply the term “The Throughness of the Vertical.” As you practice the image standing, your energy will be running upward more like a fountain and *your neck will be flowing back and up* rather than back and down, as it was when you were lying down. We will discuss this further in [Chapter 8](#), but now let’s explore more how this image allows all six limbs to connect to core as we close and open lying on the floor. Now use the hollowing sensation which you felt in exercise A and the stream image in exercise B to help you initiate in your core a total body closing in the Core-Distal Pattern:

C. Total Body Closing and Opening: (See [Figure 7](#)) Lie on your back on the floor with your body in the shape of a big X. Inhale, filling your torso fully, to the pubic bone. On the exhalation, let the breath run easily through your torso and out the top of your head... again, almost as if it were a stream,¹⁰ flowing down a slight hill, away from your pubic bone. Let that hollow moment at the end of the exhalation (when the stream is flowing through your neck and your head is flowing away like a ball on top of the stream) initiate a shape change, a total body closing of all six limbs, beginning in the lowest, most internal part of your pelvis, and rolling you onto your side (see illustration). By initiating in this way you will not be grabbing in your external abdominals, but will experience a sense of flowing through your center, almost as if you were coming around from the back side of your body. Your belly will fall in toward your spine rather than bulge out and your spine will lengthen on the back side. Go ahead and open your whole body from your center while still on your side so that you send all six limbs away from your navel radiating energy outward. When you are extended, again focus on your breath and let the hollowing moment at the end of the exhalation begin to roll you to your back again while bringing all six limbs (don't forget your tail!) actively around your core. Open from your center and extend all six limbs while you are on your back. Repeat this whole sequence until you can feel that your core is engaging in all phases of the closing and opening.

When you feel comfortable with this basic movement sequence, you can play with initiating the movement with all the various Core-Distal relationships in [Figure 5](#). (For instance, initiating with the connection of your head and tail through core, letting the rest of the body participate.) I frequently use this exercise as a connectivity warm-up, because it gives a chance to activate the Core-Distal connections which underlie all of the later patterns.

D. Improvisation: Once you have found connection in your core, you might want to go back and re-experience the more open-ended movement improvisation we explored earlier in this chapter using Core-Distal, noticing how conscious awareness at the initiatory moment gives a feeling of greater support, playing with the image of elastics extending away from core to all six limbs or repeating this phrase verbally to yourself, “Because my core moves, all six limbs move and find relationship,”

Locating Spatial Support

Still another part of Core Support is the spatial one. When an individual knows where s/he is, s/he can feel comfortable and at home. Training in moving with Central, Peripheral, and Transverse approaches to the kinesphere and in moving with clarity in Dimensions, Planes, Diagonals, and Transverse Spirals can build spatial confidence and skills.¹¹ This helps a person feel oriented in the world—at home in the center of his/her kinesphere. The “Core to Distal” connections which we have just practiced are a body-level facilitation of this spatial aspect. They open clear pathways within the body, which can then become conduits for energy through space. And all of these pathways find relationship and support through the central core.

Finding Core Purpose

Another important aspect of Core Support is a psychological one. If an individual is motivated, finds purpose in his/her life, and approaches life with confidence and self-esteem, it is both a manifestation of Core Support and an inroad to achieving it. Using Core Support at a body level creates confidence that one can extend into relationship with the world without “falling apart.” Finding the confidence in this basic pattern sometimes first needs outside support (much like the original uterine wall), so that the individual can practice coming into and away from self in a safe environment and can in this way discover what is core and what is purposeful, what really matters. This is an important part of a therapeutic situation, where the individual participates in a supportive relationship that facilitates the finding of life purpose and the development of skills that are useful in feeling successful and alive in the process. In a therapy “container,” the individual can take plenty of time to come into his/her own center and can open fully when ready.

In a slightly different, but no less important way, this is also the domain of education. For instance, if the movement-training classroom situation is such that students can feel inwardly motivated and can fully invest in movement sequences which they can successfully complete, they will be developing Core Support. Because both Effort and Shape qualities come from inner attitudes, if students are encouraged to engage their own Effort/Shape life as they train in movement, they will feel committed from within and supported at core. Trusting students to find their own images or their own phrasing for movement will aid in this process. In regular educational settings that are not movement based, training students to locate what matters most for them and what feels purposeful will both increase learning and increase Core Support.

Implications Of Core-Distal Connectivity

Now that we have explored the specifics of Core Support, let’s return to the larger pattern it is a part of—Core-Distal Connectivity. Just as with all other patterns, this one has implications for both mobility and stability. I am more mobile when I am enjoying moving through open pathways in the center of my body than when I envision each limb separately. Having these central channels open allows my energy to freely move through me rather than getting stuck. For instance, it is obvious to me as I move that a base of Core-Distal Connectivity underlies large Cross-Lateral traveling movement because my weight center is activated easily when I employ this pattern. A push from one leg rushes immediately into my weight center and through to my balancing arm on the same side and to my opposite leg that is reaching out into space. Because I take my center with me, I don’t fall into the all-too-prevalent trap of overreaching, going beyond where my weight can support me. And since my weight is immediately available, I can use its momentum to increase mobility still further.

On the other hand, the pattern of Core-Distal Connectivity also supports and underlies complex patterns of stability by facilitating countertension and grounding in relation to my center. When I do a movement sequence balancing on one leg (such as a ballet

adagio), I can be stable because all my limbs are finding their relationship through center. They are in a balanced tensile relationship which can enjoy gradual change, like chords in music which go through gradual progressions yet are related to a central key. In the very beginning of this chapter I talked about the importance of being able to produce a change in the shape of the whole body—becoming more concave or more convex—with that shape change being initiated in the body’s core. In other words, a change in the center changes the entire constellation, and any change has a resultant effect in the center. This has quite a few implications. It seems to be at the core of a movement metaphor for an individual’s ability to be both **receptive** and **expressive**—that is to take in, to receive, and to express—pour out from within.

Because the navel center is where the “guts” are located, a person might use the phrase, “I know it in my guts,” “It goes to the gut,” or “In my gut I love, hate, accept, reject, etc.” That aspect of what is “Gut Truth” for the person is usually expressed with a movement that comes into or goes away from the body’s core.

It is also at the heart of the fight-or-flight response—the body’s ability to organize all limbs at once, in relation to center, and act instantaneously. In truth, this pattern of movement which we have explored in this chapter sets up a basic pattern of “Twoness” (as opposed to “oneness” in the Breath Pattern). Here are a few of the polarities that could be explored:

Me-Not Me	Acceptance-Rejection
In-Out	Gather-Scatter
Towards-Away	Inside-Outside
Take in-Give Out	Receptive-Expressive

This sort of differentiation (“twoness”) is part of a developmental progression. Toward the end of this book we will discuss integrating these polarities, but right now we are still in the process of distinguishing the differences which will enable us to grow. Let’s proceed to the next chapter for an exploration of the spinal level, which is the next differentiation process in our bodily development.

Notes

1. Chapter 5.
2. I have chosen not to use the phrase “Navel Radiation,” because students seem to find it both amusing and confusing; they associate it with some sort of military (U.S.Navy) vessel carrying nuclear warheads. Instead I am using the phrase “Core-Distal Connectivity.” The inconsistencies in approach from Fundamentals—which stresses “Core-Support”—and Body-Mind Centering—which focuses on the Navel Radiation Pattern—were pointed out to me by Pam Schick. Many discussions ensued. The issue is still in process, and I appreciate the dialogue. I would also like to thank Martha Eddy for consulting with me on the BMC approach to Navel Radiation and how she sees concepts in Fundamentals fitting in to that framework.
3. Personal communication, 5/23/89.

4. **“Physiological Flexion** develops first. It is the process by which the flexor muscles on the front of the body increase their tone so that the infant’s total body is curled into a flexion posture. This total body flexion pattern has two sources: organ tone and skeletal-muscular tone. It begins in the lower abdominal organs and is reflected first as planter flexion of the toes. As the tone of the organs develops upward through the torso, the flexor tone increases successively upward through the feet and legs, into the fingers and hands, up the arms, and finally through the organs to the neck into head flexion. By birth, the flexor tone is so strong that the baby’s body will remain in a flexed C-curve, even when the baby is suspended in prone (belly down), and therefore sets the newborn’s basic postural tone. It is important in modifying the individuation of extensor tone which proceeds from the head downwards and differentiates movement of each of the bones separately in sequential actions. **Physiological Extension** also develops in utero, but slightly behind physiological flexion. It is the process by which the extensor muscles on the back of the body increase their tone so that the infant’s total body is curled into a total extension posture. This total body extension is also reflected first in the feet, but it originates in the development of tone in the tip of the spinal cord. As the tone of the spinal cord progresses upward to the brain, the extensor tone of the skeletal muscles develops up through the legs into the hands and arms and into the neck and head. While it is present at birth, it (physiological extension) is not as strongly developed as the physiological flexion. It modifies the individuation of flexor tone, which proceeds from the head downwards and differentiates movement of each of the bones separately in sequential actions.” Bonnie Bainbridge Cohen, “The Alphabet of Movement,” in *Sensing, Feeling, and Action*, p. 125.
5. For more on complementary patterns and other reflexes, please refer to Bonnie’s book, *Sensing Feeling and Action*.
6. A chart follows for reference, excerpted from Bonnie Bainbridge Cohen, 1986.
7. See Concepts in Fundamentals, Appendix—Concepts.
8. See [Chapters 6–12](#).
9. See Concepts in Fundamentals, in Appendix.
10. See “Streams—Vertical Throughness,” exercise B, above.
11. See Appendix for more specific information on the spatial forms, and [Chapter 11](#) for movement experiences with diagonal and transverse movement.

CHAPTER 8

Head-Tail Connectivity



I become differentiated

...I am an individual with my own spine

I ground myself in my own sphere through yielding and pushing

...I reach and pull, giving attention to my outer environment

...I follow my curiosity and my imagination

...enjoying my supportive, flexible, playful, sensuous spine.

...All things seem possible.

A spine which supports and easily achieves verticality while also having the potential for fluid grace with flexibility seems to convey an important message: “This person is proud to be the human being s/he is and is comfortable attending to the world.” Our culture places particular value on “the individual” and has intuited that a sense of “individual” resides at the Spinal level of development in the human being. Indeed, the culture is quite deprecating of a person who has not achieved a sense of self, whose internal support does not allow them to reside easily in a fluid upright relation to gravity. One hears the colloquialism, “That spineless creature!” referring to someone who has no strength of character or personal will. A person’s habitual stance in relation to gravity, that person’s Body Attitude, is largely determined at the spinal level and seems to resonate with immediate meaning to other human beings. Someone whose spine is drooping into gravity (parents sometimes refer to this as “slumping”) is generally perceived as being “unmotivated,” “depressed,” or “a victim.” (See [Figure 11](#)) There is also an immediate reaction to someone whose spine is overly rigid and locked into the vertical. Such a person may be perceived as “uptight” or “inflexible,” as seen in [Figure 12](#). A person whose head juts forward may be read as “an aggressive, determined go-getter,” while someone whose head is habitually back and up may seem “judgmental,” “snobbish,” or “remote,” as shown in [Figure 13](#).

The other end of the spine is equally full of potential meaning in our culture. Someone whose tail is tucked under may seem to be “submissive” or “ashamed,” somehow trying to lessen themselves (as in a dog whose tail is tucked between its legs). While a person whose tail opens out to the back may seem to be “brazen,” “sassy,” “flirtatious,” or “available.” (See [Figure 14](#)). The particular specific meaning associations may be different for you, the



Figure 11. Depressed?

reader, and of course meaning in movement is derived from many layers or information, including how the person's energy is being used (Effort) and the context. I suggest you begin observing spinal relationships and notice what your immediate first impression is.

This may not be your impression as you get to know the person and perceive other aspects of his/her interaction in the world. But I am confident that the way a person has organized him/herself at the spinal level is giving a powerful message to others in the society whether the individual is aware of it or not.

The bodily knowledge of self and establishment of a personal sphere of action in relation to the environment begins very early in life. Even within the womb the fetus is able to sense itself proprioceptively as its head or tail pushes against the uterine wall and receives sensory stimulation.¹ Our spine, guided by the head and supported by a Yield & Push from the feet, pushes down the birth canal and then does a spiraling reach out to enter the world. An individual is born. Once out in the world, we continue to pattern our spine daily by giving attention in a sensate way. We turn our head when our cheek is touched, rotating in the spine to "root" toward our mother's breast, fulfilling our basic needs for nourishment. We have reflexive spinal reactions to touch in the torso area such as the Galant Reflex which causes a slight lateral flexion of the torso on the side of the torso touched. And in the very bottom of our spine we reach our tail forward and up when our parent is cleaning our anal area. These basic reflexes begin to establish movement in all the planes of our three-dimensional world: Rotation in the Horizontal plane, Lateral Flexion in the Vertical plane, and Flexion-Extension in the Sagittal plane.²

Head-Tail Relationship

In [Chapter 4](#) we discussed the fact that "a willingness to participate in changing relationships and changing patterns of relationship" is core to the Fundamentals system and that Fundamentals is in a sense "a relationship technique." This is particularly important in achieving a fully functioning Head-Tail connection. One of the principles of



Figure 12. Inflexible?



Figure 13. Snobbish?

the system³ is “The whole body is connected, all parts are in relationship.” This is a fundamental truth. What is overwhelmingly obvious to anyone observing people moving in dance classes, sports training, or even in climbing stairs, however, is that **most people are not utilizing Head-Tail Connectivity to aid them in moving.** It is as if they had forgotten that both ends of the spine are alive and functioning in relationship. Most commonly one sees a head “disconnected” from the rest of the spine, striving to pull the individual around the room or, conversely, the rest of the body joyfully moving through the action while the head stands aloof or separate from the line of flow. This is perhaps logical in a culture which for several centuries ‘has operated within the context which has fostered an attitude of Mind-Body split. A sort of reverence for what goes on in the brain seems to combine with a slight disrespect for what goes on in the rest of the body.



Figure 14. Flirtatious?

Conversely, because most people are not actively identified with themselves as “Body,” there is sometimes a certain awe around people who are fully using their bodies, such as dancers and athletes. This reluctance to own “Body” neglects the fact that our brains are constantly connected to and receiving information from the rest of our body. Frequently I ask my university students to point to or touch their bodies to indicate the place that feels most alive and available to them. A great majority touch the head and state that, for them, moving the lowest part of the spine is associated with “not me,” or “slightly unfamiliar,” or “only associated with sex.”

The concept that head and tail are in a constant and always changing interactive relationship is often the single most important realization that a student of movement can have. Such a realization provides an automatic inroad to patterning the whole body from a central core of alive involvement. All movement, from simple to complex, is aided by awareness of relationship through the spine. This is true whether the movement is a simple walk or a complex gyroscopic turn, dipping down into the floor and recovering to standing. To begin to gain a sense of this it seems important to experience relationship in movement.

Most of the time we associate the term “relationship” with another person. I generally provide a chance to explore the nature of forming and participating in relationships by working in partners for a first experience.

Movement Exploration With A Partner

You might want to provide yourself with some lively music for this exploration. I have found that music from Africa or the Caribbean contributes to the fun—perhaps conga drums, marimba or steel drums. The directions are very simple:

Take a partner and begin moving. Continue moving together for five minutes. Let whatever happens happen. Follow your impulses.

After moving, take time to discuss with your partner what you noticed about the nature of the relationship that emerged as you moved together. Do you have any images or metaphors about the relationship (i.e., “we were like twins” or “it seemed like conversation,” “a battle”)?

Here are some possible relationships. Perhaps you noticed that you and your partner chose to do one or more of these. (As you will notice some are different ways of expressing a similar thing.) If you are curious what any are like that you did not do, try them with your partner improvisationally.

1. Total unison—doing exactly the same thing.
2. Mirroring—doing the same thing, but from “my” side.
3. Opposites—doing exactly the opposite (however interpreted).
4. One leading, one following. Getting the message and going with it!
5. One active, one passive.
6. Being moved by the same outside force.
7. Agreeing to the same general idea, each person fulfilling it in his/her own way.
8. One says “Yes,” the other says “No.”
9. One moving, one maintaining an alive stillness, acknowledging relationship.
10. One moving, one withholding or deadening/denying relationship.
11. One providing support for the other.
12. A conversation.
13. A question & answer session.
14. Each doing own movement and aware of other’s movement, interactively playing with and co-creating a whole.
15. Both involved in creating a single form.
16. Both investing in the same energy line, or dynamic quality. You list others:
- 17.
- 18.

After moving, talk with your partner about anything which you discovered about your own preferences in choosing ways to be in relationship. Which ways of relating felt most familiar or comfortable to you? For instance, do you enjoy leading more than following? Does it feel more comfortable to you when both people are doing the same thing, or do you prefer it when each person “does their own thing”?

Head-Tail Movement Exploration

Now play with the same improvisation ideas in relationship in your own body. Instead of working with your partner, use your own head and tail as the two “people” who are moving in relationship. Move for five minutes exploring several of the relationship possibilities mentioned above. You might want to have your partner call out possibilities such as, “Your head and your tail are doing the same thing”...“Your tail is leading and your head is getting the message and is following”...“Your head and tail are in a playful conversation”...“Your head says, ‘Let’s do this!’ and your tail says, ‘No’”, etc.

Confirm for yourself which patterns of relationship felt familiar and which felt new and different. What did moving with a consciousness of your head-tail relationship bring to your moving?

Now choose movement that you enjoy doing from your own field. It might be a specific sport skill such as cross-country skiing or a dance combination from a technique class. Experiment with various head-tail relationships from the list above as you do the movement. Notice which relationship facilitates your desired movement most effectively.

It is also fascinating to see how these relationships work while doing basic everyday actions. Try, for instance, rising from a chair or climbing a flight of stairs leading with the top of your head, letting it float forward and up and letting your tail get the message and actively follow. Do it again and notice if it is different to have both head and tail intend to go forward and up. Now do it again and experiment with having either your head or your tail say “no,” or become passive. The next time you climb a flight of stairs simply notice what your relationship is between your head your tail.

Once you have experimented on your own with both skilled actions and “everyday” actions, ask your partner to touch the top center of your head and the very bottom of your coccyx (tail) as you slowly move through those actions. (such as slow dance movement, adagio, or climbing stairs) Ask him/her to continue verbally reminding you, “Your head and tail are in relationship.” Touch facilitates awareness of relationship in your central nervous system by providing proprioceptive feedback to your brain. When this is combined with verbal confirmation, the learning of new patterns is accelerated.

Using Head-Tail Connectivity To Address Life Issues

Before you continue with your movement explorations, take a moment and jot down any “issue” in your life which keeps coming up for you—something you might see as a block in your life or a problem which feels unsolvable and may need a whole new perspective. Put the piece of paper away and let your attention to the issue be put away with it. Wiggle and shake through your whole body, getting your flow going again.

Your may want to put on lively fun music again. Play now with letting yourself be curious and have fun simply exploring what your spine can entice you to do. Let it turn you inside-out, play with going upside-down, spiral into and out of the floor, almost “swimming” like otters or seal, reversing yourself and your view of the world. See how many new options you can discover for yourself physically. Rest when you are ready.

I have a hunch that moving in this way can help unblock or unstick fixed notions. Check back with your “issue” which you previously recorded. Notice if you sense any new options for “movement” within that life issue.

Full Spinal Mobility versus Holding Tension

Whenever I watch otters or seal moving I am tantalized by their spinal-level patterning. The liquidity and ease in their head-tail connection motivates me to engage my own spine in that way simply because it looks so enjoyable! I want to have fun in my physicality! I notice that I feel a similar way when I watch virtuoso dancers or high-performance athletes. Quite a bit of my joy in kinesthetic identification comes from sensing a lively

spine. Conversely, when I notice that I am not enjoying watching a mover, I frequently then become aware that the person's spine is not fully involved. The person may be maintaining a fixed relationship in the head-neck area, which cuts the head off from receiving movement impulses. Or often the person is holding a set relationship in the lower back and so their tail and pelvis seem rigid. I also notice that some people hold the chest forward and up by setting the lower thoracic spine. **All patterns of holding cut down on the fluid nature of the movement and, hence, the possibilities that are available at any one moment.**

All of these holding patterns are there in an individual for a reason. That reason could be physiological or psychological, genetic or environmental, but whatever the original cause, making changes in spinal patterning will lead to profound changes in the individual and his/her relationship to the world. Because the spine is in some sense the bony structural element physically at the individual's core and, hence, core to the nature of the individual, the changes may be thrilling or scary—probably both. **A small change in availability of any part of the spine for movement will mean the possibility of a large change in possibilities at the distal end of the limbs.** For instance, habitually holding tension in the lower back may mean that the bony structure of spine-pelvis-femur is not in an alignment which will promote inefficient use of the psoas as a femoral joint flexor. This may result in hip-hiking and overuse of the tensor fascia latae or overuse of the rectus femorus muscle to flex the leg. In all probability, release of holding in the lower back (not “tucking,” but true release of tension) will facilitate proper action of the psoas and the leg will be able to flex easily—this is important when one wants full range in the femoral joint, since the psoas is a major flexor, especially above 90 degrees.

Yield & Push Patterns And Reach & Pull Patterns

Now that we are aware of the importance of acknowledging relationship possibilities between the head and the tail (indeed, within the spine as a whole!), lets go on to explore some of the basic aspects of spinal level patterning which will influence all later patterning. This is the first pattern which organizes us bodily by differentiating

- A. **Yield & Push Patterning** from
- B. **Reach & Pull Patterning.**

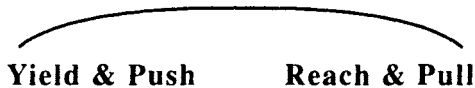
These two ways of discovering ourselves bodily lead to very different results in terms of movement abilities in the long run. I first became truly aware of these differences through the work of Bonnie Bainbridge Cohen, even though for many years I had read in Physical Education and Physical Therapy books about Push and Pull patterns. These never seemed different to me at first because I was approaching them from an Effort level rather than a Body Patterning level. From an Effort perspective, these two words both seem to convey strength, directness, and possible sustainment. I made a consciousness leap when I encountered Bonnie's approach and started adding the words “Yield &” to “Push” and “Reach &” to “Pull”. “Yield” brings an aspect of bonding with support before separating with the Push. “Reach” brings an aspect of a goal orientation in space before the Pull.

And, of course, “Yield & Push” and “Reach & Pull” say something about the phrasing of the whole.

A. Yield & Push Patterns relate to “grounding” and a sense of self. Immediate confirmation of embodied existence comes when one lies on the belly (as babies do) and actively yields the weight of the body into the earth with outpouring flow through the forearms until, as the earth meets the yield, the yield becomes a push and one begins to rise away from the floor. Through **yielding** before pushing one connects with the earth (gravity). This allows **bonding** to underlie the eventual separation which happens with the push. Through **pushing** the individual compresses the body (bony structure, musculature, organs, etc.) momentarily, thus stimulating proprioceptive knowledge of the structure or solidity of Being itself. Ability to give attention inwardly through sensation is developed. The individual yields & pushes and gets feedback in the ground of his/her own Being. This underlies development of strength and relationship to gravity. Yield & Push patterns also provide the power to “get away,” to separate self from other, to establish a personal kinesphere, to become an individual. An early example of this is the birthing process. (The baby’s lower body yields & pushes against the uterine wall, sequencing through to the head, which then pushes against the cervix, causing it to dilate, for example.) Later, as Yield & Push sequences to Reach & Pull in crawling, the power to propel toward something is claimed. Still later, we literally yield & push *down* to stand *up*. We ground ourselves to “take a stand.”

B. Reach & Pull Patterns give the ability to move into and in relation to the world, the space beyond the individual. When one reaches out, connection with the world beyond one’s own kinesphere is possible. Attention can be focused outward and the individual has the capacity to move into that environment as s/he reaches and pulls. Movement into space is attainable. This lends an expansive sense of possibility to the individual and is the beginning of goal orientation and an ability to use space effectively. Reach & Pull, especially when supported by a Yield & Push, makes it possible to go “toward” something or someone and thus is an important bodily aspect of “Choice.” Again the birth process is an example of this choice. Head Push, Reach & Pull guides the baby down the birth canal, supported by a tail and feet Yield & Push against the uterus wall. The baby chooses to be born, to begin the process of individuation from the mother.

Developmentally, **“Yield & Push” precedes “Reach & Pull.”** But development is never totally linear. It happens in overlapping waves. In general, however, for a given body relationship, the individual first learns to Yield & Push with the related parts (thus providing grounding) and then learns to Reach & Pull with the related parts (thus providing access to space and the outer world). **An effective phrasing** is a Yield & Push to a Reach & Pull.



The ability to phrase bodily in this way could make a major difference in most people’s movement. Frequently I see dancers and other movers Reaching far beyond themselves and disconnecting their movement from themselves, because they are not sequencing from

a Yield & Push pattern to support the Reach. This is particularly obvious in dance when a student attempts to soar through the air in a leap with all limbs reaching out into space, but has not propelled the reaching arms from a connected push from the lower body (as in an “arabesque sauté” or “grande jete”)—Conversely, I sometimes see individuals who don’t seem to be traveling through space on the dance floor or in athletics, even though they are obviously working hard. Frequently these people are Pushing, but haven’t given themselves a clear path to go in space, because they are lacking the accompanying Reach part of the phrase. In the sports world, in diving, for instance, clarity in the Reach & Pull from the head is necessary to complete the phrase which begins with a Yield & Push from the lower body into the diving board.

This differentiation between Yield & Push Patterns and Reach & Pull Patterns and the related phrasing will be true for all Developmental Patterns beginning with the HeadTail and continuing through Upper-Lower, Body Half, and Cross-lateral. Let’s now focus specifically on a few ways to begin discovering how these patterns operate at the Spinal level.

When the fetus is in the womb, especially in the final weeks before birth, the entire spine is primarily in flexion. Both head and tail have the possibility of being in contact with the uterine wall. It is a warm and safe environment, snug and protective. Since the surrounding wall is so close, it is easy for the fetus to gain proprioceptive knowledge of him/herself by yielding & pushing against the container and sending messages through the spinal cord from head to tail or vice versa. This provides a sense of self-confirmation and stimulates the central nervous system. Fetuses frequently suck their thumbs in utero. This sucking causes changes in flexion and extension of the skull on the spine through action of the jaw and, hence, will also be sending changing signals through to the tail. (You can notice this if you try sucking your thumb with your thumb touching your soft palette in the back of your mouth, even while you are sitting in your own comfortable chair—although it will not happen if you are holding in your jaw). This sucking action is also stimulating awareness in the digestive track, which is a through-line of openness between the top and the bottom ends of the body. The subtle Head-Tail movement which happens when sucking thus provides a rhythmic sensate perception of the through connection between both ends.⁴

It is, of course, impossible for you to return to you mother’s womb to experience Head-Tail connection in its earliest phases, but the movement explorations below may give you a taste. If you get a chance to hold a newborn or watch it in its crib, notice how it continues to enjoy pushing with its head or tail, lengthening and shortening spinally. Some babies love to push against the ends of their crib or against a baby carrier being worn by their parents. As adults moving, of course we are using much more than simply spinal level patterning in the following movement explorations, especially when we move off the floor and come to standing. I want to encourage you, however, to experience how even the very basic “baby patterns” underlie more advanced movement, such as a dancer’s plié.

Movement Exploration

Before we explore specific Yield & Push Patterns, let's work with an even earlier pattern in terms of evolutionary development—a sort of soft flexibility that is reminiscent of the movement of water creatures swimming, propelling themselves through the water by fluid successive movement, tailward to headward or vice versa. Bonnie Bainbridge Cohen suggests that this ability is related to the movement of sea squirts and the Lancelet *Amphioxus*, which is a fish-like animal with a central notochord.⁵ This type of luscious, fluid mobility at the spinal level in humans can be found by focusing on the softness of your digestive tract, your brain, your very malleable vertebral discs, and your spinal cord gently floating in its dural tube. Practice initiating movement from that inner liquidity, rather than giving attention to the bony vertebrae.

A. Flowing Spinal Undulating: *On a floor (not a rug), bring your attention to the gushing flowing digestive tract which is in front of your spine. Breathe easily into that open, undulating, elongated tube that connects your mouth with your anus. You might want to imagine something delicious and begin a subtle salivating sucking and let “desire” find its connection all the way through your torso, undulating and wriggling. Notice how easily you sense your liquidity through your core in this very “gutsy,” sensate way.*

If you would like to wriggle in a less desirous, “gutsy” way, bring your attention to the flowing open passageway which houses your spinal cord.⁶ Enjoy the softness and “ease of being” that you sense in this protected tube. Begin to send waves of successive flow through your central conduit. Let yourself wriggle headward, beginning way down near your tail. Then reverse the flow and wriggle tailward. Play with developing an ease of adaptability and suppleness in a gentle, slow rhythm that feels nurturing to you. Let yourself “swim” in this way for quite a while,

Headward and tailward wriggling was one of Irmgard's favorite “exercises” on the floor. It is fun to balance the gutsy kind of wriggling from the area in front of the spine with the more gentle waves from the back area of the spine. I also enjoy playing with successive spinal waves while kneeling, standing, or traveling around the room.

When I work with clients in a Physical Therapy clinic who are recovering from a whiplash or herniated disc and are almost totally healed, but have stiffened their spines and lost confidence in their own ability to move, I recommend spending time sitting on a large gymnastic ball and beginning a very small, successive movement in the tail, gradually letting it sequence to the head. Again I might encourage using an image of the dural tube with the spinal cord floating within and imagining its liquid softness. Frequently, soft flowing music is an aid in this process. Other clients like the more gutsy approach and will enjoy music with a more weighted pulse. Clients who are healed enough to move (i.e., whose muscles are not torn or in spasm) generally find both styles of flowing through the spine to be very gratifying and tension releasing. This movement confirms that the whole spine is available and “messages” can flow from one end to the other. Because the client is sitting with feet grounded, s/he can also feel the underlying legs to head connection.

Head-Tail Yield & Push Patterns

Now let's get more specific about Yield & Push Patterns now that the flow is going in our spines.

B. Yield & Push Pattern From Head and Tail (Figure 15): Find a warm place on the floor where you will be comfortable. A rug or knee pads might help cushion your bones. Begin in a tiny, curled position with your lower legs, lower arms, and forehead in contact with the ground, sitzbones near your heels. Begin moving by yielding toward the earth and pushing forward from your tail. As the tail pushes forward, let the movement sequence through the front of your lumbar area, then through your thoracic spine, eventually moving through your cervical spine until your head rolls forward and contacts the ground with the top of your head. Your center of weight will have traveled forward, so that your pelvis will arrive approximately above your knees. Make sure that you are breathing easily as you do this and that your elbows stay connected with the ground (this allows you to really go through your whole spine, staying connected to your navel center). When you have completed the whole phrase initiated by the Yield & Push from your tail, breathe into the fully rounded form you have made, enjoying the sensation of your own spine in relationship to itself and to the earth.

Now, from the fully rounded form, yield weight into the earth through your head, sensing the earth meeting your weight, and push back with your head, letting your head really feel the grounded push that returns your forehead to the floor and sequences movement back through cervical, thoracic, and lumbar spine until your weight is transferred back and down to the original constellation of tail over heels. Notice any new sensations you experience en route. This is your Yield & Push from your head.⁷

Play back and forth with pushing from your tail and pushing from your head.

C. Womblike Exploration: If you have a partner, it can be very useful for him/her to provide a firm touch on both your head and your tail. You might even want to do this with your partner providing a relatively solid container, enclosing you while you are on your side, curled in a fetal form, exploring pushing from head and pushing from tail. Notice any feelings that you experience while doing this movement.

D. Partner Assisted Head-Tail Push on Hands and Knees: Now on your hands and knees with a neutral spine, ask your partner to give a firm touch on both your head and tail. Push backward straight through your own central axis and out your tail. Then push forward from your tail through your central axis out your head. This begins to give a sensation of the “Throughness of the Vertical.”⁸

E. Standing Yield & Push Pattern—Pliés: Come to standing. Work with your legs in parallel or rotated out, whichever feels comfortable. Now lower your center of weight (plié) by descending along the central axis of your spine. In your mind’s eye, you might imagine that your head pushes down and conveys the information of “downness” to each successive vertebra. This is definitely not the traditional dancer’s approach to a plié, but it is worth experiencing in order to gain spinal sensation in the vertical dimension. You might want to facilitate this sensation through your spine by actually pushing down with your hands on your head or asking your partner to push down on the top of your head. Be sure to direct your push vertically downward (not forward and down or backward and down) and utilize all three joints in your legs as you lower your weight (i.e., use your femoral joint, your knees, and your ankles). Let energy come through to your tail and down into the earth. As you return to standing, release the compression of your spine, and in your mind’s eye “take your lid off” (release your hands from your head and open them up to the sky). Feel the energy rush out the top of your body. Do this plié several times until you get a clear sensation of alive energy through your spine. Again, you are experiencing the “Throughness of the Vertical.” Now

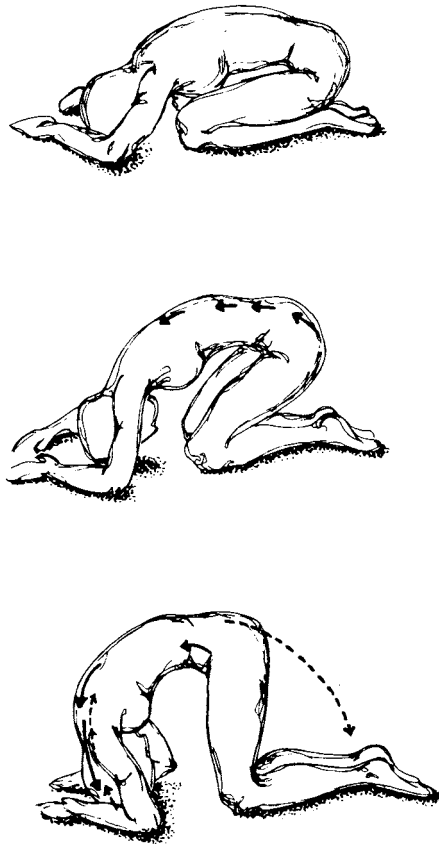


Figure 15. Yield & Push pattern from head and tail.

explore pushing from the other end of your spine. Lower yourself into pli   and then push upward from your tail to return yourself to a full vertical length in standing. After you explore Reach & Pull patterns in the next section, you might want to play with reaching from your tail to pull you downward or from your head to lengthen your spine and initiate a rising. (Pli  s are, of course, not simply about Head-Tail connectivity. They are more truly about a Lower Body Yield & Push Pattern which is supported by your Legs to Head Core-Distal connection. We will explore Lower Body Yield & Push Patterns in the next chapter.)

Head-Tail Reach & Pull Patterns

Most forms of movement training involve the ability to round and lengthen the spine without an active contact from which to push. It is rare to see adults pushing from their heads or tails (unless they are wrestling). The head and tail are usually used for exploration of the environment and giving attention out in the world—Reach Patterns.

F. Reach & Pull From Head and Tail: *Return to your tiny, curled position on your rug (as in B. above) with your lower legs, lower arms, and forehead in contact with the ground. Now, instead of pushing with your tail, begin to Reach forward and toward the floor with the very center of the top of your head. As you continue to Pull, you will roll forward and over the top surface of your head. Let the flow of the movement sequence through your whole spine as you breathe easily with your elbows still contacting the floor. Your lower body will arrive above your knees and your spine will be totally rounded into flexion.*

Notice your jaw relationship as your head and neck are fully rounded. Then be aware of the change in your jaw as you begin the next action, below.

Now reverse direction of the movement by beginning to Reach & Pull backward and downward with your tail, letting your whole spine follow in a fluid sequence. You will arrive with your sitzbones near your heels.

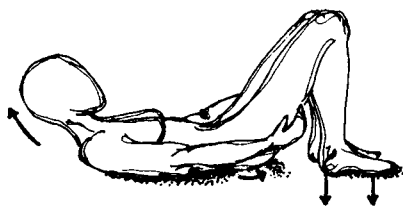
Repeat the whole exercise several times, going forward, initiated by a Head Reach, going backward, initiated by a Tail Reach. Notice how this feels different from the Push patterns you experienced earlier (A.)

G. Phrasing—Push to Reach & Pull: *Now experiment with phrasing the movement in (B.) and (F.) so that you begin from the rounded form as in (B.), Pushing from your tail, sequencing movement forward toward your head. Just as the movement impulse arrives at your head, begin to Reach & Pull forward as in (F.) to complete the action of rolling through your spine and over onto the top of your head. This phrasing of Yield & Push to Reach & Pull is developmentally more advanced than doing only one or the other. Now Push from your head and sequence the movement backward through your spine as you did in (B.) until it reaches your tail. Once it arrives at your tail, begin to Reach & Pull backward to complete the movement as in (F.) This phrasing ability will be important in later work. Notice that the Yield & Push gives a feeling of “grounding” and the Reach & Pull gives you a sense of “going somewhere.”*

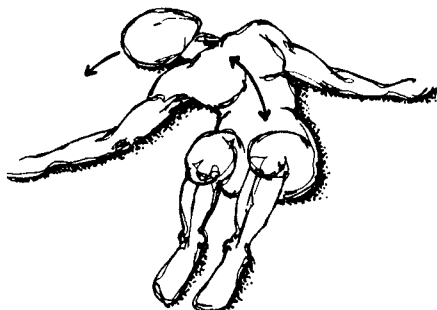
H. Simultaneous Head-Tail Reach, Exploring Planar Movement—Leading to Abdominal Strengthening (Figure 16):

(a.) This experience utilizes an image of streams for Internal Connection and Support⁹ which we discussed in the last chapter. *Begin lying on your back with your feet on the floor, knees up toward the ceiling. Inhale fully, allowing your abdomen to bulge as if it had lungs. As you exhale, in your mind’s eye watch your breath flow toward your head as if it were being moved through your center core along “streams” which run along the pathway of your psoas on each side, and then continue forming one “river” which flows through the “valley” of your chest, down a slight hill at your neck and continues out your head as your head flows away from your neck “like a ball floating away on top of the river.” This image will allow your abdominal muscles to fall back and in toward your spine and your head to feel supported as you do the following movement:*

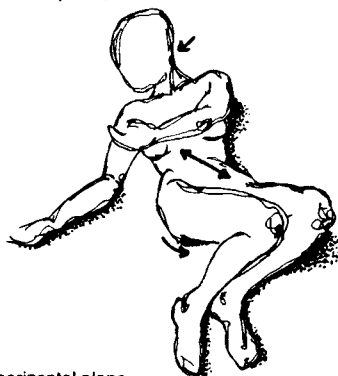
At the very end of your exhalation, as the “river” has reached your head, let both your head and your tail begin to reach out away from center core and toward the ceiling. This movement will bring your head and tail off the floor into a curve, which lengthens the back of your spine and allows you to strengthen your internal abdominals. Make sure that you are not bringing your head and tail together by bunching up your muscles on the front of your torso (This overuse of your rectus abdominus will not serve your internal support). In your mind’s eye watch your head and tail reach away from each other as they rise off the floor as if someone were embracing and supporting the



a. Sagittal plane,



b. vertical plane,



c. horizontal plane

Figure 16. Simultaneous Head-Tail Reach: Exploring planar movement with your spine.

length of your spine along the back surface of your body. Your spine will be flexing, but the curve will feel like it is lengthening your torso rather than shortening it. Spatially, this movement is in the sagittal cycle or plane. I recommend this type of movement rather than a conventional “sit-up” because it focuses on spinal patterning and utilizes the more internal abdominal muscles.

(b.) Now let’s try lateral flexion in your spine, which facilitates movement in the Vertical Plane. Begin in the same position as above, but this time imagine that you are very flat, lying on a glass surface with another glass surface just barely above your torso (ignore your knees, which will be above the plate of glass). Again, at the end of your exhalation let your head and tail simultaneously Reach

to swing to the left, Pulling your torso into a lengthening C-Shape curve if viewed from above. Allow your flow to be free and sense how you remain flat, in what is called in Laban Movement Analysis the Vertical cycle or plane. Your whole spine will be participating in an easy way, gradating the curve through all the vertebrae. Play with going to the other side. (Remember that your pelvis will not roll onto its side because you are sliding easily between two plates of glass.) Breathe into the entire back surface of your torso as you do this.

(c.) Now let's add the element of spinal rotation which will allow us to explore the Horizontal plane elements in relation to the body. Begin lying on your back as you did above. Again watch the "streams" flow toward your head as you exhale. As the "river" reaches your head, begin to turn your head and your whole upper body to your right at the same time as you turn your tail and your knees toward the left. Your head and tail will again be releasing from the floor creating a lengthening curve, as in the sagittal lengthening above, but this time your spine will be twisting into a long spiral. This movement is wonderful for strengthening your oblique abdominal muscles in your internal core. Check to be sure you are not grabbing your rectus abdominus (the muscle in the front of your abdomen). It should not be bulging up. If it is, stop and re-initiate at the end of the exhalation. This type of head-tail connectivity with support through the center core is extremely important in more complex movement, such as a cross-lateral spiral from standing into the floor.

I. Spiraling—Phrasing—Reach & Pull Supported by Push: As I mentioned in (H.) above, Head-Tail Connectivity is crucial in all total body spiraling, particularly that which changes level and/or carves the space in a three-dimensional, voluminous way. Explore many different ways to spiral through your body. Allow your intent to spiral to take you into the floor and out of the floor to stand again. As you continue to play with spiraling, turn your attention to letting your head begin the spiral and your tail follow through or your tail begin the spiral and your head follow through. Do several spirals in this way, letting your head Reach & Pull you down and around to the floor. When you have done this several times, start to tune-in to the subtle Yield & Push pattern from your foot which is underneath this Reach and supports it. Enjoy phrasing in this way!

Dynamic Alignment

The discussion of Head-Tail Connectivity and Spinal Patterning brings us inevitably to the topic of alignment. Whenever the topic of the spine comes up, my students and clients very frequently remark that they know that they are not standing "correctly" or with "good posture." There are many "should's" about this topic coming from our parents, our teachers, and society in general. Unfortunately, the message which is generally conveyed is that there is one right way to stand, and that is with a straight spine. The command "stand up straight" is all too often heard when talking about alignment. This is misleading since one certainly does not want to get rid of the spine's natural curves (more on that later), nor does one want to establish a set relationship of body parts and hold that relationship in a static way. This will only produce tension! We are seeking the ability to move with ease as well as sit and stand in a balanced way.

The movement explorations above gave you a chance to experiment with a full range of spinal activity. You were using changes in flexion-extension, lateral flexion-extension and rotation in a three-dimensional way to create spiraling movement. This meant that

every vertebra was “doing its part,” whether in active mobility or subtle countertension for stability. Your head was moving freely in relation to your neck. Most everyday actions involve a similar capability. As you twist in your car to reach for your seat belt, your spine is spiraling. As you go for a walk, the cross-lateral usage of your arms and legs means your spine is spiraling. Even as you stand upright and talk on the telephone while fiddling with your free hand, you are doing small spinal accommodating movement. If you are truly utilizing “good posture,” you are making constant three-dimensional adjustments to the varying demands of the task. Your internal relationships of body parts are shifting to maintain balance, even when it looks like you are totally still. This means that any approach to alignment must be a dynamic one, utilizing mobile images. I would like to quote Irmgard Bartenieff:

“The static image of “upright posture”...persists widely, in spite of the fact that modern science, particularly neurophysiology, has broken down the notion that static “posture” is in contrast to mobile locomotion, because it is now realized that they are not based on *different* regulatory mechanisms. The reflexive order of the use of upper and lower limbs is equally applicable to standing and maintaining balance and walking. That is, the same mechanisms regulate “postural” change and locomotion. The dynamic image of “upright posture” is described by Laban as an ongoing, cohesive, three-dimensional process that creates and recreates a series of relationships of Up/Down, Right/Left, Forward/Backward. In fact, the whole body slightly sways while “standing still” in figure-of-eight distributions of weight (Center, Forward, Right Side, Backward, Center, Forward, Left Side, Backward, Center). Uprightness is the quintessential example of the moving equations describing both sides of the constant stability vs. mobility struggle. Physiologically, all activities of the body function maximally to the degree that they maintain balance even in motion, just as philosophically/psychologically, our lives depend on the same principle.”¹⁰

Let’s look a bit more specifically at alignment: Above I mentioned that the differentiation of the head from the neck is an important part of full spinal usage. Full articulation at the femoral joint and usage of the lowest pelvic muscles, rather than substituting action in the low back, also allows the spine to do its job. The Tail is not free if the lower back is used as the major joint of the lower body. **One does not “fix” alignment by making an adjustment only in the head or in the tail. The two are in relationship and the whole spine is involved.**

Many people carry the head forward of the line of gravity. Sometimes they are told to “tuck the chin in” or “push the chin back” in order to correct this alignment and bring the head and neck into verticality. At the other end of the spine, many people carry the pelvis forward or backward of the gravity line and try to correct it by either tucking the pelvis or setting a particular curve in the low back and rigidly maintaining it. I do not recommend these approaches, because they simply produce yet other patterns of holding tension! I much prefer to use imagery to assist the neuromuscular system in finding its own connected lines of energy. This is far preferable to trying to put the bones into any particular set relationship, which looks ideal from the outside, but has no base for internal

support. **When you activate connections, you are preparing for both mobility and stability.** Your head will be supported both on and off vertical. Whether you are sitting vertically or bending down to stroke a cat, your head and tail will find an ease of connected action. Whereas, when you try to put your bony parts into a set relationship, you are simply setting up new holding patterns, and these patterns of tension become even more intense when you go off vertical.

This is also one problem with the “building blocks” idea of alignment. The image of lining up your body parts in the vertical dimension like building blocks works when your body is vertical, but what happens to the tower you have set up when you tilt off-vertical, as is frequently done in dance and sports? The tower tumbles. Let’s find imagery which will work both on and off vertical and will relate to an internal support system.

But before we explore the internal imagery for alignment we need to talk about the Head/Neck connection. This is crucial in a society where many people feel they “reside in the head” and, hence, try fiercely to hold it onto their body, lest it escape and they would lose themselves. (Consider the colloquialism, “I almost lost my head.”)

Head Is Different From Neck

One aspect of Head-Tail Connectivity is actually the ability to **differentiate** the Head from the Neck. Head and Neck are not locked together! Now this may seem obvious, but very often as people move there is not a thorough embodied understanding of this difference. Frequently when I ask students of dance or clients in physical therapy to do tiny head movement, they are unable to produce movement of the head without also involving a large amount of neck motion. This tells me that they are holding a set relationship in the head-neck which is preventing full articulation at the joint between the skull and the top vertebra (atlanto-occipital joint) as well as in the upper spine. This pattern of holding tension has ramifications in the way the shoulder girdle can be used and also frequently leads to reciprocal holding of tension and immobility in the lower spine. Pain may or may not result, but at the very least, movement potential is limited.

Whole systems of Bodywork have been devoted to exploring the potential for ease of motion, which results when the head and neck find their proper usage. The Alexander Technique is a prime example of a system which is thoroughly based at the Spinal Level. I am grateful for my work with my friends Missy Vineyard, Aileen Crow, and Idelle Packer for giving me excellent experiences in the release of tension and articulation in the Head-Neck through the Alexander Technique. I have taken the principles with me into my own work and use them constantly as a part of achieving Total Body Connectivity in Fundamentals. The following brief discussion utilizes concepts from the Alexander technique and from Ideokinesis, as practiced by my friend and colleague, Irene Dowd, who has continued developing the work of Mabel Elsworth Todd and Lulu Sweigard.

Your head begins at ear level. This is the level at which your skull articulates with the top of your spine. Your skull has two bony protuberances, called the Occipital Condyles, which are rounded on the bottom (like a rocking chair) and rest in concave articular surfaces on the top vertebra, the Atlas. Try putting your fingers in your ears to locate the level of action of the head. Then begin a very tiny forward-backward rocking

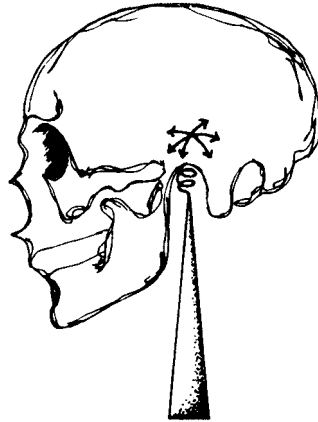


Figure 17. Your head begins at ear level.

motion in your head. (You can visualize that your fingers are pointing to a miniature rocking chair right in the center of your skull.) **Whenever you are moving your head, allow it to begin its action at ear level.** This will release tension in your neck, allowing for fullest mobility in the very top of your spine, which will also encourage a reciprocal mobility in your low spine. Frequently I ask my clients to experiment with allowing their heads to move like those “dopey dolls” which have bobbing heads that one sometimes sees in the rear windows of cars. (see [Figure 17](#)) It is fun to play with allowing the head to bobble very subtly as if saying “yes,” as if saying “no,” and as if saying “maybe” in a very tiny movement. When your head flows freely in these actions, play with almost imperceptible circles or [figure-8s](#).

If “head” begins at ear level, this means that “neck” goes all the way up to ear level! This simple statement is important when you are allowing the experience of your fully supported spine to provide an upward thrust through the center core of your body, enlivening your head. Notice the difference in your own sense of your spine and head if you imagine that your head begins (a) at chin level or (b) in back, at the base of your skull. (c) Now again envision your spine going all the way up into the center of your skull, at ear level. Your head will almost seem to float!

How can you use imagery to help your neuromuscular system know that your head is connected (but not locked) to your center core and that there is a through-line of energy along your central axis from your legs all the way up to your head? Try the following:

Imagery Exploration—Dynamic Alignment

J. Vertical Throughness—Streams: *Return to the previous chapter, pages 79–80 and review the image of the streams which flow through your torso at the end of your exhalation.* This image is a very helpful one for finding how a Head-Tail connection relates to the breath, and also for setting up the connection of legs to head, because the psoas provides a connection from



Figure 18. For a fluid verticality, imagine a fountain through the center core of your body.

the legs through to the spine and the image continues that connection through the central core up and out the head in the body's vertical dimension. When this connection is operative, I apply the term "The Thoroughness of the Vertical."

K. Ears Rotating: *If your head still feels a little stuck, watch your ears rotate forward in your mind's eye. Then once they are rotating forward, watch them begin to pinwheel out away from your head.*¹² This image can help to release tension in the jaw as well as release your head/neck. It is not so much about connectivity as release of held tension.

L. Heel Rock: One of Irmgard Bartenieff's basic exercises was the Heel Rock. This exercise allows one to check for or practice flowing connectivity from the feet through the head. It should be easy to do after the imagery in (J.) and (K.) above. *Lie on your back as in (J.), yield weight into the earth through your feet and push into the floor, connecting the balls of your feet in your mind's eye with your psoas through the inside of your legs. Connect your heels with your sitzbones and into your tail in your mind's eye. Press-release, press-release, press-release, etc. . . . As you do this you will be setting up a surging flow through your torso. Allow it to flow along the "streams" you imaged in (J.) and enjoy the subtle changes in your whole spine. Every part of your body will be rocking subtly. Once you have sensed this, stretch your legs down from your femoral joint, lengthening them away from your center core. Now your heels will be touching the floor and your legs will be long. Continue the rocking motion by pressing and releasing from your heels. The balls of your feet will still be connecting to your psoas in your mind's eye, but you will be actively pushing from your heels. This surging action confirms that you are connected from legs to head through your*

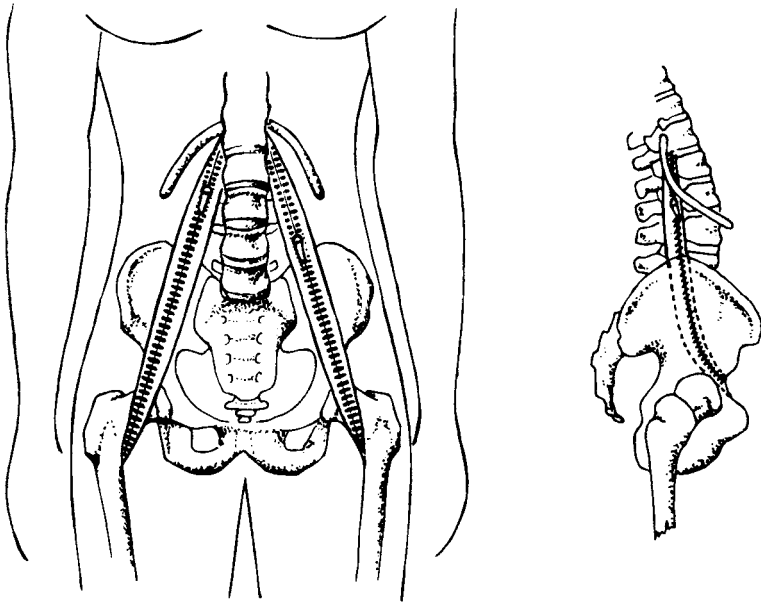


Figure 19. Watch the zippers zipping in your mind’s eye for a quick core-support check-in.

center core. This Core-Distal connection underlies all spinal work as you come to standing later on.

M. Fountain Through Center Core (Figure 18): Some people find the simple *image of a fountain through the center core of the body* to be an enlivening, mobile image of “Vertical Throughness.”

I recommend envisioning that *the fountain causes the head to ride two-three inches up off the top of the spine, like a ball that is buoyed up by the water of the fountain and is “dancing” easily in its own fluid way.* This allows for a free flow at the head/neck connection. Because of the nature of flowing water, this image is satisfyingly mobile (see illustration). Some people prefer to imagine that the fountain goes *through and out* the top of the head. The fountain image emphasizes the flow up and out from the earth. It is important for grounding to know that the water comes from deep within the earth and returns there as well, releasing tension from the exterior surface of the body as it flows downward.

N. Zippers: A much quicker image which I use as a check-in for alignment is the following: *Imagine that you have very high-waisted pants on with two zippers in the front. These zippers run essentially along the line of your psoas. Watch the zippers zipping as you sit, stand, walk, or run.* (See Figure 19 for how the zippers orient within your body.)¹³

O. Figure 8 Image: Some people find that a more three-dimensionally dynamic image helps them find the ease of relationship of the head to the tail and/or upper to lower body. I have worked with this image for many years and find it to be very helpful (see Figure 20). My colleague at the University of Washington, Joan Skinner, also uses this image

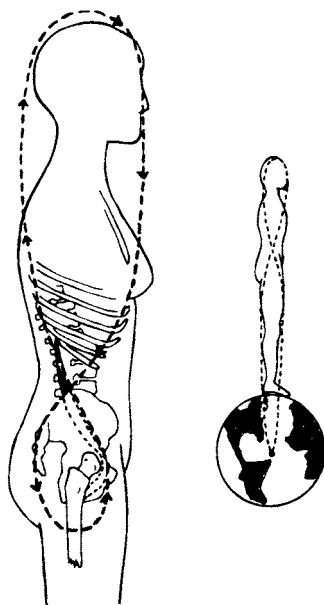


Figure 20. Imagine a [figure-8](#) for a dynamic sense of alignment.

in her classes in Skinner Releasing and Kinesthetic Training. *Envision in your mind's eye a [Figure-8](#). The bottom of the 8 is in your groin area. It is best to have a partner trace the [figure-8](#) on your body several times, until you can get a sensation of the lines of flow. Begin in the groin area and trace up the front of the pelvis (approximately in the area of your psoas on each side). When you come to the waist area let your hands sweep to the back surface of the torso, coming to the level of the lowest rib (T-12), continuing tracing up the back and neck, up over the top of the head (this becomes the top of the 8) and down the front surface of the face, continuing down along the sternum, releasing held tension in the ribs. At the lowest ribs, as you come into the waist area, let your hands sweep to the back surface of the body again, tracing down the back of the pelvis and under to the sitzbones, completing the [figure-8](#) shape.¹⁴ I like this [figure-8](#) image because it can torque and twist with me as I spiral—a must for any truly three-dimensional image of alignment.*

A variation on this which I find useful is to imagine that the bottom loop of the 8 is very long—it goes all the way to the center of the earth. I imagine the 8 coming up from the center of the earth, through the balls of my feet, up through the insides of my legs, into the psoas lines mentioned above. The 8 is the same as you traced above, except when I come down the pelvis I spread the energy line to encompass both of my sitzbones. I continue down the backs of my legs to my heels and from there on down to the center of the earth. The bottom of the 8 sweeps down under the center of the earth and the line of energy bounces back up toward the balls of my feet again. I like this variation, because I can feel grounded as well as mobile.

Try using this image of the *figure-8* as you move slowly in any way you want, pausing every once in a while to become aware of how the image supports you in stillness as well as in movement. You will notice that you feel connected and enlivened in your core and your spine feels supported and organized even when you are bending or twisting off-vertical.

Still Evolving To Vertical?

Why do human beings have such a difficult time with vertical alignment? There are, of course, many reasons including the types of sedentary jobs we have, the poorly designed chairs, and our overly static concept of the world. In relation to this last one, I was always fascinated when Irmgard Bartenieff reminded us that perhaps human beings had not quite finished their evolution to vertical. In her manuscript she talked about this in relation to the rotary action of the spine and three-dimensional movement which Fundamentals and Laban Movement Analysis fully address.

“...a twisting pattern...is operative in every step we take, exerting constant rotary influences upon our spines and their appendices. Anatomically, the analysis of the rotary elements of the spine are among the most complex and unfinished chapters of muscle function analysis... These twisting patterns need as much consideration in moving and exercising as we at present give to longitudinal and lateral stretches. In fact, if we accept the notion that our uprightness might not yet be fully developed, we may have to admit that our adaptations to the struggle with antigravity forces are still incomplete. We will have to develop a fuller three-dimensional movement potential in order to deal with that complex of problems.”¹⁵

When I think in this way, I have a sense that **people who challenge themselves to their fullest in terms of movement potential, in both vertical and off-vertical movement, can be contributing to the further evolution of the species.**

A Bit More Information On The Spine

As we think about the nature of the spine, several common misconceptions must be addressed immediately.

1. The spine is not a “backbone.”
2. The spine is not simply a column—“spinal column.” It functions in many more ways than simply support of compressive weight.
3. All parts of the spine do not have the same functions or range of movement.
4. A healthy spine is not “straight.” Your spinal curves are there for a reason.

Let’s address each of these in order.

1. The Spine Is Not A “Backbone.”

Your spine is not in back, but is much more central than most people realize. Frequently we mistake the back-most parts of the vertebrae, the spinous processes, for

the spine; whereas, the vertebral body of the vertebrae is much nearer our central core. The vertebral bodies of the first cervical and fifth lumbar vertebrae form a central axis that is parallel with and close to the line of gravity.¹⁶ The twelfth thoracic—first lumbar articular—also resides near the line of gravity. Imagining your spine as central, especially at the level of your ears, the level of your lowest rib, and in your pelvis, can contribute to an ease of balance in your body. It enables you to have a sense of mobile solidity in your central core as well as to sense volume going into your back space.

The spine is certainly not one bone, therefore, it cannot be a “backbone.” Although it is rare that educated people consciously speak of the spine as one bone, I have certainly observed many people who move with a rigidity that implies an underlying misconception about the interdependent functioning of the multiple articulations which make up the spine. I frequently see the head-neck-shoulder girdle and upper spine used as one unit with a break or disconnection around the waist area near the third or fourth lumbar vertebra. When I see this, I infer that the person is thinking of the back beginning in the lumbar curve and is moving as if that were the one joint of the “backbone.” This, of course, puts great strain on that particular joint which was never supposed to take the entire brunt of spinal movement. The vertebrae in the waist and lumbar curve were structurally intended to participate in a cooperative way with all the other vertebrae and with the femoral joint. In reality... “At birth, there are 33 bony (or, at this stage, cartilaginous) vertebrae. Later (at about age 20), five vertebrae fuse to form a sacrum. Still later, the four very small terminal units unite: we call this last consolidation the coccyx. Thus, in the fully adult spine there are 24 true single bony segments, 12 of which bear ribs. Two composite units—the sacrum with coccyx, and the skull—form the two ends of the spine.”¹⁷ Thus, when we speak of Head-Tail connectivity we are implying an active relationship between the skull, the 24 vertebrae, and the sacrum-coccyx—hardly one bone.

2. The Spine Is Not A “Column.”

The dictionary defines “column” as “a rigid, relatively slender, upright support, composed of relatively few pieces.”¹⁸ In addition, a column is generally underneath the weight it supports, so that the weight is borne by compression. As we have just discussed, our spines are composed of many bony “pieces,” not few. In addition these bones are interspersed with discs, which also contribute to the number of active players involved in spinal action. And these bones and discs are formed in such a way as to allow incredible amounts of motion, with each area in the spine enjoying more range in certain types of movement than others. In this way the whole spine is intimately involved in reciprocal interactions, producing the large movement we see in dance or sports. If a column is “rigid,” a fully functioning spine cannot possibly be simply a column, because the spine as a whole is definitely not rigid. In fact, rigidity is a symptom of a spine that is not doing its job.

It is true, however, that the vertebrae which make up the spine are able to take amazing amounts of compressive force before they will break, and it is also true that **one aspect of spinal functioning is its ability to handle compression.** Weight is distributed downward to the earth through vertebral bodies and discs which become

successively larger the closer they are to the earth, i.e., bodies of the lumbar vertebrae are larger and provide a more solid base with more disc cushioning for weight bearing than do the cervical vertebrae. This distribution of weight down into the earth happens effectively when the spine is experiencing dynamic alignment. When the vertebrae are held habitually out of alignment, the stress of the compressive weight may land in one area of the spine and not be transferred into the earth. This puts stress on both muscles and discs. But handling compressive forces is only one of the ways the spine supports...

Another important way the spine serves as support system is that of a totally opposite type of architectural support—tensile support (as opposed to support through compression). Tensile support structures provide form and structure through balancing pulls in equal and opposite directions. The spine does this by providing a sort of “spacer” in the central core for the proper attachment of the pulling elements. It provides places on its vertebral bodies, and the many transverse processes for muscular attachments which are then connected to a more distal point, providing a tensile pull which supports and distributes weight. Ida Rolf has said, “Bones determine spatial position of attached muscles and thereby also the efficacy of the agonist-antagonist balance.” In this way the spine is like a tent pole. One of its primary functions “is to separate soft tissue and body parts. It is a lattice to which myofascial parts are attached... Ask a city man what holds a tent upright, and he answers, ‘Why, the tent pole, of course.’ But the woodsman knows that in a properly stretched tent, it is the downward pull of the left side that upholds the right side, and it is the right side that upholds the left. The function of the tent pole is to ensure appropriate spatial balance for the two sides.”¹⁹ This brings up an important anatomical aspect—**proper alignment of the bones allows for effective muscular usage; and vice versa, balanced muscle tone enables the easy support of the entire structure by removing extra compressive weight, and helps maintain the centered alignment of the vertebrae by ensuring equal pull in opposite directions.** If the tent pole is not in the right place, the tent will not stand; and when one side of the pulling elements is overly tight or overly slack, the entire functioning of the structure is in jeopardy. The same is true of the spine and its related muscle partners.

Another aspect of tensile support structures is that they generally provide an expanse of enclosed space. This is true of the tensile nature of the spine and its associated muscles. They provide for the enclosing of space, which then protects the soft organs within, yet keeps them spaced so as not to have them collapsing on each other.

Another function of the spine is protection of the spinal cord in its dural tube. The vertebrae provide a totally enclosed canal through which our nerves stream unimpeded all the way from our brain to our lumbar spine—where the spinal cord ends around the level of L-2, but nerve pathways continue out from there down into the sacrum and legs. This is a canal which provides a fluid base (cerebral-spinal fluid) for carrying the nerves, which ignite us into action. Our spinal cord floats in the dural tube, creating a very subtle wavelike motion in the liquid. I like to imagine that the stability of the structure of the spine enables our “action central” canal to be both softly fluid and electrically dynamic. We have already explored this aspect of the spine in an earlier

movement exploration where we focused on undulating liquidity and the fluid aspect of the spine.

3. All Areas Of The Spine Are Not The Same.

Each area of the spine has its own “expertise” (i.e., actions it performs easily). This leads to a distribution of labor within the spine. A healthy use of the spine will ask appropriate action from each area. When I see dancers, gymnasts, athletes, and other movers doing complex tasks, for instance, a dancer spiraling down into the floor or a pole vaulter flying over the pole backwards in a twisting form, I am immediately aware of the gradations and complementary division of labor at the spinal level that makes such action possible. In the dancer’s spiral down into the floor, full flexion both sagittally and laterally in combination with rotation make the movement happen. In the pole vaulter, although hyperextension is the aspect that stands out at the height of the jump, that fullness was facilitated by a spinal sequence which included preparation in slight flexion, a change to extension combined with lateral flexion, and lots of rotation to go back and up over the pole. Every part of the spine has movement which it does best. Movement which is not so easy for a particular area is passed on to the appropriate area. When those areas are working together in a “friendly” relationship, the whole spine is participating in the action and each area is doing its part. Here are some areas of “expertise”:

Cervical—Although the cervical spine can perform all movements, it is particularly adept at extension. Lateral flexion and rotation often combine slightly. Its articular processes are oblique, which aids in range of movement, but its vertebral bodies limit flexion slightly because of their downward prolongation in the front. (This is another reason it is important to have clarity of Head/Neck differentiation...flexion begins most effectively at ear level, where “head” articulates with “neck.” It puts stress on the spine to try to do excessive flexion in the cervical area when the Head/Neck articulation is not functioning.²⁰) If the rest of the spine is functioning properly, the cervical spine lies very near the central line of gravity—particularly at the atlanto-occipital joint.

Thoracic—The thoracic spine lies nearer to the back surface of the body than either the cervical or lumbar. This is because of the amount of room which the heart and lungs need to function fully. The T-12-L-1 articulation is quite central, however. This serves the downward weight distribution and the coordination of upper and lower connectivity. When core support is not being used, however, one often sees T-12 and the entire thoracic spine passively hanging further back than is efficient. This causes the cervical spine and the head to jut forward to balance the structure.

The thoracic spine excels at rotation and has a small range in lateral flexion and (sagittal) flexion. Because the spinous processes on the back of the thoracic vertebrae are long and slant downward, extension (arching to the back) is not a “talent” of the area. This means that a long, beautiful spinal arch, as is seen in dance, needs to come from full-spine participation, cervical, thoracic and lumbar cooperating together.

Another aspect of the thoracic spine is that the ribs articulate with each vertebra. It is useful to imagine a lively mobility in these articulations as you breathe. Envision space between each rib and at the rib-vertebra articulation which air drifts in, around, and

through. Such an image is far preferable to the set image that many people have of the ribs and thoracic spine as a locked cage (“rib cage”). Most cages are heavy and that image may contribute to a sense of giving in to a passive weight, “sunken” chest. Of course the emotional feeling of “a heavy heart” can also lead to a sense of passivity and collapse in this area, and may be a truly appropriate emotional response. Conversely, one does not want to rigidly maintain a chest that is “up and open” or “confident.” The ribs need to have their mobility, not be set in a fixed form, because this limits the action possible in the thoracic spine.

Lumbar—The lumbar vertebrae are the largest and the deepest set in the body. As Mabel E. Todd has written, “The lumbar curve is relatively short and deep in proportion to its length. Although it includes only five vertebrae, these are massive and with their attached muscles constitute a large proportion of the lower trunk. The action of the lumbar spine is therefore very powerful, and as it is more flexible than the thoracic, it clearly dominates the action of the whole trunk, and of the shoulders and arms, as well as the legs.”²¹ The lumbar vertebrae are crucial in the weight distribution, with downward weight being transferred from the twelfth thoracic to the first lumbar and from the fifth lumbar to the first sacral vertebrae—the articulations most on the central line of gravity. The lumbar curve is extremely mobile, which sometimes threatens the support structure. This means that internal support from the musculature is particularly necessary to ensure the integrity of the structure. Without “Core Support” (which was discussed in the previous chapter and practiced in this chapter), many people become tremendously vulnerable to low back strain or disc problems in this area.

The lumbar area has the potential for a lot of sagittal flexion and extension, a fair amount of lateral flexion, and very little (almost no) rotation. This means that it might feel enticing to bend way forward to pick something up off the floor, and then pull the spine up from the low back, using the low back as the major joint of the lower body for flexion and extension. Such an approach may work for a while, but a wiser approach would be to utilize the legs, femoral joint, and all spinal vertebrae to gradate the flexion and spread the load. This is especially true when twisting, due to the almost total lack of rotation available in the lumbar spine. A total body twist or spiral is best facilitated when the femoral joint is also involved and rotation is gradated through the entire spine. Unfortunately, most people have a tendency to bend over and pick up heavy objects without using the femoral joint. This means that the major weight distribution is not conveyed downward through the spine, but is already off-center. When twisting is added to lifting, still ignoring the femoral joint participation, it spells disaster for the spine. The lower body needs to be underneath the weight when lifting—not behind and to the side of it.

It is also important to balance the actions in the spine. For instance, many style of dance, sports, and, indeed, everyday life utilize flexion more than extension. And even when not active, many people sit in a rounded, flexed shape. This puts undue strain on the low back and can result in disc problems. In your moving, try to alternate flexion and a full gradated spinal extension.

4. A Healthy Spine Is Not “Straight.”

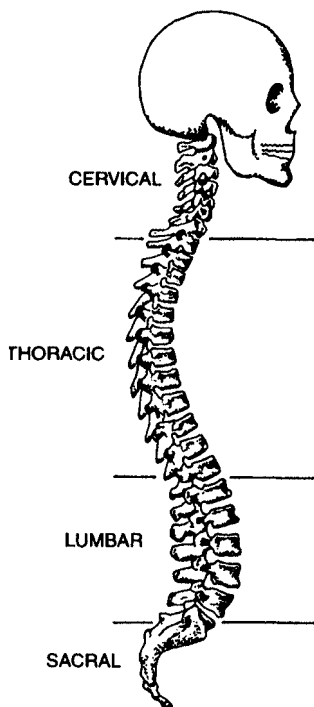


Figure 21. Areas and curve of the spine.

Your spinal curves are there for a reason. It is not wise to try to achieve a straight spine. When you look at a healthy spine from the front or the back, it looks straight—it looks as if each vertebra is piled on the one below. When you look from the side, however, a healthy spine shows four distinct curves. (See [Fig. 21](#)).

1. The cervical curvature, concave posteriorly.
2. The thoracic curvature, concave anteriorly.
3. The lumbar curvature, concave posteriorly.
4. The sacral curvature, concave anteriorly.

These curves make your spine more resilient and actually stronger, like a spring which takes a weight and cushions it. Every step you take needs cushioning. And when you run or jump, you need more cushioning as the weight of your body comes down with extra force. The fact that your spine has curves makes it almost 10 times as resistant to axial compression forces as a straight column. People who have worked to overly straighten their spines (as is sometimes done in trying to achieve pure verticality in dance) end up becoming more rigid than need be. **A simple key to initiating health in your spine is to discover your own natural degree of curvature in each area and allow**

those curves to be there, enjoying their constant adjusting relationship as you sit, stand, walk, or dance. Rather than trying to change the amount of curvature in your spine, develop your internal musculature to provide support for your natural curves. Some physical therapists train their patients to refer to this relationship as “Neutral Spine.” Once you find your “Neutral Spine” you can always use it as a sort of “home base” to which you return—a comfortable, healthy place, in harmony with your own nature.

I made that last statement about “harmony with your own nature,” because the degree of spinal curves differs with each individual. Some people have pronounced or exaggerated curves (in relation to the statistical norm) and some people have less curve or attenuated curvature. The pronounced type is referred to in the medical-scientific community as the “dynamic” type, whereas the attenuated is spoken of as the “static” type.²² **Every spine, however, has the ability to be both mobile and stable. The dynamism for each particular person depends on how the various areas of the spine are used in relationship to one another.** The trouble comes when someone decides they should “fix” one part of the spine and are unaware of its effect on the other areas. I put the word “fix” in quotations because it tends to mean both “correct” and “hold it there.” Let’s take an example: In the physical therapy clinic where I work, many people come in complaining of back pain. A large number of them have overly flattened lumbar curves. Sometimes this has happened because they sit consistently on the sacrum rather than the sitzbones, but more frequently they have somehow internalized a “should” which says, “You should tuck your pelvis under in order to be in proper alignment, or so that your buttocks don’t stick out.” This tucking generally means they are holding tension in the lumbar spine—with a resultant reciprocal tension in the head and neck. I work to help them rediscover the natural curves in the spine and strengthen the muscles to support that relationship for stability. We then work to mobilize by encouraging whole spine communication and accommodation of Head and Tail in all spinal movement.

At birth you did not have all of these curves in your spine. When you were in your mother’s womb both your cervical and lumbar curves were a part of the same C-shape curve (concave anteriorly) as your thoracic area. The C-shape of your sacral curve was also with you at birth. But the characteristic adult curves in the cervical and lumbar areas develop over the first 10 years of life from movement and interaction with the world. These are necessary in order to balance the thoracic and sacral curves. Mabel E. Todd states,

“By much vigorous kicking and crying during the first months of its life, the baby develops those muscles which are needed to produce and stabilize the lumbar curve into its convex direction toward the front, to counteract the primary concavity of the thoracic curve. Not until this curve has been established is the baby able to hold its head up, to sit or to stand alone.... Gradually the infant develops power in the minute muscles and ligaments about the vertebrae which control the secondary curves, by throwing his arms and legs about, turning his head from side to side and lifting it while prone. Active movements and the resulting deeper breathing bring about the coordinated action of the entire spine. This process is greatly aided by spells of crying and screaming since the diaphragm and the lower lumbar and pelvic muscles are so closely associated.”²³

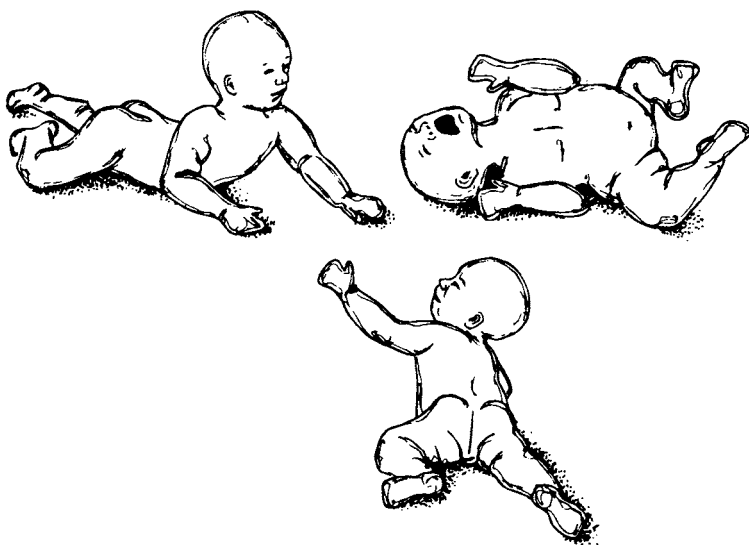


Figure 22. Your cervical and lumbar curved developed through interaction with the world.

In addition to helping me appreciate a crying baby, this lets me know that the cervical and lumbar curves, and thus the ability for self support later on, come in response to the individual's own assertion of self as s/he makes desires or wants known in the world. The cervical curve develops as the baby seeks sensory interaction with the environment as shown in [Figure 22](#). Most of the sense organs are located in the head, so the seeking of satisfaction through those senses also patterns bodily knowing at the spinal level. For instance, the baby wants to see mommy as she walks away when it is lying on its tummy and so it struggles to raise its head to see her better. Then mommy comes back and offers a toy. Again it is necessary for baby to raise its head (another chance to practice the cervical curve with lumbar support!). Eventually the baby is even able to roll over while watching a toy which is being moved...a beautiful spinal spiral! Because practice pays off, the baby eventually has stabilized its lumbar and cervical curves enough to sit. Crawling and creeping provide more chance to strengthen those muscles, and pretty soon the baby is toddling around. The original cervical and lumbar C-Shape generally disappears by 13 months, while the characteristic lumbar curve is clear at three years and assumes the definitive adult state at 10 years.²⁴

The curves of the whole spine act together to provide both mobility and stability, generally in a rhythm of interaction. It is always valuable to sense that ever-changing rhythm.

As we come to the close of this chapter, I recommend that you take a break from reading and move—simply play with any movement which seems to be inside you that will enable you to enjoy your Head-Tail relationship. Perhaps you will want to return to some of the earlier images, or maybe this last section on anatomy has sparked some new

images and ideas for movement exploration. Let yourself revel in your full Head-Tail Connectivity.

Notice what this type of movement brings to you. Is it refreshing, or is this the way you always move? How would your life be different if you had this feeling easily available in your everyday life? Or...perhaps you do. Compare your experience with some of my observations in the next section.

Implications Of Head-Tail Connectivity

The concept of Head-Tail relationship is a simple way of reminding yourself to check-in with your whole spine. And since your spine is related to Core Support, checking in with your Head-Tail and Core Support can easily put you in touch with yourself, particularly when supported by grounding and breath.

Head-Tail Connectivity allows you to sense yourself as an individual, with both fluidity and solid support coming through your core to give attention out to your world. And because you are both fluid and supported, but not yet overly action-oriented through your limbs, you can explore your world by following your own curiosity, enjoying your flexible, sensate world view.

This stage is not about accomplishing tasks. People whose preferred pattern of Total Body Organization is Head-Tail Connectivity frequently, but not always, enjoy approaching situations in the world in a wonderfully imaginative way, using their fluid internal sequencing to improvise in the situation. They often do not like to be told how to do something, but prefer to explore and follow their own creative impulses. Often they are playful and make a “game” out of what other people treat as “work.” They frequently have the sense that there are many possibilities or options in any situation. In addition, Head-Tail Connectivity certainly provides potential for fluid sensuality, as well as a solid ease in being on- or off-vertical.

Of course, one is not able to progress to sit or stand or travel easily without using the limbs. Now it is time to move beyond the Head-Tail level, and so we will progress in the next chapter to Upper-Lower patterning.

Notes

1. When I use the word “tail,” I am referring to the coccyx, our sixth limb.
2. Bonnie Bainbridge Cohen locates seven early reflexes which she particularly associates with Spinal patterning. They are the **Oral Rooting Reflex**, the **Neck Mobility Reflex**, the **Head Positive Supporting Reflex** and **Head Negative Supporting Reflex**, the **Galant Reflex**, the **Abdominal Reflex**, and the **Anal Rooting Reflex**. See Bonnie Bainbridge Cohen’s articles: “The Alphabet of Movement: Primitive Reflexes, Righting Reactions and Equilibrium Responses,” Parts 1 and 2, in *Sensing, Feeling, and Action...* Bonnie also teaches early patterns which support Head-Tail Connectivity which she calls, “Mouthing,” and “Pre-Spinal.”

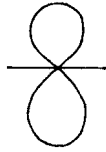
For more on the planes, see the Appendix-LMA.

3. See [Chapter 5](#).

4. Bonnie Bainbridge Cohen has explored “Mouthing” as a transitional phase between Navel Radiation and Spinal movement in her book, *The Evolutionary Origins of Movement*.
5. A notochord is a rodlike cord of cells that forms the chief axial support structure of the body of the lower chordates and the embryos of the higher vertebrates. *The Random House College Dictionary*, 1988.
6. It might be helpful to realize that your spinal cord floats in cerebral spinal fluid in the dural tube which flows through an opening in the *back* half of the spine and goes all the way from your brain down to your lumbar vertebrae (L2-L3) with nerve pathways that continue even further down.
7. Yield & Push from the head precedes Yield & Push from the Tail developmentally in utero.
8. See Appendix for this concept—of course this exercise locates an axis which is a body vertical, not a spatial one.
9. See pp. 79–80 for a fuller discussion of this image.
10. Irmgard Bartenieff, manuscript, pp. 297–298.
11. Of course this illustration is not about anatomy. Your neck is not one bone and you do not have a spring at ear level. The movement at ear level happens when the skull articulates with the atlas (the first vertebra, which is approximately at ear level); and the atlas articulates with the axis (the second vertebra).
12. This useful image was introduced to me by my friend and colleague Irene Dowd.
13. This image was utilized by Lulu Sweigard.
14. My colleague and friend, Joan Skinner, introduced me to this image.
15. Irmgard Bartenieff, manuscript, p. 303.
16. Mabel Elsworth Todd, *The Balancing of Forces in the Human Being: Its Application to Postural Patterns*. New York: Printed privately by the author, 1929, p. 44.
17. Ida Rolf, *Rolfing*, p. 189.
18. *The Random House College Dictionary*, 1988.
19. Rolf, *Rolfing*, p. 65.
20. Unfortunately, many people read and work looking downward with the cervical spine in exaggerated flexion.
21. Todd, *The Thinking Body*, p. 95.
22. Kapandji, p. 20.
23. Todd, p. 94.
24. Kapandji, p 16.

CHAPTER 9

Upper-Lower Connectivity



I want, I will.

I can't, I can.

I struggle to claim my own power and use it.

I push away to make my space safe.

I reach out to go forward toward my goal.

I fail...I push through...I succeed.

I stand on my own two feet.

I am confident as I move into my world.

Welcome to a time of work, practice and accomplishment in movement development. In the last chapter we discussed Head-Tail relationships and connectivity at the spinal level. We noted that a certain beginning type of individuation happens at this level of growth. It was a differentiation out of the unity we experienced when Breath and Core-Distal relationships organized us, but it was not yet getting tasks accomplished in the world. A spine is important, but without legs and arms, it is hard to travel through space or reach out and realize our intentions in action.

Now we go even further toward specialization and differentiation as we delineate the next stage of organizing and relating in our bodies. This is the stage of finding out just what the Upper Body can do and what the Lower Body can do. What does each have to contribute to the whole? What are the obligations of each in human physical functioning, and what are some movement tasks which might facilitate developing these skills?

Every part of your body is not equal in its adaptive skills for dealing with the world. This means that at some stage in your development it becomes necessary to come to know that you can count on certain parts of your body to fulfill a specific function and other parts to fulfill different functions. For example, as an adult I count on my lower body for support and for locomotion to get me where I want to go. This frees my Upper Body to create relationships with the world, such as hugging my daughter, reaching for a can of beans, or typing on this computer. If I couldn't count on my Lower Body for support and locomotion, I might need to use my Upper Body, perhaps with crutches or a wheelchair. In these instances, substituting Upper Body support is appropriate and useful.

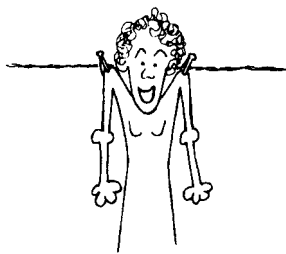


Figure 23. Clothespin approach to support.

In other instances, a person might not be claiming the supportive function of the Lower Body and is somehow trying (although probably not consciously) to get the Upper Body to support him. Many of these people show up in physical therapy clinics with extremely tight muscles in their shoulders and neck. These muscles are overworked from what I call “the clothespin approach to support” (see [Figure 23](#)). And, as if that weren’t enough, the same muscles are also being used to reach, hug, and type! Clearly these muscles are doing more than their share of the labor and they cry out in pain. They need a labor negotiator. But they also need a trainer who will clarify the tasks of the upper and the tasks of the lower and condition the Lower Body to get in there and be active! This is just one small example where proper differentiation is necessary for whole body relationship to work. Throughout this chapter we will encounter many more examples and will also discuss ways to address lack of effective skills.

Rather than a congenial time of harmonious connectivity, this stage may, at first glance, seem to be one that promotes disconnection and even a bit of polarization (Upper versus Lower or vice versa). Differentiation has separation as an inherent aspect. Upper and Lower are both vying for attention and each needs to learn specific tasks. The creative challenge is to give each the needed movement experiences so that each develops specific skills fully and in collaboration with each other—without having differentiation come to mean total isolation.

Many people unfortunately develop an Upper-Lower split with a “no man’s land” in the center core of the body, because Core Support is not adequately developed. When this happens, later movement experiences do not sequence through the core and there is a loss of a sense of coordination and confidence in the ability of the body to function as a whole. Learning to use the limbs in a connected way with the core to accomplish action in the world is sometimes confusing and discouraging. Finding out which area can be counted on for what is part of the developmental mandate at this point. This stage is a time of skill-building, including endless practice. And it is a time of struggle, struggle to find what can and cannot be done.

Learning to set boundaries, learning to give and receive, learning how to support your reach for the goal with a push which will get you there—these are some of the large tasks to be learned at this stage. Two polar aspects are particularly important. Stated as an inner monologue they are:

1. “This is what I do to get away from what I don’t want to be near, so that I can feel safe in my space.” (boundary-setting by pushing away...self-protection)
2. “This is what I do to move out into the world, so that I can get what I want.” (moving toward a goal by sequencing from a Yield & Push to a Reach & Pull ...self-expression)

Learning to be the commander of the troops (the physical resources of the body) is not an easy task. This is true whether you are less than a year old and learning to push away, and subsequently to travel forward on your belly, or whether you are an adolescent or an adult approaching school, career or relationships, reaching toward a goal and needing the grounded support of a Yield & Push to get you there.

This chapter will include a section on Homologous movement and then will have separate sections on the Lower Body and the Upper Body. In these separate sections I will discuss some of the anatomical considerations of the femoral joint and the shoulder joint and some of the specific movement experiences and issues inherent in articulating each area. I will introduce Rotation in this chapter, even though it does not come to full movement fruition until we later work with Cross-lateral movement and diagonal connectivity. I am doing this because understanding the role of the rotary factor is crucial in achieving articulation and differentiated movement in the proximal joints of the Lower and Upper. We will begin, however, with some early baby-like experiences which build support for more adult expressions later on.

Homologous Movement

Developmentally, this Upper-Lower stage is a time when the baby is training the whole Upper Body to act together and the whole Lower Body to act together. And so, for instance, when the brain sends a message to “arm,” both arms do the same thing and, ideally, the rest of the body responds. When the brain says, “leg, push,” both legs push in the same way and the rest of the body responds, perhaps by traveling. This is called Homologous Movement.

In our movement explorations in this chapter, we will do a lot of Homologous Movement, but not exclusively. Since Irmgard Bartenieff worked mainly with adults, she frequently helped her students gain understandings of the role of the Upper and the role of the Lower, and possible connective relationships, without providing movement which was exclusively homologous. I will follow her lead in this matter and will discuss several of her “Basic 6” exercises later in this chapter, even though some of them are not totally homologous. I am doing this because my sense of her emphasis was on gaining clear articulation of the lower and upper while confirming basic connections (such as sitzbone-heel or scapula-elbow-hand) which could lead one to clear weight shift, and increased range at the global proximal joints. Although her exercises were based on early baby movement, she rarely taught in a specifically developmental progression.


Yield & Push
Reach & Pull*Yield & Push Patterns and Reach & Pull Patterns*

The movement exploration will begin with Yield & Push Patterns and continue with Reach & Pull Patterns. Even though developmentally the two overlap in waves as the child progresses from lying to sitting to kneeling to standing, for ease of understanding I find it useful to have a full experience of several different Yield & Push Patterns to confirm my grounding and my sense of self. Then I feel ready to reach out to space.

Before you begin your explorations of Yield & Push Patterns and Reach & Pull Patterns in your Upper and Lower, I suggest that you return to [Chapter 8](#) and review the general nature of these patterns. Here's a brief reminder: Yield & Push precedes Reach & Pull developmentally, and Upper Body patterning generally precedes Lower Body Patterning. Yield & Push Patterns facilitate grounding, and Reach & Pull Patterns provide access to space. **For many ordinary activities, an effective neuromuscular phrasing is a Yield & Push sequencing to a Reach & Pull.**

Movement Exploration: Yield & Push Patterns

When I think of Yield & Push Patterns, I immediately see myself feeling grounded and claiming my own power. I know I will be building my skills at connecting from the earth into my Core. These skills will feed into my sense of confidence. I will feel grounded, secure in my own power. When I think of the pervasive sense of powerlessness in our society at this time, I know that many people need to return to these basic movement patterns. Let's start simply, as a baby might.

A. Upper Body Yield & Push Pattern—Homologous (Figure 24): *Lie on your belly with your arms bent so that the forearms and hands rest on the floor and your elbows are at the level of the lowest point of your scapula. Actively yield your weight into the floor. Continue yielding weight, especially into your forearms, until the yield becomes a push and your Upper Body begins to rise away from the floor. As you sense the push down into the floor, connect your scapula through to your elbows and free your head to reach out forward and up (See illustration). Your whole body will be in a satisfying graded spinal arch supported by your Upper Body¹. Be sure you yield and are not stiffening as you begin. Yielding before the push connects you with the earth (gravity) and allows you to practice separation through bonding, which is important in healthy development. (Many people stiffen and set a boundary between themselves and the floor as a preparation for the push. Bonnie Bainbridge Cohen feels this underlies separation through defending rather than bonding.) As the push happens, make sure you are using the connection from your scapula to your elbow (Core-Midlimb) and are not skipping the elbow in your eagerness to do a “push-up” onto your hands. (That movement comes later—after you have more lower-body push power.)*

B. Upper Body Yield & Push Pattern—Backwards—Sets Boundaries: *Really push with your Upper Body from the ending form of (A.) with the intent to travel, you will push yourself backwards along the floor. Notice that you go away from where you were, putting at least an*

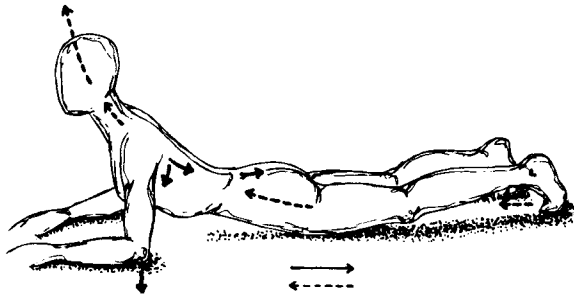


Figure 24. Upper Body and Lower Body Yield & Push: Your Upper Body Yield & Push allows energy to travel backwards through your body connecting lower arms to scapula and tail. Your Lower Body Yield & Push allows energy to travel forward from the balls of your feet through the inner core of your torso and out of the top of your head.

arm's length in between you and what you were near before. This is surprising and frustrating to the baby who is generally looking forward and is trying to use new-found skills to go toward some toy or other thing of interest. The ability to travel backward and put space between yourself and someone or something is, however, an important part of learning to survive in this world. Before you learn to travel *toward* something, you begin training for the skill to *get away*. It is a crucial boundary-setting skill. When I worked with this type of movement in the physical therapy clinic and have clients practice it at home, frequently they return and tell me that they feel better about setting their boundaries in the rest of their lives as well. They learn to claim their own space.

C. Lower Body Yield & Push Pattern—Homologous: *When you have completed the Upper Body Yield & Push Pattern described above in (A.), maintain your support on your forearms and curl your toes under, yielding weight into the toes and through the balls of your feet, so that you can push from your feet. Push forward from your toes and let the movement sequence through the insides of your legs and through your internal core, going forward and out the top of your head. When you do this correctly, you will sense an enlivening through your pelvis along the line of your psoas. This is important later as you make the connection to standing support.*

Play with alternating a push backwards from your Upper and a push forwards from your Lower. (As you do this, you may notice how the connectivity of “arms to tail” and “legs to head” from Chapter 7 underlie this movement.) By practicing this rhythmic alternation of Upper to Lower and Lower to Upper, you are building a bodily support system which is grounding and confirming of your sense of power from within (See illustration, Figure 24).

D. Upper-Lower Push Pattern onto Hands: *When you have equalized your Upper Body push through your forearms with your Lower Body push from your feet, you can support a full-body arch moving to a slightly higher level. You are now able to push higher, yielding and pushing from both ends, straightening your arms and rising onto your hands.² Make sure you do not lose your connection through your center core and down to your tail. Lengthen your whole spine forward and out; don't break your connection at your headneck. Breathe easily and fully into your lengthened spine. Check to see that you have not lifted your shoulders nearer to your ears.³*

E. Yield & Push Pattern from Hands and Knees: *Support yourself on your hands and knees. Yield weight into the earth & Push forward from your Lower Body and backward from your Upper Body. Let this build into a rhythmic alternation... forward, backward, forward, backward. As you do this, you might find it more satisfying if you let sound come out (perhaps like a tiger). Build the power of the sound which comes out. It can be like revving an engine or like a growling animal that is raring to go! Notice that this movement is a chance to practice the underlying support of “legs to head” and “arms to tail.” “Don’t lose the power of those underlying patterns! As you push forward from your Lower, reach through your spine and out your head. As you push backwards, let your power come through your tail and sitzbones—send it out! Many people practice holding power inside themselves. Such an approach only builds tension and bound flow. This exercise is a chance to yield and connect to the earth and then use your power to PUSH. Use your power freely. If you want to feel your power even more clearly, ask a partner to give resistance by putting hands on your shoulder area and pushing backward as you push forward from your Lower Body. (If you want to feel the underlying “legs to head” support, have your partner give resistance through the top of your head.) Your partner can give resistance as you push backward by switching his/her point of contact to your sitzbones (or to your tail if you want to feel the underlying arms to tail support).*

F. Standing Lower Body Yield & Push—with a Partner (See Figure 25): *Stand with your feet underneath your femoral joints. Have your partner stand behind you and put his hands on the upper rim of your pelvis, giving pressure directly downward. Lower your center of weight by flexing all three joints of your Lower Body (ankle, knee, hip) and open the soles of your feet in your mind’s eye as you yield and connect into the center of the earth (in dance this is called a *plié*). Open the flow in your feet, yielding weight into the earth. Now, use the power of your Lower Body to “push the floor away,” so that you rise to a normal standing level against your partner’s resistance. As you push on the floor, make sure you are sending your energy directly down into the earth, so that you will rise purely in the vertical dimension (i.e., not forward or backward and up, for instance). This “Throughness of the Vertical” (see Appendix—Concepts) comes when you have connected the center of the earth through to your own center core and out the top of your head. Again, the earlier pattern of “legs to head” supports this ability. Make sure you are not pushing backward and locking your knees as you do this movement, Doing so siphons-off power and sends energy backward rather than up through your central core. Practicing using your Lower Body power in relation to the earth enables you to feel grounded and centered, able to claim your power.*

If you like, it is also useful to do this exercise with your feet in various relationships to your center of weight; for instance, with both feet spread wide away from center and rotated outward (in Dance this is called a “2nd position”). Whatever the relationship of your feet, make sure your knees are opening directly over your feet as they bend. Peek down. You should be able to see your knee lined-up directly over your second toe. And your weight should be spreading backwards to your heel, as well as forward over the ball of your foot. Your push down into the earth will then sequence from a tripod-like base. Your Push from the ball of your foot will connect up to your center core through the inside of the leg and psoas connection. Your Push from your heel will connect up the back of your leg and into your hamstring. Thus, the entire push will provide stable support on both front and back.

G. Standing Upper Body Push—With a Partner: *This exercise utilizes the grounding and internal support you gained from the last exercise (F.). Face your partner and take time for both of you to find your own Lower Body Yield & Push for support. Then let palms of your hands come*

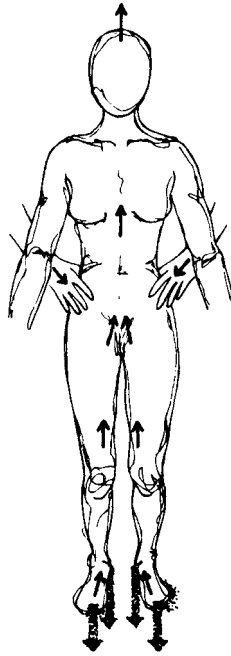


Figure 25. Standing Lower Body Yield & Push With a Partner.

together so that the heels of your hands are at the level of the lowest point on your scapula. Lower your center of weight and enjoy playfully pushing your partner who will provide some resistance (but not too much!). Initiate your Yield & Push from the lowest point on your scapula and visualize anchoring your connection down into your tail. As you continue in your give and take, you will notice that you are able to channel a Yield & Push from your Lower into a Yield & Push from your Upper. This is Lower Body support for Upper Body expression. Work toward using this power because you will have more power if you use your Lower Body than you will if you use your Upper by itself. Make sure you are not simply tensing your muscles in bound flow. Let your power flow through you from the earth into your partner. Allow your Lower Body to adjust to keep providing renewed support—this will require using your Lower Body to travel forward into the push, keeping your center of weight with you—*not leaning* into your partner from your Upper Body. Once you have this pattern it, play with it with your partner as a boundary-setting movement. Push yourself away, or push your partner away, and set a boundary.

H. Improvisation Using Push: We have done many specific exercises using Push Patterns from both Upper and Lower. Now let yourself begin to use them playfully. Challenge yourself to find as many different ways as you can to move using Push Patterns for initiation. Try many different levels, all the way from lying down to jumping into the air. If you are a dancer, experiment with “changements,” “sissonnes,” etc. Since you are a fully formed adult, you will probably notice that Reach & Pull Patterns sometimes come in to complete the phrase of what you are doing. But don’t

focus on the Reach; just enjoy experiencing the fullness of your Push. Try pushing off the wall, the furniture, etc. Keep moving... Push, Push, Push! This movement can be exhilarating!

Movement Exploration: Reach & Pull Patterns

As we have said previously, Yield & Push Patterns provide grounding and power, where Reach & Pull Patterns provide access to space. Our environment opens to us. We are able to reach out to it and pull ourselves into it. If we have stayed connected to our Core, we bring our whole body with us into a new place as we Reach & Pull. We are able to reach to our goals and achieve them—particularly if we use our Yield & Push to sequence to the Reach. We are able to encompass and embrace around that which we care about. We can hug, we can accomplish tasks. We can catch the golden ring on the merry-go-round. We can fulfill beautiful purity of line and form in Dance, ice-skating, gymnastics, or rock-climbing. We can reach to step down a ladder or search for a safe ledge as we go down a mountainside. All these joys and many more come when we can fully Reach & Pull.

I. Upper Body Reach and Pull: *Return again to your tummy and remind yourself that your arms are connected to your Core and through your Core to your tail. (Envisioning this clearly will facilitate staying connected.) Reach forward along the floor with your arms. Make contact with your hand through your forearm to your elbow and scapula to pull your whole body forward along the floor. You will notice that this requires considerable power from the muscles under your scapula. Make sure you are not initiating this action from the muscles on the top of your shoulder girdle, because incorrect initiation will tend to cause your Upper Body to disconnect and leave your Lower Body behind. If this happens, you will experience real difficulty moving forward.*

J. Upper Body Reach & Pull onto Knees: *This movement happens frequently when you are changing levels, going from lying prone to being on your knees. Begin lying on your tummy, reach out forward along the floor and pull forward from your hands, allowing your Lower Body to come into a full flexion supported on your knees and lower leg. As you do this, notice that the movement is facilitated by utilizing your Head-Tail connection to round your spine. Try another variation on this one: Begin supported on your knees and lower legs, then reach forward to the floor with your Upper Body and pull your Lower Body under you inflexion again. (Don't forget your Head-Tail connection.) This movement has real traveling potential! I have seen children race across the room, pretending to be many different kinds of animals, using this exact movement.⁴*

K. Lower Body Reach & Pull: *This pattern is usually seen when changing levels, such as when the baby is coming down off a parent's lap, reaching both feet down to the floor and pulling the rest of the body to the lower level. Adults sometimes do this when they descend from a platform or a stage. Let's try a variation that is not coming off a high surface. Lie on your tummy again, this time with your arms pulled into your body so that your hands are under your shoulders and elbows are flexed alongside your chest. Give yourself just enough push from your Upper Body to move your weight backwards while reaching backwards with your toes. As the balls of your feet contact the floor, pull backward from your Lower Body using your Core connections (primarily your psoas) to flex your whole spine and Lower Body and bring you backward over your legs, ending supported on your knees and lower leg. Another Lower Body Reach & Pull happens frequently when children are holding their parents hands and swing their legs forward and up into the air to travel forward. This is great fun!*

L. Improvisation Using Push to Reach & Pull: *Begin playing with this idea by returning to enjoyable Push Patterns as you did in (H) above. Focus on the push at first, then gradually become aware of the Reach which could come after the Push. Where is the energy from the Push going? Can you ride that energy and Reach further out spatially along that line of energy? Finally, when you reach, can you allow yourself to be pulled into the direction of your Reach? To accomplish this, you may have to release your counter-tension (your pull in the opposite direction, which you might have been using for grounding or balance) in order to travel along the line of energy. Once you begin to find the rhythm of the phrase beginning with a Push and sequencing to a Reach, ending with a Pull, you will notice how easily you move from one place to another, even with a level change. While you will definitely be exerting yourself (this type of movement is not for the lazy at heart!), the exertion will be physically gratifying. Once you've tried this, you will have a full appreciation of the vaulters and high jumpers.*

As you finish doing these movement experiences, you are no doubt feeling the tingling in your muscles that lets you know you have been really working them. This is a stage where repetition and practice pays off! We are building muscles and using muscles in our limbs to sequence into core, through core to the other set of limbs, and then using them to pull the whole body through space. From an Effort perspective, we are learning about the Weight efforts of Strength and Lightness. We are developing a sense of a Self which “can do” in the world. This is very different from the experiences we had when organizing mainly from Breath—Breath feels like a universal flow is moving us— whereas what we are now doing feels like it really requires individual intent to “do something, get somewhere.” It requires intentionality and the breath is only in service of the greater locomotor intent. It functions as a pump for the heart, blood, and oxygen to get into and out of the muscles. When I am doing these homologous Upper-Lower patterns, I have a real sense of Self-Activation. I am using myself fully and actually getting somewhere!

Of course, developmentally this is a big step. It is empowering to the child. S/he wants to use her/his power which has been developing physically. So this is a time of PUSH-PULL between parents and children. It can be a gratifying time—a time of new accomplishment. Parents can play games of pushing with their children, or can give a tiny foot a bit of extra grounding to push against so that the push can be used to help travel on a slippery floor to get to a goal of a toy just a little bit out of reach, for instance. This period of developing the ability to get to the goal can also be very frustrating when the goal the child has worked to get to (perhaps mommy's favorite antique crystal pitcher) is suddenly whisked away and placed totally out of reach at the last moment. Lots of crying can ensue. It can also be frustrating for parents when they feel that the child has to be watched every instant or s/he will destroy the house or do personal damage (sometimes the “goal” is a fascinating bottle of bleach or aspirin!). Because these Push patterns build a sense of self, the child also starts to indicate that s/he wants to do something different from what is wanted by the adult. In fact, it may seem during this period that the child **always** wants to do the opposite of what the parents want, all the way from getting dressed in the morning to going to bed at night! And so, this time is exhausting as well as satisfying. The child is learning to set her/his own boundaries and say “No!” and the parents are re-learning the necessities of having clear intent and strong boundaries. The

satisfaction of actually getting to the goal is a delight, and so it is important at this stage to provide enticing goals which can be rewarded with a “Yes!”.

Effective Patterning: Phrasing YIELD & PUSH to REACH & PULL

At the other end of the developmental spectrum, masterful athletes (such as high jumpers, pole vaulters) and circus stars on the high-flying trapeze, as well as dancers leaping high into the air traveling great distances across the stage, amaze us with their excellence in reaching exact goals using a Yield & Push sequencing to a Reach & Pull. Our society could definitely learn a lesson from these experts, since reaching goals seems to be of value in our society. Perhaps most people in our society would not want to be an Olympic athlete, but most do want to succeed in reaching their own goals. You might be among those. What could you learn from such movement masters? You could learn about the relationship of Yield & Push to Reach & Pull. Phrasing from a YIELD & PUSH to a REACH & PULL is effective for getting things done in the world and for offering your feelings out into the world and bringing response back into yourself. When you phrase movement in this way, you are both powering the movement and being empowered by it. The phrase is complete and satisfying, as opposed to feeling the environment is pulling you around or that you can never accomplish anything.

Ineffective Patterning

Many people in our Western culture reach for goals but do not support their reach with the push which will get them there. They reach out from the Upper Body without supporting that reach with a push from the Lower Body. They are “over-reaching” (going beyond what they can support with their weight themselves), and since the center of weight will not be underneath them, these persons in all probability will not be able to get to the goal. Frequently this causes a falling into gravity with passive weight or a rigidifying in the musculature to try to “hold on way out there” in space at all costs. Either option leaves the person with a phrase which is incomplete. This happens both literally and physically, and also metaphorically in the psychological sphere. Patterning your body/life in this way can lead to a constant sense of failure which is undermining to self-esteem. Or it can also lead to a sense that your actions out in the world are happening, but your own Core Self is not participating and, hence, the actions are meaningless.

On the other hand, some people learn to push but never to really reach out into space. They seem to stay within their own sphere and push themselves (and anyone else who enters the sphere) around. This person seems to be constantly in a struggle, pushing their own weight around, but not getting anywhere. Reach patterning both sets up and requires relationship with the outside environment. Bodily this relationship comes through connection to the distal ends. Aliveness in the distal ends—hands, feet, and head and tail—is crucial for adequate Reach & Pull to function. This need takes us back several stages to Core-Distal Connectivity. When the Push from Core does not sequence out to the distal end, again the phrase is incomplete, and a sense of failure ensues.

Why is this inefficient patterning operative? There is, of course, no easy answer (nor does laying blame ever do much good). For each person it has been a part of the individual adventure. Some children don't learn to push on the floor, perhaps because they are never allowed to be on the floor. (Maybe the parents think the floor is too cold or dirty.) It could be that the child had an early injury which prevented getting on hands and knees. It could be that these children were punished for pushing. Or, conversely, perhaps they never learned to Reach, or were told their goals were unacceptable or unreachable. Obviously these speculations are just that: speculations which are easy to write and much more difficult to do anything about. The individual physical/psychical person interacting with the family, the culture, and the world is a system within a system within a system with wide-ranging places for actions and interaction to hinder or facilitate development. But it is also interesting to ponder what our planet would be like if every child were well-fed, housed, clothed, loved and encouraged to develop their own fullest movement potential, which would include opportunity to and training in how to Push powerfully (and delicately), then sequence to an intentional Reach & Pull.

Using These Patterns in Your Life

What if you are not intending to be masterful athletes and are beyond the actual homologous physical developmental stage in your own learning, and are feeling relatively satisfied that your patterning can be functional? When might the practicing of Push to Reach & Pull patterns be useful? The simple answer is, "Whenever you feel bogged down and unable to get out of the 'muck' to get to your goal." Sometimes when I feel stuck in the middle of a project (such as writing a paper or planning a class), I begin to play with Yield & Push patterns to give my frustration a physical outlet and to confirm my own ability to "do something." Then I begin to play with Reach & Pull patterns to remind myself that I can "get to the goal." Finally, I put the two together and go from Yield & Push to Reach & Pull. This lets me know that "I myself, using my own energy, can push through to the goal." There seems to be a transfer from this physical knowledge into my ability to accomplish more seemingly mental tasks (such as writing). Because I notice this to be true in my own life, I have a hunch that such physical practice could also be effective within a traditional learning situation when students are getting stuck mentally in their studies—especially if the links between physical and mental were a valued part of the whole learning environment.

Your Lower Body

We have just talked about and explored homologous movement. The key point in this kind of movement is that the whole body's action is organized from either the Upper or the Lower. Let's now discuss the Lower and the Upper separately to discover what are the unique contributions of each in terms of life functioning. We will also deal with some specific issues one might confront in working to activate each.

Irmgard Bartenieff spoke many times about the importance of mobilizing and enlivening what she called "The Dead Seven Inches" in most Americans' bodies. "What

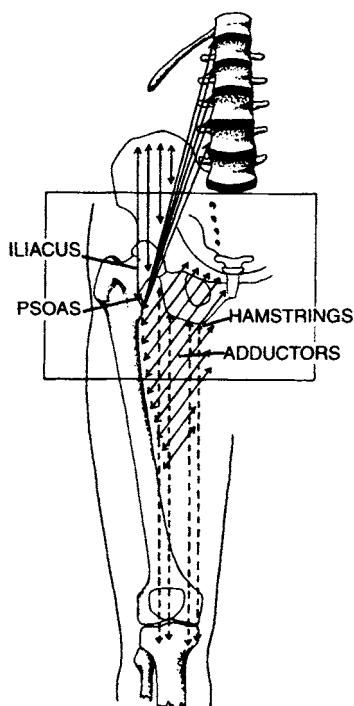


Figure 26. Activators of the Vital Seven Inches. Generalized schematic lines of action.

Dead Seven Inches?” you might ask, “And why are they so important?” Well, you can find those Vital Seven Inches on your own body and then perhaps you’ll want to do some of your own speculation about why Irmgard would have felt this area deserved special attention in our culture (see [Figure 26](#)).

Begin by placing your thumbs slightly below your hip bones (anterior superior iliac spine). Then reach down with your middle fingers to include the part of your legs that is furthest out to the side (greater trochanter of the femur). Now let your thumbs and fingers sweep around your pelvic basin delineating a wide band approximately seven-nine inches wide, like a wide scarf worn low on your pelvis. When you have located this volume on your own body, take some time before reading further to ponder what aspects of your moving and your life in the world are facilitated by the bony articulation, muscles, and organs contained in this area.

Here are a few aspects which seem important to me as I consider these 7–9 inches. This area contains:

1. **Your center of gravity**—“that point about which all parts exactly balance each other. . . . In the human body, its approximate location is in the pelvis just in front of the upper part of the sacrum at about 55 percent of the height of the individual.”⁵ Of

course there are many “centers” in the body from which one can move. Because of the importance of our relationship with gravity and our own sense of weight, the center of gravity or center of weight is particularly important from both a movement perspective and from a sense of full embodiment. Many people in America, especially in the corporate workplace or academia, report to me that they feel they are “living in their heads.” They do not feel themselves embodied and their spirits physically available to them. **The sensation of being “centered” or “grounded” comes from being in touch with this center of weight area and its relationship with the center of the earth. This center is also a power source. *Os sacrum* in Latin means “sacred or holy bone.” Locating and enlivening this center can be empowering and can contribute to a lively, physical spirit.** Your center of weight is important in all locomotion or weight transference. **To feel centered and grounded as you travel, you must shift your weight from your weight center.** Many people try to travel by leading with the Upper Body or knees. This can be beautiful and interesting if it is a choreographic choice, but efficient movement through the space demands an ability to shift weight effectively by initiating in the Lower Body, mobilizing the center of weight and bringing it to rest in a dynamic stability, connected through the legs and feet into the center of the earth. **Shifting weight effectively is a major emphasis in Bartenieff Fundamentals.**

2. **Your femoral joint—major joint for movement and full range articulation in the Lower Body.** It serves in all locomotion (walking, running, jumping, etc.), level change (going from standing to sitting to lying down, etc.), swiveling, turning; all basic shape changes of opening and closing (whether in the flexion-extension range, the adduction-abduction range, or the rotary range—most often involving all these in a subtly graded and proportionate way.) When your femoral joint is fully functioning, you can really get around easily in this world.
3. **The lowest part of your spine, the sacrum and coccyx, your “tail,” access to which is an important part of both active grounding and mobility.** Your tail is your sixth limb. Another way to think of your tail is that it is the opposite end of your neck. **Your tail is in constant intimate relationship with your head through your central core—all true flexibility at core comes from activating this relationship.**
4. **The muscles which regulate a large percentage of postural alignment.**
 - a. legs to pelvis, including the relationship with pelvic floor muscles
 - b. legs to spine
 - c. pelvis to spine

The importance of the appropriate interplay of these muscles cannot be overestimated considering the high percentage of people in our culture who suffer from back pain and problems with internal organs due to dysfunctional alignment. (See [Figure 26](#) for schematic diagram of general lines of activity of iliopsoas, adductors, and hamstrings)

5. **Your major sexual and reproductive organs**, as well as the muscles surrounding them. Many people hold tension in the muscles and organs in this area. Such tension blocks sensation and is “deadening.” **When these seven inches are mobilized and enlivened, most people experience an increase of pleasure.**
6. **A large part of the organs of digestion and elimination.** Your lower intestines, colon, and urinary bladder help rid you of unwanted and unneeded waste. If you have tension in these organs or the muscles surrounding them, you may be holding onto the to unneeded material, which will make you feel bloated or congested, also “deadening” to you as a whole human being. **As you activate the lowest part of your pelvis, you facilitate a release of internal waste.**

My list does not, of course, address all the aspects of importance in these “seven inches.” Your list may contain many other salient features. Suffice it to say that *a large part of what most people expect to be able to do as they live their lives depends upon proper functioning of this area in our bodies.* In other words, most people expect to be able to walk, run, change direction, stoop, twist, sit, rise from sitting, have spinal flexibility, feel “centered,” stand with a sense of verticality, enjoy sensual and sexual pleasures, digest their food and eliminate bodily wastes. All of these sound fairly basic in human life...and all require an active Lower Body.

However, from my experience working in both dance and physical therapy, I conclude that most people in our society are not savoring even these basics which being in tune with and aware of the Lower Body can offer. And so, unfortunately, I agree with Irmgard that “The Dead Seven Inches” bring us a lot of pain rather than the joy which could come from “The Lively Vital Seven Inches.” Almost everyone could benefit from a fuller understanding and usage of his/her Lower Body.

Movement Exploration

AA. Lower Body Improvisation: Before we continue discussing specifics of your Lower Body, it is time for a movement break: *Let your Lower Body begin to move, per haps initiating with your pelvis or your feet. Just see what movement comes as you continue to explore your possibilities. You might enjoy moving to music from the Middle East or Eastern Europe—music which has a sense of rhythmic use of weight. Return to your movement improvisation after reading the next sections on anatomical specifics.* It is always important to embody any new information, and moving to music, phrasing the movement in your own way, is an excellent choice for that embodiment process.

A Few Anatomical Considerations Concerning the Lower Body

Understanding the anatomy of the Lower Body is amazingly useful for locating the potential for activation. I recommend that you turn to *The Thinking Body* or *The Hidden You* by Mabel Elsworth Todd, *Human Movement Potential* by Lulu Sweigard, *Rolfing* by Ida Rolf, and *Taking Root to Fly* by Irene Dowd for in-depth discussion of the movement implications of anatomy. I do not want to repeat their work here, so I will remain relatively simple in my discussion. But I do find that understanding a few basic things

about the pelvis and femoral joint make a major difference in the ability to activate this area. Here are some of these basics:

1. The pelvis is both a stable bowl-like protector and a dynamic instigator in an internal alive figure-8 form.

- a. It is bowl-like in that the bony structure of the two *os innominata* (the unnamed bones made up of the ilium, the ischium, and the pubis) and the sacrum with the coccyx form a container which is like a bowl or basin whose function is to hold the more liquid viscera (intestines, colon, rectum, bladder, sexual organs, etc.) These “gutsy” parts are protected by bone, which in turn seems more static and stable until we notice that...
- b. The innominate bones themselves are much more like a figure-8 or lemniscate form than a simple bowl.⁶ This dynamic form means that muscles attached to these bones rarely run in straight dimensional lines, but are constantly following gradated transverse pathways, thus producing the possibility of fine subtleties in ever-changing three-dimensional movement. And the trabecular row, the inner lines of flow along which the bone is laid down, also arrange themselves in mobile transverse pathways. Irmgard Bartenieff delighted in noting that the pelvis is alive with internal movement—a sort of tensile aliveness. When a surgeon cuts through the bones of the pelvis, the bones do not simply fall open like two halves of a melon. Rather, they “spring open” as if they are always engaged in an ongoing dance with active countertension and are reluctant to stop the dance. In addition to these lively side and front aspects of the pelvis, the back of the pelvis (the sacrum-coccyx) is like a slightly cupped hand ready to encourage you, saying, “go ahead, move.”

2. To correctly locate your femoral joint (right side), whether standing, sitting, or lying on your back, flex your right leg and let the middle finger of your thigh. Your finger will almost automatically fall down and into this seemingly open space if you let your thumb rest on the outside surface of your pelvis and span the width of the crease as your leg flexes. You will feel the muscles at the top of your thigh bulge slightly into the palm of your hand and the tip of your middle finger fall down and in toward the joint. As you do this, remind yourself that your femoral joint is very deep within you. It is much closer to the center line than most people think, and also usually lower. Frequently, when I ask students to point to their femoral joints they point to the outside lateral surfaces of the pelvis...or they point to the bony landmark at the front and top of the pelvis (the anterior superior iliac spine). These are commonly considered to be “the hips” or “the hip bones,” but there is no joint articulation there. When students are moving with an erroneous location of the “hip joint” they invariably have trouble finding full range of motion in the femoral joint and effective support or weight transference. Knowing that the joint is closer to core, nestled underneath the iliopsoas (posteriorly), and responsive to its initiation, enables the student to find full femoral flexion as well as clear alignment for basic support and locomotion. With

this knowledge it is easy to stand with the feet directly underneath the femoral joint. This allows for proper balance of action of the muscles around the femoral head.

3. It is also useful to know that the femoral head, which articulates with the pelvis and is the pivot for all action in the joint, is not the same as the greater trochanter (the bony protuberance one can feel on the outside of the thigh). Many people think that the joint is at the greater trochanter and tend to stand and move accordingly, i.e., they stand on the outsides of their legs rather than through center core. They shift weight by tilting their torsos to the side and stabilize by overuse of the gluteus medius and tensor fasciae latae.⁷ The fact that the femoral head and its articulation in the acetabulum (the socket for this ball and socket joint) is separated spatially from the greater trochanter by the “neck” between them means that the thigh bone can have a full range both frontward and sideward (in outward rotation) coming up toward the torso without the thigh bone bumping into the pelvic basin. (Before I knew this fact I thought there wasn’t enough room!) This sense of openness around the bones can be a useful visualization to free the range of motion in the femoral joint. The fact that the femur is not a straight bone but has “the neck” and greater trochanter, which are outside of the line of gravity, means that the muscles on the inside of the leg (adductors—vastus medialis, etc.), which keep the leg coming in toward center and underneath the femoral head, must be very strong. They need to balance the outward pull of the muscles on the outside of the pelvis and leg, such as the gluteus medius, tensor fasciae latae, and vastus lateralis, which have somewhat of a spatial advantage and tend to be overused.

Femoral Flexion and Extension

Femoral flexion/extension happens thousands of times each day in the lives of human beings. As we roll over onto our sides and prepare our legs to get out of bed, we flex and bring our legs nearer our core. As we push to stand, we extend. As we take our first daily step and every one thereafter, we swing one leg forward in flexion and as we transfer our weight to stand on the leg, the femoral joint extends. This repetitious action continues as we climb stairs, as we put on slacks, as we sit and stand again, or as we run. One might say it is a “fundamental” action! It is almost omnipresent in daily experience. Yet many people whom I see in dance, as well as many in physical therapy, are not using the torso-limb connection through the femoral joint correctly as they perform this action.

Flexion: Importance of Iliopsoas

As we have discussed before, the deepest, most core connection from the torso through to the legs is the iliopsoas. This is the basic femoral flexor as well as postural support. Because the psoas’ major portion originates from the spine at the twelfth thoracic vertebra it has a wonderfully long line of pull for seemingly effortless flexion if there is proper alignment of the spine and pelvis. You will remember that the psoas reaches down and inserts on the lesser trochanter. As the muscle contracts it flexes the leg almost as if a finger were hooked underneath the lesser trochanter moving the bone forward and

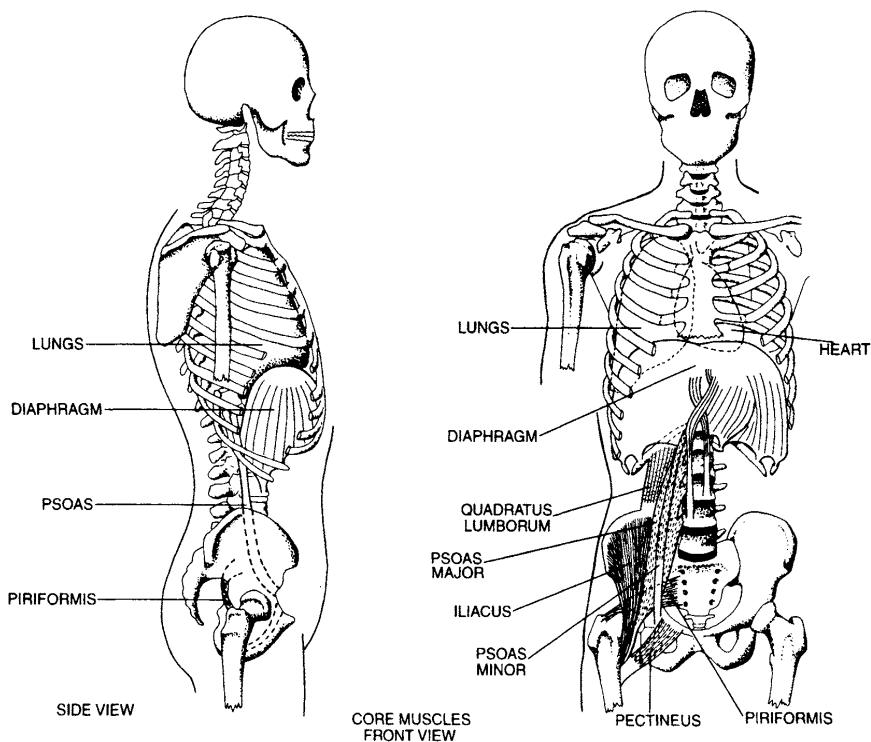


Figure 27 & 28. Your iliopsoas is your primary flexor at your femoral joint.

upward. When the femur flexes in this way the sensation is that the action is happening very low in the body—as if there were a U-shape or a J-shape being made, with the axis of the rounded form being the greater trochanter. The back of the torso has a releasing and lengthening sensation within a “neutral spine” (pelvis definitely does not “tuck”) and tissues in the front of the pelvis fall back and in toward the spine rather than tightening and bunching up (see Figures 27 and 28).

Role of the Abdominals and Back Extensors

If, however, the pelvic basin is tipped forward and muscles in the low back are overly tight or if the pelvis is “tucked,” the psoas cannot do its job as a flexor, because its line of pull will be disturbed. It is difficult for the pelvic basin to maintain its proper alignment without the internal support provided by properly toned abdominal muscles and back extensors. Most people work to strengthen the Rectus Abdominus (and, in fact, over-

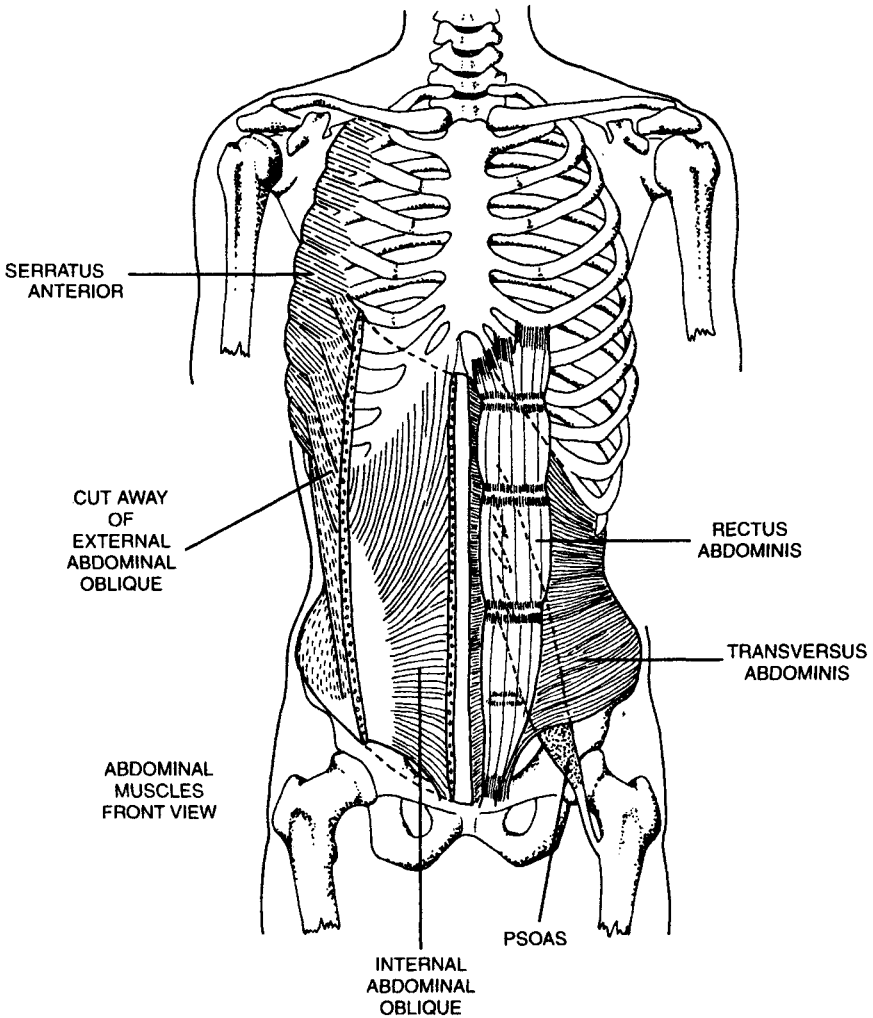


Figure 29. The many layers of your abdominal muscles provide both support and mobility.

strengthen it). But very few people adequately utilize the deeper muscles—particularly the Transversus Abdominis (which contributes to the “Hollowing” sensation) and the Internal and External obliques (see [Figure 29](#)). These muscles are an important part of Core Support. They contribute to the ability of the psoas to do its proper job. I imagine in the mind’s eye that the balanced relationship between the abdominals and the back extensors provides a container which the psoas can then run through like a fountain (see [Figure 30](#)). Without the supportive container, the whole system is less effective.

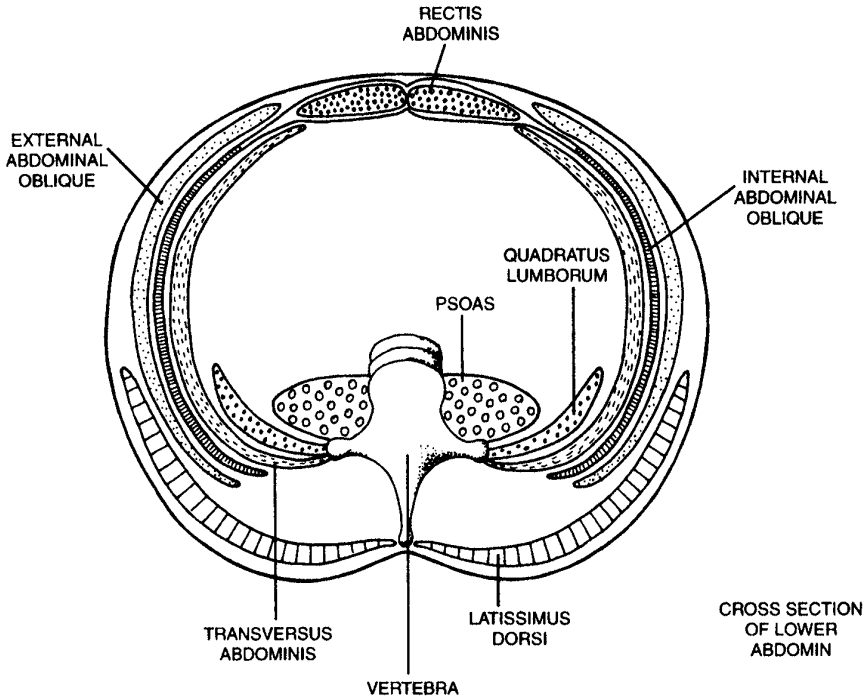


Figure 30. Cross-section of Abdomen. Activate your muscles closest to your center for effective core support.

Effective/Ineffective Flexion

When the pelvic basin is tipped due to lack of support, the muscle in the top of the thigh (rectus femoris) becomes the major initiator of flexion and the abdominals tend to bunch up (particularly the rectus abdominis). These muscles are much more external than the iliopsoas and, hence, not as efficient. (It is more efficient to move bones from deep in the core for basic movement so that the more external muscles can add their help rather than do the whole job. They can then add power in extraordinary circumstances.) Substitution of the rectus femoris for the psoas shows up as a problem in dancers who cannot get their legs above 90 degrees. Frequently these persons need to release and lengthen their low backs and work from a deeper initiation. In fact, once the leg is to 90 degrees it is actually easier to get it higher because of the mechanical advantage of the psoas in this relationship of femur-torso.

In her book, *Rolfing*, Ida Rolf speaks eloquently about the central role of the psoas and flexion in all core functioning, including even the health of the autonomic nervous system's lumbar plexus.⁸ She is very clear in her statement that, "in an integrated body,

the psoas falls back in flexion and she provides clear pictures of the torso flexing on the legs which demonstrate this “hollowing” (as Irmgard called this phenomenon).

The Issue of Hip-Hiking

Overuse of the Rectus femoris and rectus abdominus are not the only poor habit patterns in leg flexion, however. One of the most common is the habit of “hip-hiking.” This happens when an individual initiates femoral flexion on the outside of the leg or hip by using the tensor fasciae latae,⁹ sometimes in conjunction with the gluteus minimus. This substitution tends to lift the pelvis up on the gesture side and tip the pelvis down toward the standing leg, causing the individual to stand on the outside of the standing leg rather than through the core. This tipping is also quite hard on the low back and can bring considerable pain. In terms of function, “hip-hiking” generally means that the leg will not have a full range because the femoral head is not operating correctly in the joint; therefore, both flexion and outward rotation will be compromised. Many dancers are frustrated with this complication in their movement habits and they wonder why the pattern is there. If you are one of these dancers, I suggest you examine the phrase “lift your leg” for its personal historical meaning. If your mother said, “Lift your leg,” while holding a snowsuit or other pants in front of you (and probably a bit too high), you may have hiked-up your hip to get your leg high enough to put your foot into the pants. It worked OK in that instance, because you accomplished the task. But when you are now working to get your legs to extend high in front or to the side, this action does not work. It prevents your psoas from doing its job. For this reason I rarely use the word “lift” in relation to the leg. I also do not use the phrase “Thigh Lift” to refer to the first of Irmgard’s Basic 6 exercises (see [Figure 31](#)). I prefer the simple statement of what is happening, “Femoral Flexion.”

Use of the iliopsoas in Walking (Weight Shift)

A strong iliopsoas, as has been mentioned above, is a part of centered standing, as well as femoral flexion. Here’s another point to consider, which brings up a slightly different aspect of attaining support:⁷

In walking, the psoas is used alternately to produce flexion (the mobile phase) and Internal Core Support (the stable phase). If the psoas and iliacus have been utilized to swing the leg forward in the gesture phase of walking, they will already be activated and ready to take the load, transferring the thrust upward while also cushioning and retarding the momentum of the bodyweight falling toward the ground as the weight is transferred. As Mabel Elsworth Todd teaches, “a muscle thus contracting against a load, does so with great efficiency; if not preparing for the load by contracting against it, it cannot lift the weight so far, or carry it so long, as it can if it contracts before assuming the load.”¹⁰ Thus, if the psoas and iliacus are contracted to swing the leg forward in the flexion phase of the step, they will be enlivened before the load is put on them, and therefore will be stronger in the support phase as well.

Mabel Elsworth Todd brings up another interesting point in her discussion of “Dynamic Mechanisms and Balanced Forces”; that is the balancing aspect of the obturators in relation to the psoas. This aspect is part of the rotary component in ordinary walking which I mentioned several pages back. The psoas has a tendency to outwardly rotate the leg when the leg is a gesture (not weight-bearing), but as the foot takes weight and becomes fixed, the psoas rotates the pelvis, and the obturator internus outwardly rotates the leg and pulls the front of the pelvis downward. “If the psoas and iliacus be stretched, the obturators may pull the pelvis downward to the extent of jeopardizing the support of the load at the fifth lumbar vertebra.”¹¹ Many people are simply not using the iliopsoas adequately as part of either the flexion or support phase. When this is true, the low back is endangered. In dancers there is even more danger if the Core Support isn’t active. When the obturators combine with the piriformis to accentuate outward rotation (as is the dance aesthetic), there is added stress at the fourth and fifth lumbar, which is where the compressive force of the weight is being transferred downward toward the sacrum. This needs to be balanced by tensile forces in the front—“the work of the iliopsoas and pectineus muscle groups (*are important*)...in centering the thrust of the upward lines of force from the femora through the supporting thigh-joint toward the sacroiliac and lumbosacral joints.... The action of the iliopsoas and pectineus groups must equal and oppose that of the obturators and piriformis if the heads of the femora are to be balanced and steady in the acetabula, and the centralized thrust directed through the pelvis toward the keystone, the sacrum. These muscles act to keep the joints in a favorable position in relation to the spine, quite as much as do the ligaments. If these groups of muscles do not operate to balance each other, the ligaments are weakened and the joints subjected to dangerous strains.”¹² Obviously this component we are now discussing is a rotary one. It is operative even in movement, which is not “about” rotation but is concerned with “centered verticality.” This is because of the nature of the relationship of the femoral heads to the pelvic basin. But we will discuss this later. Let’s now delve into the fundamental experience of femoral flexion.

Movement Exploration

BB. Femoral Flexion-Extension (Figure 31): (“Thigh Lift” from Bartenieff’s “Basic 6”): *Begin lying on your back with knees up and feet “standing” in line with your femoral joint, planted on the floor. Confirm your connection on your one leg as a “standing” leg by yielding weight into the earth, pushing down through the earth. As you do this send a line of energy through to the psoas line on that side, and out your head, sensing a “grounding” of your pelvis and foot. (Make sure you are not tucking your pelvis under or standing on the outside of your leg, see “Streams” image on p. 80.) At the end of an exhalation, activate low and deep within your pelvis to let your leg move toward your chest in a pure femoral flexion. As this happens, the tissues in the front of your pelvis will fall back and in toward your spine and your back will lengthen. It is sometimes helpful to imagine that you are creating a U-shape so that there is a sensation of open space in the joint and it doesn’t feel congested or squashed (as it might if you were using an image of a V-shape, see picture). It is also useful to imagine that your pelvis is perhaps one inch longer than it really is, and that you have to lengthen all the way down the back of your pelvis before you create the curved part of the U-shape*

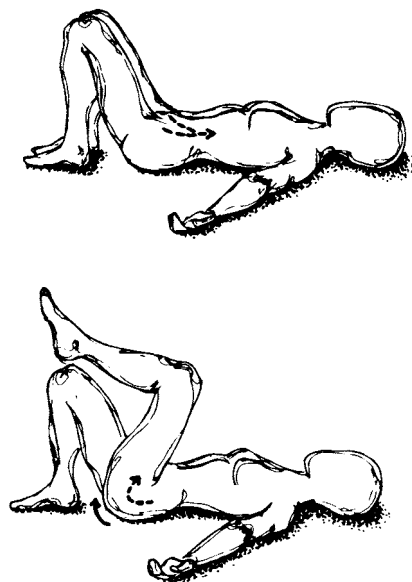


Figure 31. Femoral flexion: Wait for the end of your exhalation (top illustration) Initiate femoral flexion using a U-shape (or J-shape) image (bottom illustration).

with your flexion. Some people also find it helpful to know that the greater trochanter is the axis around which the curved part of the U-shape swings. All of these images help to release tension in the low back and on the outside of the leg. (Check that you are not “tucking” your pelvis, however. This is not necessary, and substitutes action in the low back for psoas-initiated action in the femoral joint.)

To return your leg to standing, initiate the extension phase of the movement by engaging your hamstrings near your sitzbone. Bring your thigh down and plant your foot firmly on the floor, sensing again your “grounding” from heel to sitzbone to coccyx and from the ball of your foot through your inner leg through to the line of energy of your psoas and out your head. Some people find it helpful to use their own touch to bring sensation to the activation of the hamstring to begin this action. To locate a line of contact which might give you proprioceptive feedback about initiating in your hamstrings, find your sitzbone and trace a line from there one or two inches directly toward your knee on the back side of your leg. This is the beginning place for the confirming stroke. Now, use a firm, direct stroke coming down toward your sitzbone to stimulate sensation in your hamstring and confirm for yourself where the action of extension of the femoral joint begins. This should help you to come more solidly into a stable stance as your foot returns to the ground.

Check that you are not using your lower leg as the initiator for either the flexion or extension phase.

Extension: Importance of the Hamstrings

In the above exercise, to return your foot to the floor, you utilized the opposite of flexion, i.e., extension of the femoral joint. I emphasized beginning this extension in the hamstrings.¹³ Let's discuss this further. Flexion and Extension are a pair. In many people's minds the major pair of muscles associated are Rectus Femoris (flexion) and Gluteus Maximus (extension). These are the most external of the possible pairings and they are important muscles, to be sure. But I would like to emphasize the Iliopsoas and Hamstrings as a less obvious, but extremely important pair. I have already talked about the psoas and its closeness to core, plus the fact that it traverses the lowest part of the pelvis and moves the femur into flexion. It is true that the Gluteus Maximus is a major muscle of extension and that its very length, covering as it does both the upper and lower components of the pelvis, means that it is certainly not to be ignored and is an important part of pelvic, femoral action. Let's talk a bit more about the hamstrings, however, since they are frequently less visible in their interplay with the whole system in traditional texts (see [Figure 32](#)).

The hamstrings originate on the sitzbone, the ischial tuberosity, which in effective standing is spatially on the same horizontal plane as the insertion point of the iliopsoas on the lesser trochanter. This fact means that the two muscles are effecting opposite types of change in the same joint at nearly the same level, i.e., the angle of the femur and the very lowest point of the pelvis find their correct placement for vertical support through the interaction of these two very long groups of muscles, one which goes up to the spine (iliopsoas) and one which descends down just below the knee (hamstrings). The "Hamstrings" are actually four muscles¹⁴ which in collaboration effect two joints: the femoral joint and the knee joint. Each of the four muscles pulls at a slightly different angle and all need to be balanced for most efficient action. Most hamstring strengthening exercises and machines address the action at the knee joint and not the one at the femoral joint (probably because addressing the action at the femoral joint means providing education about support through the pelvis.) The rationale for this is generally that the muscles fire as a unit and it doesn't matter which end you work. In my experience this is not true. The action of extension at the femoral joint needs attention. It rarely seems to get trained. This neglect means that many people are not utilizing the hamstrings effectively for initiating the extension of a gesturing leg (as it returns from flexion), nor are they accomplishing the final phase of extension, which is a part of weight transference—the moment when the pelvis arrives fully over the leg.

"Centered" Standing

Irmgard Bartenieff used to say that the hamstrings are like your "bootstraps"—they help get you up over the leg. When walking, climbing stairs, or doing bench aerobics classes, most people are not doing the last bit of extension initiated at the head of the hamstrings. They remain in a slight flexion and are thus not able to feel totally "grounded" or "centered." If the pelvis does not come fully over the leg, the supportive line of upward thrust from the psoas (in its role as support rather than flexor) will not come into play along

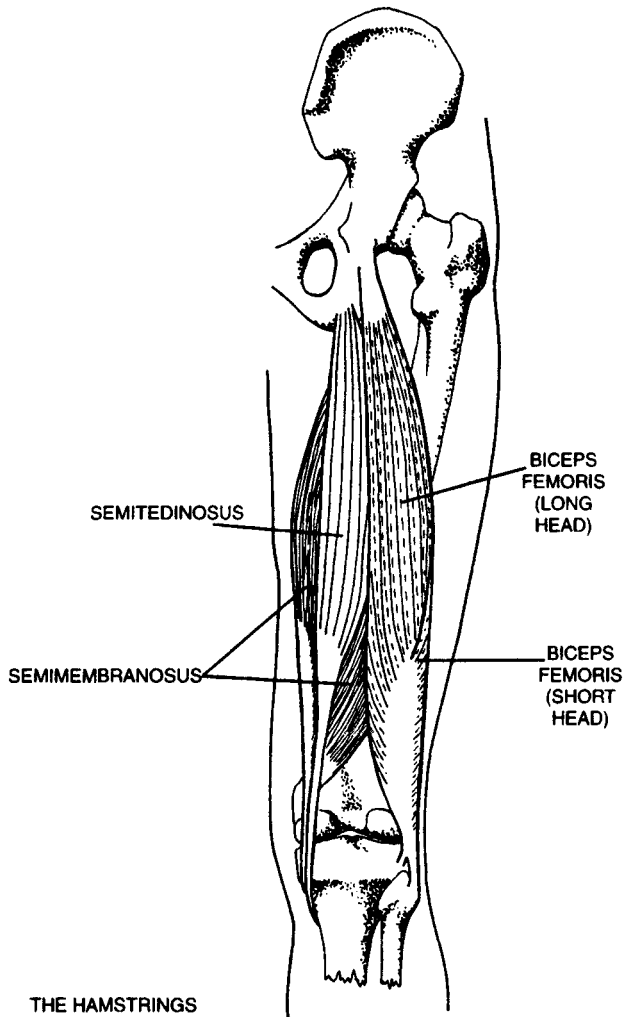


Figure 32. Your hamstrings initiate extension at your femoral joint (a balance to the flexion provided by your psoas), and contribute to centered standing.

with the concomitant connection through the inner leg (adductors, see [Figure 33](#)) and down into the ball of the foot. Without this, the connection on the backside of the leg will not be operative. In “centered” standing, the sitzbone connection runs down through the hamstrings in a kinetic chain with the lower leg muscles to the heel connection. The medial hamstrings, the Semimembranosus and Semitendinosus, along with the adductors, help energize and activate a core line which allows the individual to release tension on the outside of the hip and thigh and stand more nearly through center. Let’s locate that moment of activation at the head of the hamstrings...

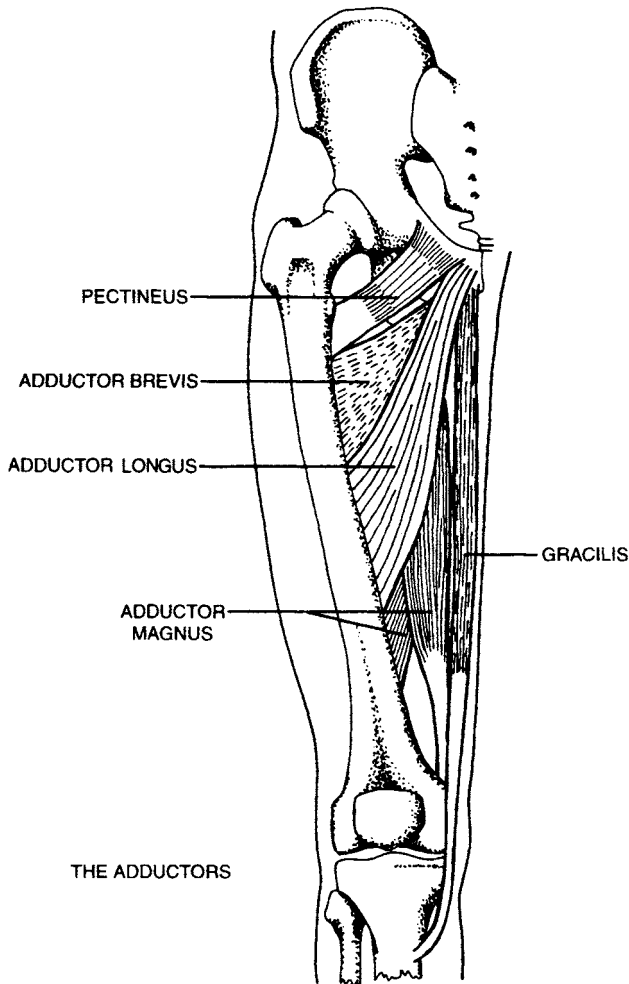


Figure 33. Your adductors play an important role in centered standing.

Movement Exploration

CC. Hamstring Initiation of Femoral Extension:¹⁵ Lie on your tummy. Take your pubic bone to the floor by initiating the movement at the top end of the hamstrings, where they attach to the sitzbones. Make sure you are not initiating the movement by “tucking” your pelvis (this would mean that you were working “one story too high” and overworking your low back rather than gaining support from the lowest muscular component that can achieve alignment of pelvis and leg for centered standing). It is possible to do this movement with a “neutral spine,” allowing your spine to have its own natural curves. Repeat the movement several times until you can get a real sensation of activating from that area. Once you have experienced the sensation, explore doing the

action with your toes curled under and feet flexed, reaching out away through your heel. Imagine that you are standing on the floor. This will help you feel the relationship from your heel to your sitzbone that is necessary for walking and standing. Notice also that you can sense the line of energy from the ball of your foot up into the area of your psoas and through your center core out your head. If you are uncertain if your hamstrings are working, use your fingertips, touching about an inch below your sitzbones to bring proprioceptive feedback of the action into your consciousness.

DD. Walking, Weight-Shifting, Using Hamstring:¹⁶ *Just to confirm that the action of the hamstring which you practiced above is actually useful in everyday life, try this simple experiment. Stand on your left leg and reach your right leg forward to begin to take a step. As your heel contacts the floor, give a touch about an inch below your sitzbone on your right leg as you shift your weight forward. If you slow down your weight shift, you can notice the activation of the hamstrings as they assist your pelvis in the final phase of coming forward to arrive centered above the leg. You may also notice that as the ball of your foot contacts the floor, you can sense a connection up into your psoas area.*

Importance of the Adductors in Centering

Naturally, the ability to stand and move through center could not happen without the component of pulling toward center which the adductors provide. When the adductors are active along with the psoas and hamstrings on the supporting side, they give the power to feel solidly “on” the standing leg. When transferring weight from one leg to the other, even when stepping forward, there is a slight side-side distance to travel (the horizontal distance between the femoral heads). If the adductors activate as part of the kinetic chain from floor up to center core, there will be an easy line of “feed” up into both the psoas and hamstrings of the standing side. I like to think of my legs extending up to the origin of the psoas at the level of the twelfth thoracic vertebrae, which means that as I shift weight from leg to leg, if the legs are underneath me in place, then I only have to shift one vertebrae’s width in the side-side dimension. This image only really works, however, when the adductors are there doing their supportive job. When an individual has weak adductors, that person tends to stand on the outside of the leg, and core support is more difficult, because the links in those low magical “seven inches” which we discussed at the beginning of this chapter are not complete.¹⁷

Sagittal Weight Shift

Movement Exploration

EE. Preparation for Sagittal Weight Shift—Sensing Core Support in Shifting: *Lie on your back, knees up, feet on the floor. Allow your spine to continue to be “neutral” with your own natural curve (i.e., do not “tuck” it under into spinal flexion or arch into extension). Now simply press down through your feet into the earth and release your pelvis about one inch from the floor. You will be planting your feet, and it may feel that you are “standing” on your feet, even though you are lying down.*

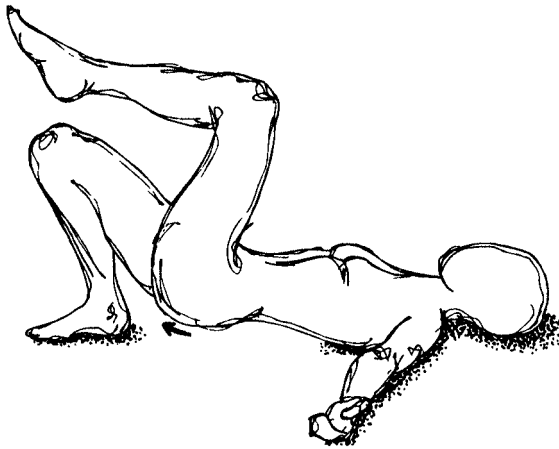


Figure 34. “Standing” through your inner leg and core as you release one leg into U-shape flexion.

While you’re there, with your pelvis released from the floor, explore the sensations of connection of your feet with your pelvis. Let your weight be more on your heels and sense the heel-Sitzbone connection. Then let your weight be more on the balls of your feet and sense the ball of the foot to psoas connection sequencing through the adductors. Play back and forth between your heels and the balls of your feet, then “ground” your foot through both, enjoying the connections from the back of your legs into your pelvis and through the inner legs into the front of your pelvis. Notice that when you experience your grounding, you also feel more centered.

To return your pelvis to the floor, release in your femoral joint and crease directly down to the floor. Do not roll down through your spine. Enjoy your “neutral” spine and let your femoral joint make the change. This trains you to perceive your femoral joint as the major location for change in your Lower Body, not your low back!

Now, shift your weight onto your feet again and release your pelvis about one inch from the floor. Explore tiny shifts of weight into different directions, still keeping your spine neutral. Push from your feet and let your weight slightly shift toward your head. Then Pull through the back of your legs and let your weight slightly shift toward your feet (remember this sensation—we’ll use it again in the next exercise). Remember to allow your breath to be full and let the energy at the end of your exhalation run through your torso and out your head. Tune-in to the sensation in your inner core as you go through a range of tiny weight shifts. Let your weight come to center. Are you able to sense changes through your inner core?

When you are, add another possibility. “Stand” on both feet again. At the end of your exhalation, release one leg from the floor into a small flexion. (You will be “standing” on the other leg; see [Figure 34](#)) As you do this, notice that you can sense the weight shifting slightly, but even more importantly, you can sense that the support is facilitated in your inner core at the level of your 12th thoracic vertebrae on your “standing” side, where the psoas connects. (Even though you are still tying down, the leg that stays planted may be thought of as your “standing” side.) If you alternate legs, standing on one and then the other (while your pelvis is still released from the floor), you will be able

to sense the change of support from one psoas to the other. **This lets you know that when you shift from one leg to the other with your legs “underneath” you, the side-side component of the shift is about an inch—the width of one vertebra—the distance between one psoas and another.** This creates a clear feeling of centered support. You are not shifting the distance between your greater trochanter, and therefore, there is no need to stand on the outside of your legs. This is very important when standing and walking in everyday life.

FF. Weight Shift—Sagittal Pelvic Shift (Figure 35): (“Pelvic Forward Shift” from Bartenieff’s “Basic 6”): Lie on your back, knees up, feet planted (see above). At the end of your exhalation, press down through your feet and shift your pelvis forward toward your feet. Your pelvis will be released from the floor and travel forward and a bit upward, bringing the femoral joint into extension. This is a simple progression of what you were just doing in the previous exercise. **Your intention to go forward will enable you to shift toward your feet and not toward your head.** If you were standing vertically this would be “advancing,” training the ability to travel forward. (If you are having trouble with this, lie near a wall and push on it with your hands, reaching from your tail to shift toward your feet.) By initiating the movement at the end of your exhalation you provide maximum opportunity for your internal support through your psoas to engage. You will also notice that your hamstrings are major players in pulling your pelvis forward. This hamstring component of extension is what I was discussing earlier—it is the fundamental aspect which enables the pelvis to complete the shift of weight over the legs, whether you are standing vertically or lying down. Check that you are not lifting from your middle or low back and also that your Gluteus Maximus is not providing the femoral extension. If you are using your gluteus as your major extensor in this exercise, you are working, as Irmgard used to say, “one story too high.” Finding the lowest component of extension on a simple weight shift such as this one allows the most efficient movement—closest to the joint and closest to core. To return your pelvis to the floor, release in your femoral joint and crease directly down to the floor. (Cut down into your femoral joint.) Do not roll down through your spine. Let your femoral joint make the change. This is the beginning of the ability to go into the back space, to “retreat.” Practicing advancing and retreating in this way allows you to perceive your femoral joint as the major location for change in your Lower Body, not your low back.

Let’s now try two subtle variations of this fundamental action, one which encourages more spinal mobility, and one which encourages more spinal stability. When you experience the differences between a. and b. (below) you might want to jog your kinesthetic memory to remember which you did in this first exploration.

GG. Sagittal Pelvic Shift with Spinal Mobility: As you do the movement described above, shifting your weight forward, let your “tail” (coccyx) Reach & Pull forward toward your feet, lengthening your spine. This activation in the lowest part of your spine will engage your pelvic floor musculature and provide a true mobility through your whole Lower Body. Your tail will be available to begin, or accommodate to a full spinal movement, thus facilitating Head-Tail mobility.

This movement uses what Irmgard called “the pelvic-femoral rhythm,” a graded interplay of pelvis/thigh movement as the weight shifts and/or the femur flexes. This pelvic-femoral rhythm is somewhat similar to the scapulo-humeral rhythm in the Upper Body. Irmgard taught that graded change in the lowest part of the spine and pelvis when the relationship changes at the femoral joint is an important part of healthy movement of the lower unit. In normal walking one sees the slight flow and lengthening through the

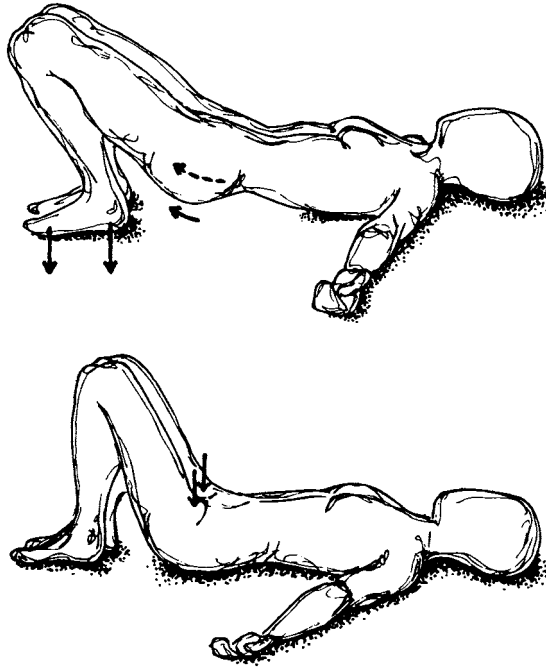


Figure 35. Sagittal Pelvic Shift: Go *forward* to “stand” on your feet (top illustration). Cut directly down into your femoral joint to return (bottom illustration).

lowest part of the pelvis as the leg swings under, and again a slight proportionate change as the pelvis comes above the thigh and the tail accommodates. In normal walking the tail is free-flowing and participates in the weight shift (rather than being rigidly held as it is in so many people). I also work with this movement with dancers and others who are training for large, total body shape change with weight shift and/or level change... anyone who needs more mobility. I would not work with mobility first with a patient who had a herniated or bulging disc in the lower back, because the spinal lengthening which happens in this variation sometimes puts too much pressure on the discs by slightly taking away the natural curve of the spine. (I would work with the spinal stabilizing version, below.) On the other hand, if a patient is having low back pain from excessive tension in the low back and there is not a disc problem, I would work to mobilize this lowest part of the spine, and this might be a perfect exercise to use. I would make sure the person is really reaching with the tail, lengthening the spine and not simply tucking the pelvis by reversing the spinal curve in an already overworked lumbar vertebrae.

HH. Sagittal Pelvic Shift with *Spinal Stability*: Lie on your back, knees up, feet planted again. This time check to see that your spine is “neutral” (i.e., that you have your own natural curve in your low back. If you have trouble finding “neutral,” arch your spine into a full extension, then tuck it into a flexion, then release and sense your natural curve.) As you shift your weight forward over your feet and let the femoral joint come to full extension, maintain your neutral

spine. Do not lengthen your tail or roll through your low back to get your pelvis off the floor. Simply push down through your feet and let the hamstrings do their job of opening the front of the femoral joint and taking the pelvis into the air. (You can check yourself: Put your hand underneath your low back before you begin. You should not feel your fingers getting pressed down into the floor if you are maintaining a “neutral spine” as your pelvis comes forward and up from the floor.) Return to the floor by creasing down into the femoral joint again. (Check to make sure you are not rolling down your spine successively. This is a different action.)

I work with this exercise with patients who have disc problems, because frequently they have an area in the low back which is hypermobile and needs stability. Often they have been using a joint articulation in the low back as the major joint of the Lower Body (rather than using the femoral joint), and the neuromuscular system needs to be reeducated.

Once the client knows where the femoral joint is and can make weight shifts in the joint rather than in the low back, this exercise can be used to practice back stabilization by alternately standing on one leg and then the other, letting the gesture leg come to a U-shape flexion while the pelvis is off the ground. (See [Figure 34](#)) The challenge is to keep the pelvis level (i.e., no tipping to either side as the weight shifts to one foot and the other leg is raised.) This trains the smaller muscles of the back, the paraspinals, to maintain stability while there is mobility in the femoral joint. (When there is a back problem, one still needs to be able to use the legs to walk and change level without overusing the larger spinal muscles and/or torquing in the low back through pelvic rotation.) Adding leg weights can be very useful for strengthening once the connections and articulations are clear. Once the back is able to achieve stability, I would alternate stability with gradual introduction of mobility.

I am including a large variety of weight shift patterns, because this ability is an important one—and was historically emphasized in the study of Fundamentals. I would not, however, use all of these variations at one time!

II. Sagittal Propulsion—Sitting ([Figure 36](#)): *Sit on your sitzbones, legs flexed, feet “standing” in parallel on floor in front of the pelvis, arms down by the side of your pelvis, hands supporting some weight. Yield & Push down into the floor through both your feet and your hands enough to release your pelvis from the floor. Shift your weight forward toward your feet, allowing your tail to reach toward your heels and lengthen your back as you did in the “Sagittal Pelvic Shift with Spinal Mobility.” When your sitzbones are near your heels, reverse the direction and travel backward by cutting directly back into your femoral joint. Repeat this sequence several times, until you can begin to sense an activation in the femoral joint area. (Make sure you are not doing this primarily from your low back—you want the action to initiate in the lowest part of the pelvis, utilizing the pelvic floor, psoas, and hamstrings not tucking the pelvis from the level of the lumbar vertebrae.) It is sometimes useful to do this exercise with students before doing the more subtle Sagittal Pelvic Shift while lying down. This exercise gets the femoral joint and the lowest part of the pelvis activated!*

JJ. Sagittal Propulsion to Stand and Walk: *Once you are shifting forward and backward easily, with the action coming from your femoral joint, continue traveling forward and upward to stand and walk forward (not shown). To do this: on the forward phase, keep your pelvis coming forward; your knees will come to support briefly on the floor as you swing one leg through*

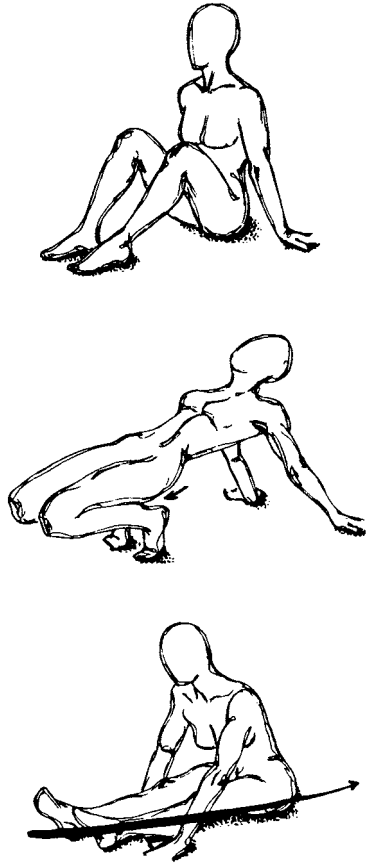


Figure 36. Sagittal Propulsion Sitting. Take your tail toward your heels (middle illustration). Cut directly back into your femoral joint (bottom illustration).

(using pure femoral flexion, not hip-hiking) to walk forward. As you do this part, check that your center of weight continues to travel forward and upward. If you had a light on your center of weight, it would travel forward and upward in one continuous sweep with no glitches. (Many people have a moment where the center of weight shifts momentarily backward as they come to stand. Do not allow this to happen.)

To return to sitting, simply reverse the line of weight transference and walk backwards and down, cutting into your femoral joint—almost like “riding” a line of energy.

In these exercises we have been emphasizing the **Functional aspect** of the femoral joint to enable weight shift and propulsion forward and backward. For a description of how I might work with the **Expressive aspect** of use of the pelvis in weight shift, see [Chapter 4](#) (p. 33) In teaching a class, **I generally work with both aspects within one class to give students a chance to integrate Function and Expression and bring the experience to personal meaning.**

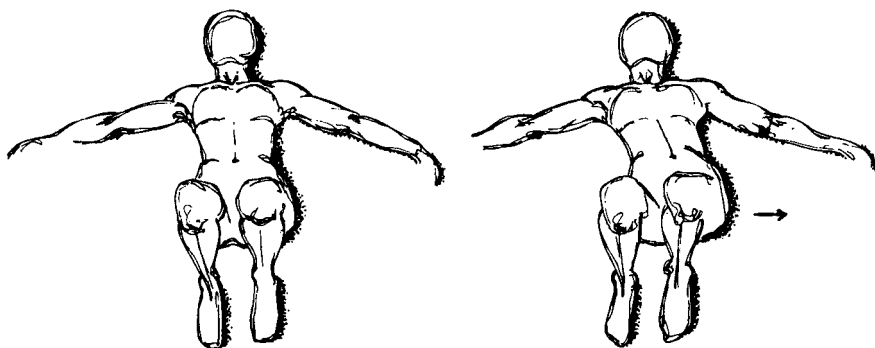


Figure 37. Lateral Pelvic Shift: Shift purely side by side by the movement through your lesser trochanter. You will see the result as your greater trochanter moves sideward through space.

Lateral Weight Shift

Movement Exploration

KK. Weight Shift—Lateral Pelvic Shift (Figure 37): (“Pelvic Lateral Shift” from Bartenieff’s “Basic 6”) Lie on your back, knees up, feet planted. At the end of your exhalation, push down through your feet to “stand on your feet” (see above). Your pelvis will be about an inch off the ground. Shift your pelvis to one side by yielding and pushing through your feet and reaching and pulling through your lesser trochanter on the side toward which you are going. Again this is a Yield & Push pattern which sequences to a Reach & Pull. It feels like you are shifting a typewriter carriage at the level of your greater trochanter. As you shift you will notice that your pelvic rim and greater trochanter will go further out to the side, not up toward your ribs. If your pelvis is going up toward your ribs you are “tipping” your pelvis, not shifting your weight from the lowest area.

You can graphically experience the difference between tipping and shifting if you have a box or a large book handy. Put the box on a table or on the floor. Lift up one side and tip it to the other side. (If it were full of sand you might be spilling the contents slightly.) This is “tipping.” Return it to resting fully on the table and push it directly to the side, leaving the bottom of the box on the table. It will slide on the table (and none of the contents would spill if it were full of sand). This is “shifting,” and this action is what should be going on with your pelvis as you shift your weight, both in this exercise and when you are standing. The top rims of your pelvic basin on the sides, the iliac crests, should be level with one another. The low rotators and the abductors and adductors will be the major movers—again activating the area around the greater trochanters and through the pelvic floor level, supported by the hamstrings and psoas. In the lateral shift we encounter rotation. One leg will rotate outward slightly as the other rotates inward. We will discuss the rotary component in a moment, but first let’s experiment with Lateral Weight Shift while standing.

LL. Weight Shift—Lateral Weight Shift While Standing: Stand up and play with shifting your weight side-side improvisationally, perhaps to music. Make sure you are shifting

through the *lesser* trochanter and sequencing through your internal core support as we discussed in “centered” standing.

The Rotary Component

One of my favorite facts about the femur is that its head is beautifully rounded. This enables a marvelous aspect of human movement potential to manifest itself...one which a large percentage of the population is not utilizing fully. I am speaking of GRADATED ROTATION. The rotary component in movement is sorely underrated and underused. The importance of the rotary element was one of Irmgard’s major points as she worked with people in rehabilitation and movement training. By gradating rotation as you move (particularly as you flex or abduct the leg) you seemingly make more room in the joint. It seems almost magical. Rotation helps make a greater range of movement possible! (This is true also in the shoulder joint and in the spine—using gradated rotation makes for greater range of motion.)

Although many people utilize the Gluteus Maximus as their major outward rotator (lateral rotation), this muscle does not lead to the greatest degree of mobility in outward rotation (particularly when flexion and abduction at the femoral joint are desired, as they are in a ballet leg “a la seconde”). This is because the Maximus primarily extends the thigh and stabilizes as it outwardly rotates. The Adductors also participate in outward rotation, but **the six primary outward rotators are the following (going down the buttocks area, see Figure 38):**

1. Piriformis
2. Superior gemellus
3. Obturator internus
4. Inferior gemellus
5. Obturator externus
6. Quadratus femoris

Underuse of these important muscles contributes to what Irmgard called “the Dead Seven Inches,” which we discussed at the beginning of this chapter. You will notice in the illustration that these muscles are quite low spatially on the body in relation to the majority of the inward rotators (medial rotation),¹⁸ which are the following:

1. Gluteus medius (anterior portion)
2. Gluteus minimus
3. Tensor fasciae latae
4. Adductor magnus (posterior portion)

The spatial disparity of the two sets of muscle groups means that people who tend to work “one story too high” as Irmgard used to say, will be likely to have trouble finding their connection to true outward rotation and will try to “lock it in” with the Gluteus Maximus rather than discover the gradated aspect.

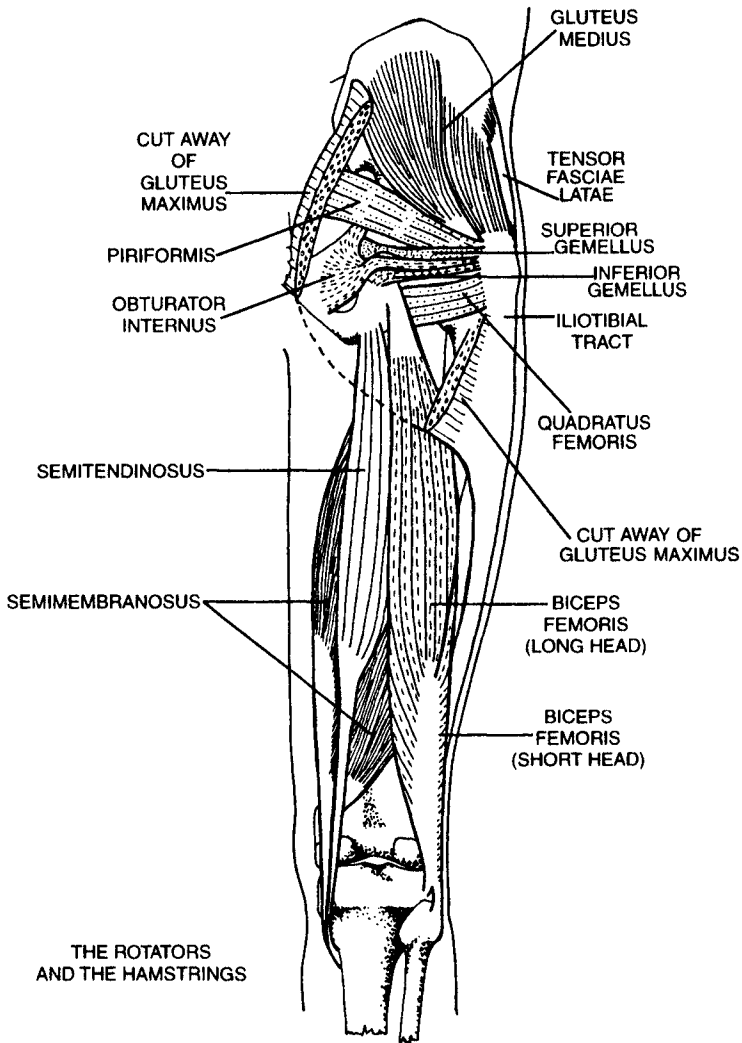


Figure 38. Your outward rotators are like a fan. Each pulls at a slightly different angle to facilitate graded rotation.

There is a slight rotary aspect even in normal walking as we discussed earlier, but in dance and most sports where rapid transference of weight, including change of direction or level, is called for, rotation is paramount. The six external rotators work in a graded way along with the Hamstrings, Gluteus Maximus, Iliopsoas, Adductors, and Pelvic Floor to provide the lowest component of both mobility and balanced “grounding” for the Lower Body. Imagine a quick shift of direction as a basketball player “fakes” and weaves out of the way of an opponent. Most often the weight is lowered, legs are bent, and the

quick change of facing comes not so much from a turn of the whole body with friction under the foot, but from a “frictionless” or “blind turn” in which the torso changes direction by opening away from the femoral joint, transforming a leg which had been parallel into a turned-out one automatically. This is possible because of graded rotation. Effective functioning requires that the stable moment of parallel rotation which is probably being facilitated by the inward rotators of the “upper story” of muscles, yield in a split second to the mobility of the outward rotators of the “lower story.”

From the expressive side, whenever shape is important rotation again is paramount. As a dancer brings a leg around in a “ronde de jambe” to embrace a partner in an “attitude en derriere” rotation is what makes the action possible. “In all more complex spatial patterns, such as rounded shapes and figures-of-eight, there are frequent changes of rotation according to changing directions and planes. The rotary pattern becomes decisive to the smoothness and spatial precision of the shape.”¹⁹

In movement training, both inward and outward rotation are needed to balance action around the joint. Most people do not have much problem performing inward rotation, however, so we will spend more time discussing the issue of outward rotation. The six primary outward rotators form a sort of “fan,” **each pulling at a slightly different angle** to rotate the femur. This fact is important to know if you are intending to work for maximal outward rotation, as is done in dance. As you move into a different relationship of the pelvis and thigh you can sequence into different amounts of outward rotation. For instance, in dance, as you descend deeper into a plié or lift your leg higher to the front or side, you can outwardly rotate more. (This, in turn, will aid your flexion, so they are mutually supportive!) Thus, if you are doing a movement and you try to set the degree of “turnout” at the beginning (as many dancers do when they begin a plié), you are doing yourself a disservice. When you begin a plié, open the underneath sides of your legs like a fan and keep the space opening gradually more and more as you descend. This is generally much more effective than thinking “down” to begin. Initiating by using “open the fan” or “widen” means that there will be room between your legs for your pelvis to descend.

Sometimes students are confused about the true nature of outward rotation in the femoral joint. They frequently confuse it with abduction and flexion combined. For instance, a student might have the leg flexed forward at 90 degrees with the knee bent (sometimes called a “parallel attitude”). The teacher might say, “Rotate the leg outward and take it side,” and the student will simply open the leg side like swinging open a gate, leaving the lower leg pointing downward. I call this “gating the leg,” and it is not the same as rotation.

When the femur truly rotates in the joint (the acetabulum), **the greater trochanter excursions down around nearer the sitzbone** (see [Figure 39](#)). This means that the lower leg also changes position in space. (In the previous example, as the femur rotates and travels to the side, the lower leg would end pointing toward left forward low.) Consciously enjoying the excursions of the greater trochanter is quite a new experience for most people. The experience of using the lowest component of the rotator fan can feel “way down under” to students who are used to producing outward rotation primarily by holding in the Gluteus Maximus and piriformis. One time in class

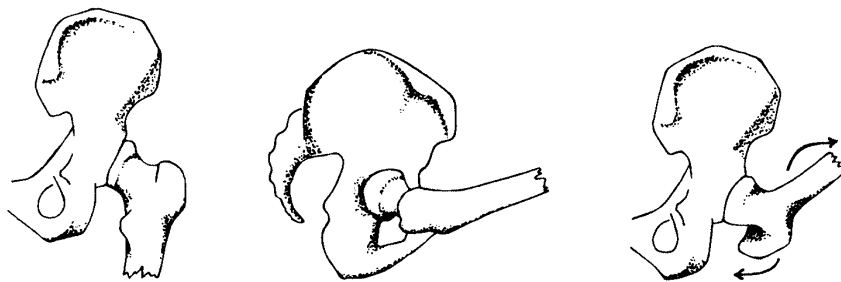


Figure 39. During outward rotation, your greater trochanter excursions down around nearer your sitz bone.

when we were talking about how far down this action seems to be on the body, one of my students jokingly said “Wow! We’re talkin’ Australia here!”

Movement Exploration: Rotation

MM. Basic Outward Rotation in Femoral Joint: *Lie on one side with your arms and legs at 90 degrees to your torso and elbows and knees bent. Now use the hand of your top arm to help you locate your greater trochanter and your sitzbone of your top leg side. Let your thumb press on your greater trochanter and your middle finger press on your sitzbone. Explore the difference in the amount of space between your thumb and your middle finger in the following:*

a. “Gating”—*Lift your top leg toward the ceiling and out toward your side. Notice that the space between your thumb and finger stays relatively constant and your lower leg travels upward and sideward with your thigh. You are not using rotation in this example. Let your leg come down again to rest on top of the other leg.*

b. *Outward Rotation—Begin rotating your femur in the joint to open the space between your two legs. Immediately you will notice that your thumb starts to move down around under the lowest part of your pelvis toward your middle finger at your sitzbone. Encourage this even further by pulling down around toward your sitzbone with your thumb. You will also notice that your lower leg is still probably pointing toward the ankle of your other leg. Do this without letting your pelvis roll backward. You are using your fan of outward rotators. Now let your leg rest. Repeat this several times until you feel you are sensing the action easily. Roll to your other side and repeat both (a.) and (b.).*

NN. Sequencing Rotation into the Pelvis and Torso: *Return to the beginning form above, lying on your side. Begin outwardly rotating your top leg, as in (MMb) and keep it opening until you sequence through your pelvis and torso onto your back. As you do this allow both legs to come to their full outward rotation so that the space between them is very open. Enjoy the sensation of open space as your arms and legs spread away from each other. Then continue rolling onto your other side, enjoying the moment of internal rotation which will bring your limbs back to parallel as you again lie on your side. Repeat the whole sequence until you are rolling easily from side to side in*

a rhythmic way, savoring that moment of total opening and total closing each time. Make sure you are initiating the movement from the rotary action, letting your greater trochanter journey toward your sitzbone. It is quite a different sensation to begin with your Upper Body or hip.

OO. Rotation—Standing: Come to standing on your feet (not lying on the floor). Begin with your legs parallel (neither rotated in nor out) directly under your femoral joints. Assert your centered standing through your standing side and let your gesture leg flex forward. Now explore rotating your gesturing leg inward and outward around the internal axis of the thigh. Remember that you do not have to hike your hip up to rotate inward or tip it downward to rotate outward. Let the action happen deep in the femoral joint, not in your low back. Try a phrase, “Flex, rotate out, rotate in, stand parallel.” Repeat on the opposite leg. Notice that as you change from one leg to the other, your internal support through your center core is clear (your torso doesn’t tip to one side or the other) and your legs are free in the joint.

PP. Turnout: If you are a dancer, it is wise to work with your own anatomically correct degree of outward rotation. Find it by doing the following: Stand with your feet together in parallel. Release the balls of your feet slightly off the floor and rotate your legs outward from the femoral joint. Let the balls of your feet return to the floor and stand fully on your feet. This will be your “First Position.” Your knees should be “looking” in the same direction as your toes. If they are “looking” inside of where your toes are pointing, begin again. Your feet are probably pronating, putting pressure on the inside of your knee. It is potentially extremely detrimental to your knees to “force” rotation from the feet. Whole leg rotation begins in the femoral joint! When you *plié* in this position, it is useful to imagine widening the space between your legs first rather than thinking about going down. “Open the fan” between your legs and then continue to open your knees directly over your first two toes as you descend into *plié*. Make sure that you are not “tucking” your pelvis as you do this. “Tucking” means that you are probably not utilizing your femoral joint fully, and are working “one story too high.”

QQ Rotary Improvisation—Eyes all over the Body: Imagine that you can put your eyes anywhere on your body. For instance, put one on the inside of each thigh. What color are your “eyes?” Let them open wide and narrow to a slit, enjoy that they can express different feelings or attitudes. Now explore “seeing” with those eyes. Let your body move in whatever way is necessary (changing level, turning upside down, etc.) to allow those “eyes” to “see” into different parts of the space. Continue moving and move the “eyes” to different body parts. As you move, enjoy the fullness of rotation that is possible when your “eyes” are really wanting to “see.” Don’t neglect your Upper Body either. Put “eyes” on the inside of your upper arms, etc. As you travel letting your “eyes” “see,” you may begin to spontaneously experience some of the beautiful aspects of Asian dance, which is so rich in rotary possibility.

I find that the above improvisation enlivens rotation and makes it less mechanical for students. Needless to say, any of the senses can be used. One could put “ears” or “noses” on the body parts. The key element is that the body is actively seeking sensation. You may remember that this happens developmentally as well; the baby rotates the head in response to touch or smell and in order to suck. Working with sensation with dance students allows them to become more active in the process of rotating rather than trying to achieve a set shape and hold it in an outward rotation while moving.

The sensory improvisation we just did reminds us that Upper and Lower are connected and, of course, one of the major components of Upper Body movement is rotation. But let's focus a bit more on the Upper itself before we go any further.

Your Upper Body

There is no doubt that the last half of the 20th century in America has been a time of Upper Body orientation: Consider the value placed on jobs where the brain and hands are the most predominant “workers,” for instance, corporate leaders, surgeons, and computer programmers are some of the highest-paid professionals. (This is very different from a time in culture when the whole body was used to stalk an animal for food or to swing an ax.) In addition, magazines are full of pictures of men's hard Upper Body muscles along with women's pretty faces and soft voluminous breasts. These serve as fantasy images for the culture. But none of these aspects of “Body” require that total body connectivity be available for the functioning of the profession or fantasy to happen. Indeed, “getting the upper hand” in a situation or “one-upsmanship” might be a valued to “reach a goal” (generally also an Upper Body image), but there is little emphasis on connecting the whole body to get underneath whatever is being done. This brings up the question, **“What is the role of the Upper Body in whole body functioning? And how can the Upper Body remain connected to the whole body in ways that will further its full movement capabilities and that of the whole organism?”**

But perhaps an even more basic question is, “Why would I be interested in activating my Upper Body?” Let's follow that one for a while....

Earlier in this chapter we made a list of important aspects of Lower Body functioning. Let's do the same with Upper Body. Take a moment and close your eyes, taking time to let images of yourself using your upper come into your mind's eye. Then record these images in some way.

Here are some that come to me:

1. Touching my heart (the front of my chest) in an expression of having felt something deeply.
2. Giving a hug, really surrounding and melting.
3. Reaching up and forward to put dishes away on a shelf.
4. Reaching around and back to pull my car seatbelt, and twisting around forward and down to fasten it.
5. Stretching to return a tennis ball.
6. Spreading my arms up and out to greet the sky or down to pick a flower.
7. Doing a large, expansive arm movement while dancing (such as a large rounded arm sweep through space, which might end in a clean lined star shape.)
8. Typing on a computer.

I am aware of something very basic about all of the above examples...something which I rarely think about consciously, but which is quite important in answering the question we posed above about the appropriate role of the Upper Body. What I notice is **that in all**

of the above examples the role of the Upper Body is one of connection. The ability of my Upper Body to connect to myself, to others, to objects, to space and the environment is an important part of my ability to respond to the world in an adaptive and interrelational way.

As I connect to the world, I want to be sure what I am “connecting” is coming from the full “me” in all my multifaceted-everchangingness, and that I am able to respond to “the world” in all its multifaceted-everchangingness. **The ability to be adaptive and interrelational then becomes a major aspect of function in the role of the Upper in connection with the world. This brings us to the subtlety of constant gradated change and how the Upper Body is anatomically made for this function.** I am here jumping levels from pure anatomical structure to action and psychological abilities in the world and I recognize this is a large leap. But it has been my experience that playing back and forth between the language of anatomy and metaphor serves a fuller, more integral understanding of Body-Mind working than does addressing each in a totally separate way.

In speaking about the Upper Body we are talking about basically the head, shoulder girdle, arms, and ribs, plus all the organs included within and muscles attached to those areas. Since we will be talking about the bones and muscles more later, perhaps I should mention the obvious in terms of organs...

1. My Upper Body contains my heart and lungs: my basic organs which sustain life.
2. It contains my principal sensory organs of touch, taste, smell, hearing, and sight: my basic organs for perception.
3. It contains my brain: my primary “organizational control central” for input and output of sensing, feeling, and thinking.

Any blockage of movement in the Upper Body will mean that these organs are probably not getting their fullest support for activating their function. For instance, if the breath is not full, the heart may not be receiving adequate oxygen and hence the brain may not be fully oxygenated as well. Muscular holding patterns in the thoracic area can make it difficult to breath fully. Inadequate usage of the scapula in arm movement can mean a tightening of the upper muscles which connect the shoulder girdle to the cervical area of the neck/head. This tightening can cause the cervical spine to lose its length and the head to pull back and down on the spine, possibly cutting off kinetic chains of nerves which supply the brain. When this happens, my clients report that the area supplied by those nerves feels sort of “numb” or “dead,” as if it is not readily available for sensation. In general, **holding tension in an area cuts off sensation. Bringing movement to an area re-enlivens sensation.**

Upper Body Areas which May Need Enlivening

In my work in a physical therapy clinic I have noticed that there are generally two major holding areas in the Upper Body (similar to the “Dead Seven Inches” in the Lower Body). They are:

1. The seven-nine inches which include the head-neck connection at ear level down through the upper part of the shoulder girdle (including the clavicle and the upper border of the scapula and the articulation of the humerus in the joint formed by the glenoid cavity and the acromion). There are many causes for this holding pattern—probably an interaction of function in the world and expression of psychophysical being in the world. “Function in the world” might include such activities as sitting at a desk eight hours a day maintaining a set head-neck relationship while looking at a computer screen. “Expression of psychophysical being in the world” might include ways of being in the body such as pulling the head in and collapsing in the chest in order to appear less threatening or be less visible—common in families where abuse is prevalent or in women who are ashamed of or embarrassed by their height or breasts.
2. The five-seven inches from the mid-thoracic area including the mid and lower parts of the scapula and descending to the first lumbar vertebrae. Frequently this is experienced as a flattened or “deadened” area in the vicinity of the mid-thoracic (brapstrap area in women). Depending on whether the front of the chest is concave or convex in the held position clients have referred to the sensation as being “resigned to the situation I’m in” or as a holding of a “braced competence” or “invulnerability.” This area contains the life centers of heart and lungs and, hence, is a center of vulnerability. Enlivening this area in movement along with a consciousness of emotional feeling frequently brings a sense of “heart opening,” or “new life.” Activating the lowest part of the scapula in arm movement, either for stability or for mobility, brings a sense of “groundedness” and connection to center, which is frequently not there if the arm is considered to begin at the shoulder. Utilizing the lowest part of the scapula means you can put more of your lower power behind your arm movement and also, when appropriate, more total body into an embrace. I have noticed that when people speak of the “soul,” as in “I want my soul to be involved in my work,” they frequently touch an area right below the sternum which some people refer to as the “solar plexus.” Because this area also contains the juncture of Upper Body and Lower Body at the 12th thoracic vertebra it is important in the entire question of Upper-Lower connectivity.

Activating the Upper Body

Now that we are clear why it is important to activate the Upper Body, let’s continue with a few more specifics. When I teach classes on the Upper Body, I include movement exploration from each of the eight areas listed below. You will notice that they relate to a developmental progression. I do not always use this order, but I have found it necessary to cover at least these basics, because there are so many possible movement problems in the Upper Body and also so many possible inroads to facilitating Upper Body mobility and stability. Here are a few that I have found useful:²⁰

Upper Body Mobility-Stability Is Facilitated By:

1. **Full Breathing**
2. **Core-Distal Connectivity**
3. **Head-Tail Connectivity**
4. **Upper Body Yield & Push Patterns and Reach & Pull Patterns**
5. **Movement of the Scapula on the ribs as the arm moves**
6. **Graded rotation in the shoulder joint**
7. **Use of full range of Radius and Ulna action for creating volume and subtle graded change.**
8. **Three-dimensional use of the hands**

Let's look at each one of these in greater detail...

1. **Full Breathing**—Breath allows movement in the rib area and prevents the sensation of “locked” chest and arms. Breath also provides a sense of core stability, linking Upper to Lower through the full use of the diaphragm.

Without breath support, movement in either the upper or Lower Body both looks and feels lifeless. Movement seems to have an “external” quality—as if it is happening to the person rather than coming from her/him. It lacks a “shape flow” and “effort flow” baseline. Rather than the torso participating in a full opening or closing, it somehow seems held or locked, as if the rib case were truly a cage. In fact, thinking of the ribs with the term “rib cage” frequently cements that mind set.

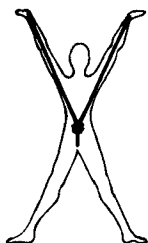
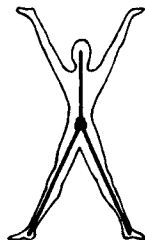
I prefer to remember that the part of the ribs which attaches to the sternum in front is actually cartilage, not bone. When I see this in my mind's eye I can see the protection which the ribs provide for the heart and lungs is like a malleable case, easily molding and accommodating with the breath as the arms carve and shape space. Further, because I know the ribs themselves are not flat in one plane, but are more like sweeping three-dimensional transverse volute forms, I can imagine the space within the ribs changing in swirling currents as the ribs expand and rise with the breath on inhalation and enclose and sink with the exhalation.²¹

When working to enliven the Upper Body, it is always wise to return to Breath. For more specific information and movement exercises utilizing Breath, the reader is referred to [Chapter 6](#).

2. **Core-Distal Connectivity**—Core support for limbs confirms basic connection and prevents a sensation of limbs which fly away out of control, unsupported. Particularly useful in Upper Body support are the triadic relationships.

Total body integration is more easily achieved by anchoring the Upper into the Tail and by giving the energy of grounded connection from the Lower a place to go up through the torso and out the head. For more specifics about core support and for Core-Distal movement experiences, the reader is referred to [Chapter 7](#).

3. **Head-Tail Connectivity**—This provides spinal support and aliveness through the core. As obvious as it is, many people do not consider the head when discussing the Upper Body and, likewise, do not discuss the tail when talking about Lower Body work.

Arms to Tail**Legs to Head**

Most people work with “the arms” and “the legs” without realizing the underlying spinal support which is necessarily part of the usage of these limbs.

If either the head or the tail is held in tension, as if apart from the rest of the body, neither full mobility nor full stability is possible. Sometimes a simple question helps to integrate the spine—perhaps, “How is your head ‘living’ within this movement?” Sometimes it helps to get specific and ask, “Is your tail moving with your standing leg or your gesture leg?” Once the choice is made at the spinal level, it is easier for the limbs to stay connected to the whole.

For more specifics about Head-Tail work, the reader is referred to [Chapter 8](#).

4. **Upper Yield & Push Patterns And Reach & Pull Patterns**—Because these neurological patterns are patterns of total body organization initiated by the Upper Body, they entail moving the whole body by means of the upper and, hence, strengthen muscles which articulate the scapula and connect into the Lower Body as well. The Yield & Push patterns establish grounding and anchoring for the lowest border of the scapula. This anchoring is necessary for taking the arm overhead later, using adequate flexion and abduction (including use of the serratus anterior), without engendering tension from overuse of the upper trapezius and levator muscles.

The Reach & Pull patterns establish relationship to space and goals. Again, the Pull strengthens the anchoring of the lower scapula and encourages use of the lower trapezius and latissimus. These developmental patterns set the stage for the more finely articulated movement which we discuss in the next four sections below. The reader is referred to earlier sections in this chapter on Homologous Movement for explorations using Yield & Push and Reach & Pull patterns for the Upper Body.

5. **Movement Of The Scapula On The Ribs As The Arm Moves**—this is necessary to complete the “scapulo-humeral rhythm” (discussed later), which is part of all full arm movement. When the scapula is not sufficiently used in Upper Body movement (especially the lowest part of the scapula), the delicate balance between the rib/head/neck relationship and that of the shoulder girdle is disturbed. And the individual is likely to find it difficult to achieve true verticality through the central core. This is because the arms to tail connection through the back of the core is not operative to counterbalance the legs to head connection through the front of the core.

There are three major muscle groups which define the movement in the Upper Body, and each of these component groups has an effect on the scapula, either directly or through a kinetic chain. Irmgard taught that it is the “ever-present interaction of the three muscle

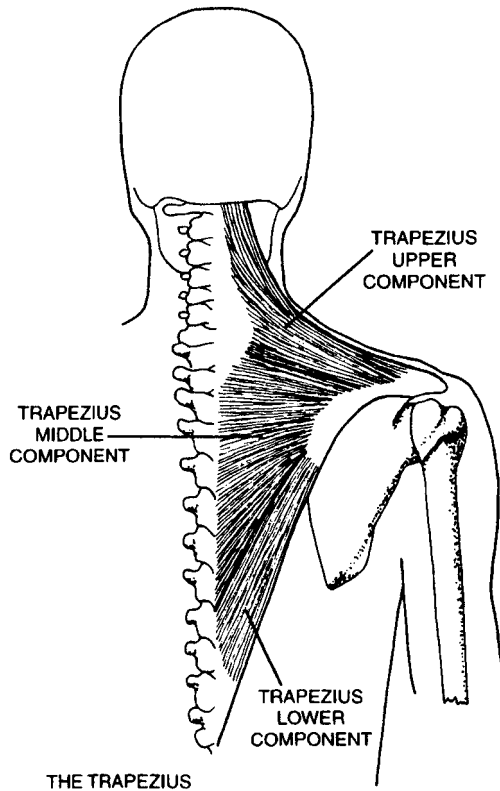


Figure 40. Your trapezius has three components. Activating the lowest component facilitates scapula “anchoring” and Total Body Connectivity.

groups that hold the scapula in mobile balance ...and it is this mobile balance of these three components that makes for complete verticality. All three components constantly act in concert.”²² They are (see Figures 40, 41, 42):

- a. *The Upper Component*—Upper trapezius, levator scapulae, lateral neck muscles, and upper pectorals. When the Upper Component is dominant, the upper edge of the scapula is pulled up (as in shoulder shrugging). This can be useful when it is either expressive (“I don’t know”) or truly functional (as in some gymnastics work), but frequently the upper component is overused and becomes tense and no longer elastic. When the Upper component jumps into action without balance from the other groups, it is difficult for arms to stay connected to core. Sometimes this happens when people conceive of the arms as beginning at the shoulders. This inappropriate usage almost always causes neck and shoulder tension, perhaps pain.
- b. *The Middle Component*—Middle/lower pectorals, rhomboids, and middle trapezius. When the middle component is dominant, the horizontal component is predominant

(abduction and adduction), which takes the scapula toward or away from the midline.

- c. *The Lower Component*—Serratus anterior, lower trapezius, and latissimus dorsi. When the lower component is operative, the scapula is able to link or anchor to the lumbar area. This provides scapular “anchoring” and makes total body connectivity a real possibility. The muscles of the lower component influence the lowest angle of the scapula (see [Figure 41](#)). They are effective in sequencing from lower to upper or from upper to lower. The lower trapezius reaches down toward the tail, providing a wonderful “root” from which the pulling forward of the serratus anterior and the pulling back of the latissimus can “grow.” I quote Irmgard Bartenieff...

“To make full use of the triangular forces of the scapula, the three muscle groups have to be brought into interplay at all times.... The outstanding feature of the incomplete use of the scapular and shoulder joint potential is the weak use of the lowest angle of the scapula. As a result, one finds overuse of the upper component, causing neck/shoulder tension. This weakened use of the lower scapula component influences full uprightness, full use of neck/head, and full use of the reach space around. It also prevents making full use of the connections through the large muscle groups that connect the shoulder girdle with the lumbar/sacral region (see [Figure 41](#)). Lack of these connections cuts off the supportive and balancing forces of body weight in Upper Unit activity.”²³

When the three component muscular groups are working in collaboration, one finds that there is a proportionate relationship between the amount of movement of the arm and the scapula on the ribs. This is called the scapulo-humeral rhythm. Irmgard Bartenieff describes this proportionate relationship as follows:

“When we speak of the **scapulo/humeral rhythm**, we are describing the degree of closeness of the interplay between the components of the scapula and of the humerus linked to the scapula by the shoulder joint. For example, in abduction of the arm, the humerus abducts the first 10 degrees with minimal scapular/clavicular action. After that, between 20 to 120 degrees, every 10 degrees of abduction is accompanied by 5 degrees of scapular/clavicular motion.”²⁴

I often work with clients whose scapula is not able to move fully because they have overused the muscles in the Upper Component group. With re-education about the importance of initiating movement using the Lower Component and allowing the Middle Component to do its job, they achieve a much greater range of motion and are able to move without pain. (See [Figure 43](#).)

One easy place to begin in this re-education is with the Upper Body Push Pattern were covered in the section on Homologous movement. I recommend that you return to that exercise (p. 114) and do it several times before progressing to the next movement explorations.

Movement Exploration

aa. Noticing Scapula Movement—Vertical Plane Arm Movement: *Begin standing with your right arm down at your side and your left fingers touching your right scapula at its lowest*

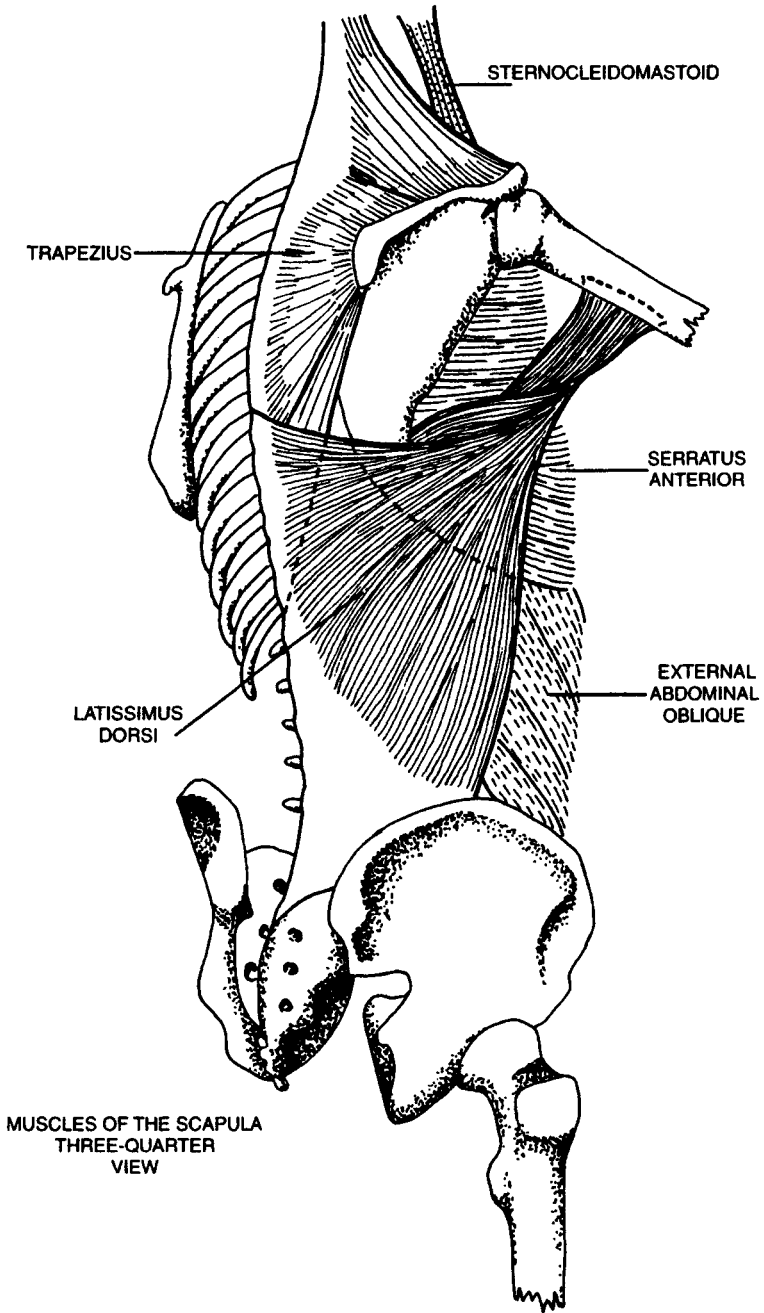


Figure 41. Three-quarter view of muscles that move your scapula and facilitate connection of your arm to your lower torso and tail.

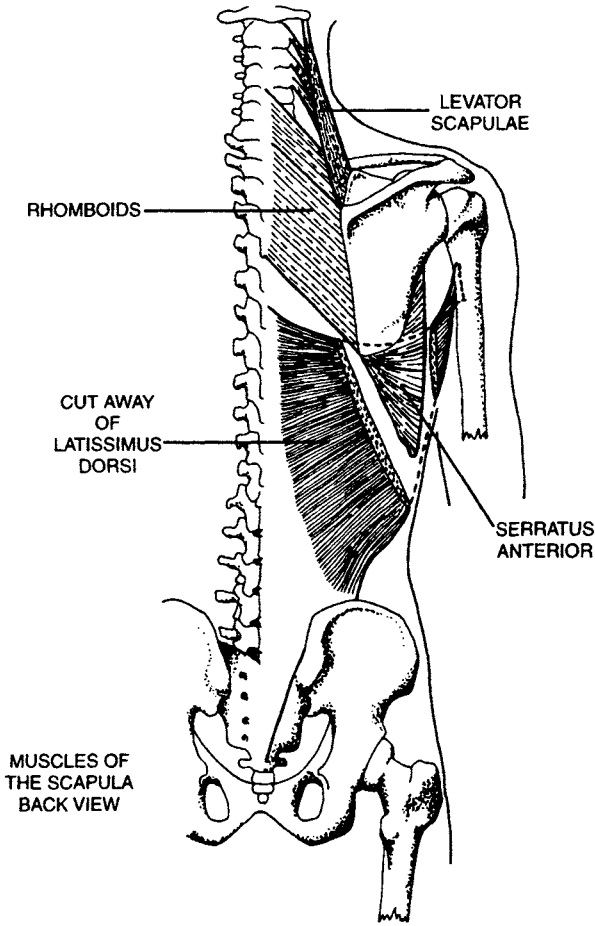


Figure 42. Back view of muscles that move your scapula.

point. (If your arm won't reach, do this with a partner.) Try each of the following experiences and compare them for yourself.

1. Raising arm, initiating from upper component: *Take your right arm out to the side and up to the ceiling until it is directly above your shoulder joint (abduction, through side middle to place high). Initiate this movement from the top of your scapula and shoulder joint. Does your arm still feel connected down into your Lower Body? Do your neck and head feel free to move easily?*
2. Raising arm, initiating from lower component and allowing full use of middle component: *Again take your arm above your shoulder joint by going side and up, but begin to move your arm by initiating from the lowest point of your scapula, connecting it down toward your tail. Your scapula will descend slightly before it begins to spread away from center, sliding*

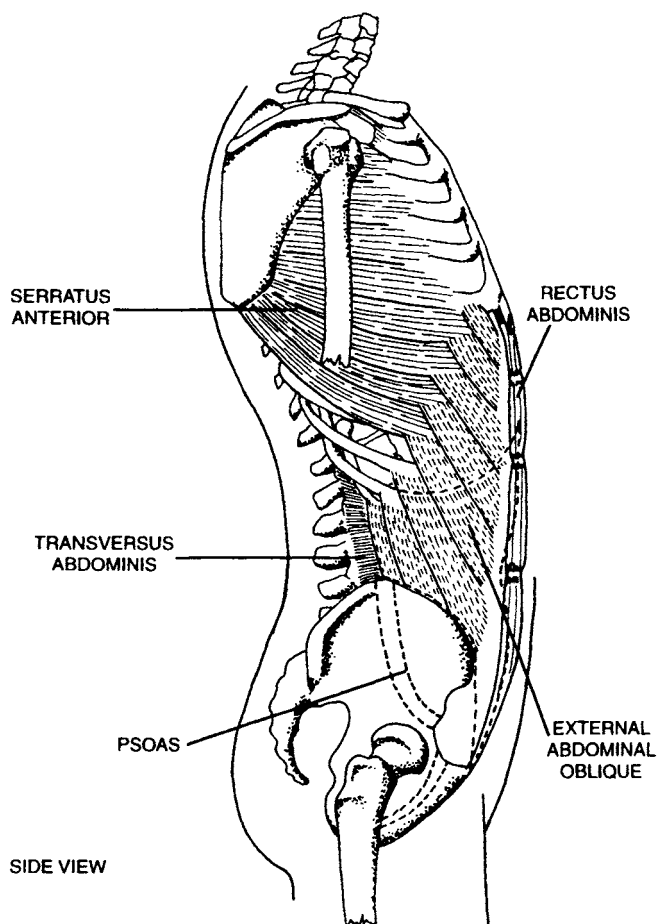


Figure 43. Side view of serratus anterior and external obliques.

on your ribs. As your arm arrives above your shoulder joint, notice if your arm still feels connected to your Lower Body. Are your neck and head free to move easily?

Hopefully you discovered for yourself that example 2. provides both a greater sense of connected stability, and a greater sense of easy mobility. You probably also noticed a slight gradated change in rotation as you raised your arm in 2. (Dancers, please note that the experience in 2. was not achieved by holding the shoulders down. This “shoulders down” approach used by so many dance instructors is simply another “holding pattern.” It does not address the central issue, which is “Where is the movement initiated?”)

bb. Horizontal Carving-Letting Scapula Slide: *Lie on your back with your knees up toward the ceiling and your feet “standing” on the floor in line with your femoral joints. Let your arms be out to your side, resting on the floor with your middle fingers at the level of the lowest point on*

your scapula (not at the level of your shoulder joint). Press down through your left foot and confirm grounding through your core which can sequence in a kinetic chain through to the scapula of your opposite arm (this is cross lateral connectivity which will be discussed in [Chapter 11](#)). Sense the soft inside surface of your arm. Begin to reach out away from your center with your right arm (the Push of your leg phrases to the Reach & Pull of your arm). Carve around your front space and over toward your left side, as if you were embracing a cloud. Notice that your scapula is sliding on your ribs and spreading away from your spine. If you soften in your chest and breathe you will also be able to do this movement without closing extremely in the front of your shoulder joint. Imagine that you have a soft baby bird nestled in the space in the front of your shoulder. Please don't crush the baby bird. Is your elbow accommodating?

When you have gone as far as feels comfortable, check back in with what will enable you to go further. Remember to breathe and soften in the chest. Remember that all six limbs are connected to center. Sense your arm connecting to center. Remember that your head and tail are involved. Allow your spine to twist. Check to see that your push is still supporting your reach.

To return, begin to spread out from the underside of your torso and gradually retreat and sink into the floor by spreading each successive part of your torso and arm onto the floor. Keep spreading, even to your finger tips.

Try this same movement sequence sitting and standing. It is wonderful to feel the scapula slide and the torso accommodate!

6. Graded Rotation In The Shoulder Joint—this makes possible three-dimensional accommodating and adaptive interrelational change. The rotary factor is both functional and extremely expressive.

As with the femur in the Lower Body, the humerus (upper arm bone) has a beautifully rounded head which has an amazing amount of rotary possibility. By utilizing full rotation, this joint can truly claim the name “global proximal joint” (see [Figure 44](#)). Utilizing rotation can increase the range of motion of the Upper Body and can release habitual tension in the upper trapezius and levators. These muscles frequently get overused as a substitution for rotation when the arm reaches.

The muscles of rotation are as follows:²⁵

<i>External</i>	Primary: Infraspinatus
	Teres Minor
	Secondary: Posterior Deltoid
	Supraspinatus
<i>Internal</i>	Primary: Subscapularis
	Pectoralis Major
	Latissimus Dorsi
	Teres Major
	Anterior Deltoid

The subscapularis is the central and constant mover, the others assume dominance according to the region in which arm/scapula moves.

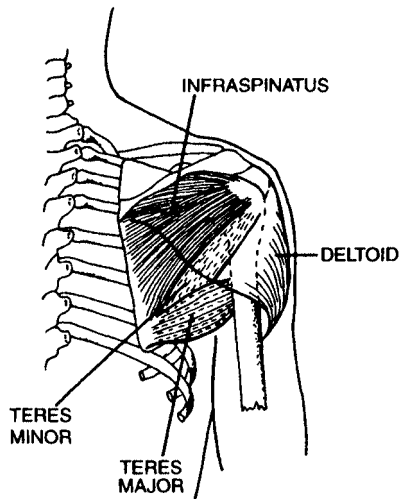


Figure 44. Rotary muscles of your shoulder-back view.

“You will note that the Upper Body has a majority of internal rotators; the Lower Body has a majority of external rotators. This is logical, because the influence of the internal rotators is more stabilizing and of the external rotators more mobilizing of the flux of movement in space. Therefore, the mobile bony structure of the shoulder girdle is given stability by the preponderance of Internal rotators; and the more solid bony structure of the pelvic area is given more mobility by the preponderance of External rotators.”²⁶

“The socket at the glenohumeral joint is too flat to offer any security for the head of the humerus, so the joint must be reinforced by muscle to give active support and still allow a good deal of mobility. The four reinforcing muscles (subscapularis, supraspinatus, infraspinatus, and teres minor) arise from the scapula and cross the joint at the level of the joint to insert on the humerus about the head...the muscles and their tendons form a *musculotendinous cuff* around the humeral head (see [Figure 45](#)). Three of the four are rotators of the joint, hence rotator cuff is a common term for the group. (Infraspinatus and teres minor are outward rotators and the subscapularis joins with the latissimus Dorsi, teres major, and pectoralis major to inwardly rotate). With the joint secure against dislocation, the many movers of the arm can act to provide almost unlimited mobility.”²⁷

Each of the members of the rotator cuff pulls at a slightly different angle and is only able to do the job fully when the scapula is being effectively anchored (stabilized) by the larger muscles which effect the scapula; for example, the lower trapezius, the rhomboids, and the serratus anterior. When these muscles are operative, the rotators can work effectively in cooperation with the larger muscles which move the arm, such as the latissimus dorsi, the deltoid, pectoralis major, and teres major. **When the scapula is not effectively anchored in that split second when movement initiates, it is rare to see full range use of the rotary factor, because the upper group of shoulder muscles are then used unnecessarily and tend to tighten, limiting rotation. The**

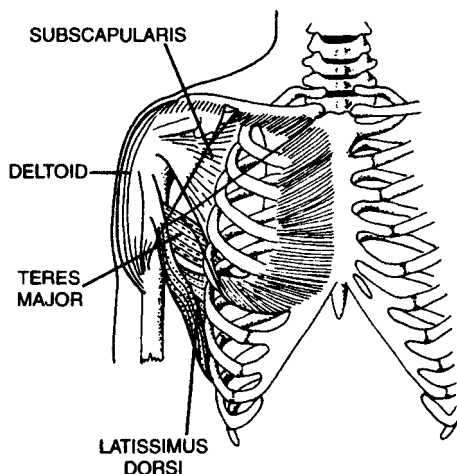


Figure 45. Rotary muscles of your shoulder—front view.

essential element here is cooperation of the lower muscle groups in an effective sequencing. For instance, if you want to effectively reach with your right arm toward the right forward high diagonal, finding scapular “anchoring” or countertension as you initiate the movement (perhaps with a momentary use of the lower trapezius) will be important in order to avoid overusing your upper shoulder girdle muscles. This will allow you to begin sequencing the initiation into outward rotation (perhaps utilizing your infraspinatus and teres minor), and flowing into the scapulohumeral rhythm using the serratus anterior along with the supraspinatus and deltoid will allow for a full range action. (Your Latissimus Dorsi must not be overly tight.)

On the other hand, **I do not recommend thinking muscularly as you move!** The above example was given only to illustrate a possible kinetic chain. It is much better to have a larger organizing image to help your neuromuscular system pattern the movement. In doing the above movement you might want to imagine **“scooping down into a bucket of rice and scattering it out up and to the right.”**

Rotation opens the space of possibility and adaptation. **If you are not using the full spherical possibility in your shoulder joint (or femoral joint, for that matter), you cannot easily make transitions from one movement to another or from one area in space to another. So in sports or dance training, when rapid transitions are part and parcel of the skill, working with graded rotation should be an important part of the training process.** In my own dance training the *graded* aspect of rotation was rarely mentioned. The arm was given a place to be (perhaps back and up), but only occasionally was work done with rotation to increase the possibility that the arm could arrive there with ease. In the Lower Body the legs were either “turned out” or not, but the gradating of rotation to make a transition happen was not stressed. As I watch virtuoso performers, more and more I am aware of

the subtlety of rotation in helping them move between forms and in creating the expressive communication itself.

Rotation is also part of a healthy ability to relate effectively to the outside world. “In the mentally retarded and the visually impaired, you will notice that the rotary factor is frequently underdeveloped. In catching a ball, the afflicted person may only be capable of catching by confronting the ball sagittally in a neutral right/left clasping, with all the finer adjustments of hand/wrist/forearm of the whole arm missing. In certain neurological deficits, the rotary factor seems to be immediately weakened as seen by the inability to shape or smoothly connect two phases of movement sequence.”²⁸ And so we see that the rotary factor is also an indicator of full neurological development.

In addition to access to space, Irmgard Bartenieff frequently reminded us that “the rotary is not only a spatial factor, relating to skill, but also a profoundly expressive factor... giving freely outward or collecting toward yourself.” Let’s work with this aspect in our movement exploration first and then we will return to the more functional range of motion aspect.

Movement Exploration

cc. Expressive Aspect of Rotation: *Begin by simply walking across the room with your arms responding naturally to your stride. Your palms most probably are facing your body as your arms move in a loose swing.*

Again walk across the room, but gradually rotate your arms outwardly (laterally) as you walk, letting your palms open to face where you are going. Do this several times until you experience any possible change in your internal feeling as you do the movement. Now try simply walking again, but this time letting your arms gradually rotate inwardly (medially), closing away from where you are going. Play with alternating the rotation, staying attuned to your own feelings as you move. Do you notice that this simple action is profoundly changing the expressive nature of your movement? Take a moment to jot down the different feelings you experienced.

Now let yourself enjoy moving in whatever action sequence you want, but let the initiation for the change of movement and form come from a change in rotation. As you open and close let your whole body become involved. Experiment with taking your shoulder joint rotation to its fullest range and feel how your body wants to sequence into action, changing shape and expressive statement totally. Do it gradually at first, so that you can sense the subtle change in feeling that even a few degrees of rotation makes.

When I do the above movement, I am amazed at how fully I feel a sense of “generous opening of myself” with outward rotation and how clearly inward rotation feels “protective and boundary-setting” to me. You may have had slightly different feeling experiences... but whatever they were, as we move on to the more “functional” explorations, leading to greater range of movement in the shoulder joint, carry the feeling-tone experiences with you. Function and expression are co-creative in the human being.

dd. Scoping Diagonals: *Either sitting or standing, raise your arm to the right forward high diagonal (↗). Notice whether you used inward or outward rotation and also if you initiated the movement from the top of your scapula or from underneath. Now take the same arm left back and*

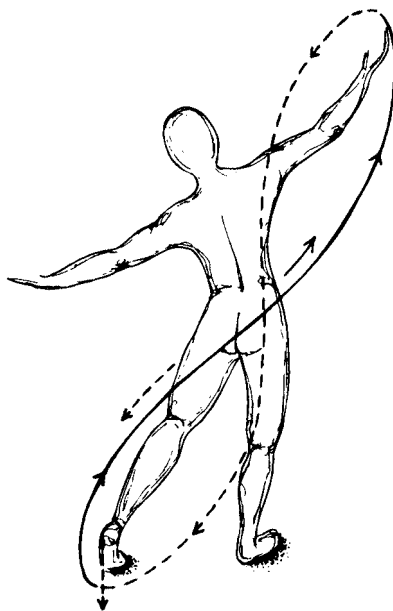


Figure 46. Diagonal [Figure-8](#).

down (■) in back of your body to the opposite diagonal corner. Check-in with the same observations.

As you do the rising movement again, experiment with sending your scapula down toward your tail as you initiate the movement, and begin immediately to outwardly rotate your arm as you rise right forward and up toward the diagonal. Your little finger side will be leading. Your scapula will spread away from your spine, sliding along your ribs (*Serratus power*). When you reach your diagonal corner, notice if you are further out into space and also more connected into your core than you were the first time you did the action. At the peak of the diagonal let your arm inwardly rotate, leading from the thumb side, and move the lowest point of your scapula as your arm encloses, sinks, and retreats to the opposite diagonal (*Latissimus power*). Again, your scapula will slide as you do this. Do you have greater range in the back space as well from having used rotation?

ee. Diagonal [Figure-8](#) (Figure 46): Let the above actions sequence to form a [figure-8](#) which rises, advances, and spreads with outward rotation and sinks, retreats, and encloses with inward rotation. (See illustration). Do it many times until your whole body becomes involved, including your weight shift. You will notice that this can easily lead to a full-body homolateral pattern with an undercurve weight shift along a diagonal. Let your eyes follow your hand and your spine will be enjoying its full rotary possibility as well.

My physical therapy clients find this [figure-8](#) sequence to be wonderfully recuperative from sitting at a desk, and dancers enjoy it as a warmup for full mobility. A [figure-8](#) is a chance to be off-vertical and in rotation—not quite as extreme as total body rotations such as cartwheels, somersaults, spinning, or riding an amusement park ride, but as

Irmgard says, “Circular gestures, figures-of-eight in various relations to the body— in Front, at the Side, Overhead, close to the ground—have a more mildly intoxicating effect on the performer as well as on the audience.”²⁹ Why not give ourselves a mild thrill!

7. Use Of Full Range Of Radius And Ulna Action For Creating Volume And Graded Change. One common problem area as people move the arms is that they tend to stop the flow of movement through the elbow area—particularly as they reach out into space. The arm becomes overly straight, seemingly “locked.” Allowing motion in the two bones of the lower arm (Radius and Ulna) releases “locked” elbows and allows for the kinetic chain of movement to go through the midlimb in a sequence: Core-Proximal-Midlimb-Distal. When tension is held in the elbows, movement from the core cannot sequence to effect the world through the hands; and, conversely, movement from the hands (contact with the world or other people) can’t sequence back into the core. In dancers or athletes, “locking” in the elbows shortens the perceived length of the arms and/or the power of the lever arm to translate power from the torso into action.

What do I mean by “locking”? I mean holding a set relationship between the upper arm and the lower arm (this is frequently seen in reaching the arms and letting the elbow go into hyperextension)...or holding a set relationship between the bones of the lower arm, i.e., not using the full movement potential in the action of the Radius and Ulna. The Radius rotates about the Ulna and it is that action which makes it possible for your whole arm to participate in the creation of rounded shapes, molding either the air to form an arcing path, or to someone else’s body. This movement is both influenced by and influences movement in the shoulder joint (particularly action in the rotator cuff) and in the use of the hand (see below).

Movement Exploration

To experience the difference between elbows which are not available to be a conduit for energy and elbows which are, try the following experiment:

ff. Radius And Ulna Exploration: *Use your whole arm with the elbows straight and holding a set relationship between the upper arm and the lower arm and between the two bones in your lower arm. Let your arm reach in the fullest range it can around your body. Notice what the range of the motion is in front, around to the back, etc. Notice also if you feel connected all the way through to your core...or do you have a tendency to “overreach” and disconnect your Upper Body from your Lower Body?*

Now explore softening in your elbow, envisioning that you are breathing life into your elbow, and that the upper arm bone (Humerus) and the lower arm bones (Radius and Ulna) are always available to subtly changing their relationships. Sense a spaciousness and ease of movement between the bones. Notice what the range of the motion is in front, around to the back, etc. Is there a greater range than in your previous experience? Notice also if you are more easily able to connect into your core. There is probably less likelihood that you are reaching beyond where you can support with your weight center. Hence, you are more likely to stay connected between your Upper and Lower Body. In terms of Effort, you are probably using more free flow in this example, as opposed to holding a relationship in bound flow in the previous one.

Now let's play with the action between the Radius and the Ulna. Hold your elbow with your other hand. Stabilize it in space (put a space hold on it). Rotate your lower arm inward and outward, letting your hand be relatively passive and go along for the ride. The action you are experiencing in your lower arm is that movement of the Radius about the Ulna. The Radius will also rotate around the Ulna if you stabilize your hand by contacting a table or wall and rotate the elbow in and out. In this case your upper arm will go along for the ride.

Play with using the action at the Radius and Ulna as you do the full arm movements, reaching around your body which you did above. You will notice that you can go further down around the back or up across to the front when you let the full action at the Radius and Ulna happen. What an easy way to increase your range!

8. **Full Three-Dimensional Use Of Hands**—Your hand contains 27 bones with innumerable articular surfaces, many of the surfaces of which are articulating along small diagonal pathways. The accumulation of these tiny diagonal gliding movements make possible the creation of quite subtle rounded forms; for instance, the ability to cup the hands to get a drink of water or sculpt a piece of art. A huge percentage of our brain is devoted to hand articulation (according to diagrams of a motor homunculus)—most people are aware of this fact, but many are not aware that **full hand articulation can actually lead to a greater range in the use of the whole Upper Body**. This is because of the connections of the fingers into the Radius and Ulna, and the kinetic chains of muscular energy from there through the shoulder joint, into the scapula and down to the tail. Your distal aliveness and volume makes for greater adaptive ability in use of tools and actions using the hands, but also provides a larger range of possible motion at the midlimb and proximal joints as well.

Your thumb and first two fingers articulate through bony connections with the lower arm bone, called the Radius. They guide hand movement and allow for specificity. Your ring finger and small finger both connect through bony articulations with the Ulna. They help you to grasp objects. Thus, by using all your fingers three-dimensionally to carve or contour, you are causing the Radius to rotate around the Ulna, enlivening your elbow joint and contributing to full-range at your shoulder joint as well.

Irmgard Bartenieff delighted in teaching classes on the use of the hands and was fond of pointing out that human beings differ from most animals in that we have more than a pincerlike action possible in our hands. We have potential for creating volume and molding and carving our environment! When children are young they are able to use a pincer-like action of the thumb and first finger to pick up objects, but they have difficulty scooping up beans or water with their hands, tying a bow, or even molding their hands to grasp and accommodate to your hand as you help them cross the street. Generally it is the adult who grasps in a 3-D way and the child releases the hand into a soft Shape Flow. This is an example of development which is not complete. Development generally proceeds from Core to Proximal, through the Midlimb and out to the Distal edge. On a more cultural level, the Choreometrics Project at Columbia University (done in the late 1960's) discovered that 3-D molding and carving with the hands and arms did not appear in the dance or work styles of primitive hunting and gathering cultures. Indeed, this use of hands and arms did not appear until the culture was at a developmental stage which utilized animal husbandry (herding animals) and irrigation agriculture (molding the environment).

And so it seems that full use of adaptive ve hands and arms with subtle gradated change is a developmental phenomena both personally and culturally.

I have noticed that many of my adult students and clients are not utilizing the 3-D potential in their hands. They might tend to use the hand as a flat unit or the individual fingers in a flat way. It is almost inevitable that these same people have trouble finding a full range of action at the shoulder joint.

Movement Exploration

gg. Hands—Exploring What They Can Do: *Begin to explore what your hands can do. First, simply notice that they can open and close in a general way, spreading fully or closing totally (making a fist). Experiment with different moods or feelings as you do this, perhaps luxuriously opening like a flower spreading to drink in the sun, or snapping closed like a sea creature capturing its prey or shrinking away from touch. Explore popping open all at once and drifting closed, delicately opening or crushing closed.*³⁰

As you do these movements notice where you initiate the action. Do you begin in the palm or center core of your hand, or do you start from the ends of the fingertips? Does your whole hand move at once including all the fingers simultaneously? Or do you enjoy successive or sequential movement through your hand?

Begin to let these hand movements radiate back into your whole body until are doing movement in your whole body which is direct amplification of movement initiated in your hands.

Investigate what you might do with just fingers coming in to touch the end of your thumb. Let each finger touch the thumb one after the other. Notice if your hand wants to rotate inwardly or outwardly. Play with your fingers being straight and flat. Then change and let them round to encompass a volume as they come to touch the thumb.







When I do this action with fingers that round to encompass volume, I discover that **touching my little finger to my thumb causes my hand to tend toward outward rotation and touching my first finger to my thumb tends to initiate inward rotation; whereas there is minimal rotation initiated if I lead with my middle finger to touch.** These statements seem simplistic and obvious at first. What is the possible application? The redirection of energy that a tiny emphasis on either the little finger or thumb side of the hand can have becomes of major importance when the movement is amplified to a large arm movement in dance, or to putting a spin on a tennis ball, or when a massage therapist is releasing a volume of tissue. Let's play more with this action of gradating volume.

hh. Carving a Figure-8: *Begin with the thumb side of your hand to carve downward and inward, letting the rest of your hand and fingers follow sequentially, continuing a rounded form until your little finger side of your hand reaches down to scoop up and outward, letting the fingers and palm fan open. As you repeat this action several times, enjoy letting your hands and fingers become more rounded each time, not by passively softening into center, but by actively contouring around a volume.*

ii. Whole Body Opening and Closing Initiated from Hands: *Continue to let this movement become larger and you will notice that it becomes possible to form a large sweeping figure-8 pattern. If you are doing the movement with both hands (bilaterally), as you amplify it to*

include both arms and total body (especially incorporating head and tail), you will notice that you are closing and enfolding energy into your center core and then opening and spreading energy out, inviting the universe to send energy into you again. This can become a beautiful Inner to Outer and Outer to Inner experience. It has both protective-enclosing and vulnerable-exposing aspects. Notice which feel most satisfying to you at this moment.

jj. Crosslateral Figure-8: If you do this *figure-8* type of movement letting one hand lead (instead of moving bilaterally), you will be experiencing one of my very favorite movements—one which I use both to warm up dancers and to help office workers get rid of Upper Body tension. This movement is particularly fun to do while standing (rather than sitting, although that is possible too). See Appendix-LMA for symbols used.

Stand with your legs in an open stance (with one foot to the side and slightly in front of the other foot, for instance, left foot  and right foot ). Let your weight begin to shift in an undercurve from one leg to the other. Get your down-under, push to rise going easily and then add a *Figure-8* arm, using the opposite arm from the leg which is forward (i.e, use your right arm in this case). As you shift to your forward leg, lead with your thumb side inwardly rotating your hand down, forward and across toward that leg (). Then as you begin to shift toward the back leg, let outward rotation in your hand take over and help you rise back up and out () until you want to go over the top again to ride the diagonal downward again (You are creating a *Figure-8* along the diagonal  to ). If you let your arm increase in range and really actively use your hand, you will notice that your shoulder joint rotation will be easy, your scapula will be moving on your ribs, you can let your eyes follow your hand to activate your spine, your arms can connect to your tail, and your breath will be free and full. What an enjoyable total body experience! And to think it was facilitated by 3-D hands!

*Inner Characters*³¹—Upper-Lower

In the previous sections of this chapter we have looked at the Lower Body and the Upper Body from many different perspectives. We have discussed important functions of each in the context of everyday life; we have investigated Upper-Lower patterning from a developmental perspective; we have briefly skimmed each area from an anatomical perspective; and we have explored each from the perspective of facilitating mobility and stability.

Let's play a different game now...one which I find to be both fun and personally fascinating. We have said that **Fundamentals approaches movement from a psychophysical perspective. One way that I facilitate this in my classroom is by simply letting the movement speak for itself and asking the individual to make sense of it within a context that is important to him/her.** I might do this in an open-ended improvisation, or I might set up a movement experience such as the one below.

This way of working acknowledges that the psyche is able to “speak” through movement. Here is one possible such situation: If I assume that I have different parts of myself (as in, “Well, a part of me is enthusiastic about doing it, but another part of me is clear that there are risks involved.”), it is possible that a part of myself “lives” or initiates movement in my Lower Body and another part of myself “lives” or initiates movement in

my Upper Body. By letting one part, or area, of my body begin to move in its own way, I can begin to experience that part kinesthetically and truly embody that part of myself. Let's experiment with this in movement...

Movement Exploration

kk. Inner Characters: *Begin sitting on the floor (so that your Lower Body is not immediately the major mover), Breathe into your whole body, taking several full breaths. Then specifically begin to breathe into your Upper Body, letting it know that you are available to move in whatever way feels good at this point. Let whatever part of your Upper Body that wants to move, move. It may be your hands, it may be your shoulders, your chest, your head. Explore with the part that feels enlivened and let the movement amplify to move through your whole Upper Body. Once your whole Upper Body has the movement, let your Lower Body begin to follow with the exact same quality until your whole body is doing the movement your Upper Body initiated. As you ask yourself these questions, as you keep moving and let your movement **amplify the quality** which seems to be present.³² Notice what tendency the movement has in terms of its flow. Is it freely flowing or more contained and controlled? Does the movement have clear external form such as lines or volumes, or is it amorphic, not about clear form? Do you tend toward strength, delicacy, heaviness, limpness, or no particular use of your weight? Does the time quality feel sudden or luxuriously sustained, or not about time? Does your focus want to be pinpointed and channeled or are you aware of many things at once, or are you "spaced out"? Do you want to travel through the space or stay in one spot?*

*As you have amplified these qualities of the movement, you have probably become fairly crystallized in a particular constellation of movement qualities, or ways of being in the world. As you now continue to move, begin to let this constellation become a "character" of its own, someone who is just who he or she is in the world and uses exactly those qualities to function. Experiment with what types of things this character does or "says" in the world. Does she like to tell people what to do? Is he softly sensuous and shy? Keep exploring with the movement, but begin also to feel how the character is breathing, what s/he is wearing, how s/he relates to people, etc. When you have finished moving, sit down and let yourself capture some of the **qualities** on a piece of paper with color. (Don't worry about your ability as an artist... simply let the **movement qualities** of this character come onto the paper, not a realistic portrait.) You might also want to write down some of his or her inner monologue. Does s/he have a name?³³*

When you have finished coloring and making notes for yourself, return to the moving space, this time standing. Again breathe into your whole body, but then breathe specifically into your Lower Body. Let your Lower Body begin to move in any way that it wants. Let it initiate wherever it feels right to do so... feet, pelvis, knees, etc. Your Lower Body may want to begin traveling, or it might want you to lie down so that it can be free to move without worrying about balance. (Of course, it might also enjoy balancing.) Keep moving as you ask yourself the same questions about qualities which we asked about above. Again, let a character emerge and take over your whole body, so that your whole body is moving with the quality initiated by your Lower Body. Again record your "character" with colored markers and/or inner monologue on a piece of paper. You might even want to use the phrase, "S/He's the one who....." to refer to this part of yourself. (i.e., "He's the one who is enthusiastic.")³⁴

Now take time to play back and forth in movement between your Upper Body Character and your Lower Body Character. Notice what is satisfying about each; notice what each brings to your life. Spend some time appreciating each one. You might even want to make a list of core characteristics each affords you. Remember...YOU are neither one nor the other (even though you might feel more identified temporarily with one). YOU are the larger whole which contains both.

This last point is important, because YOU facilitate the interconnections and make it possible for the two parts of yourself to relate. YOU use the parts of yourself to live your life. For instance, as the larger whole, PEGGY, it is useful for me to know how to touch into the quality of my Upper Body character, Evelyn, when I need her clarity, and it is also useful for me to know how to touch into the quality of my Lower Body character, Davey, when his enthusiastic spirit would serve me in my life. It is also crucial that I not become totally identified with either one to the exclusion of the other. Neither is the whole of who am. The larger WHOLE OF PEGGY needs to find ways of being in the world that will use all of my qualities when the context demands them. I need both Evelyn and Davey to be an integrated human being. Without enthusiastic clarity (an integration of both qualities) I would not be effective as an educator!

What is interesting from a Fundamentals perspective about working with Parts is that those various aspects of oneself need to be acknowledged if one is to eventually integrate Upper Body and Lower Body into a fully moving Integrated Body. It may also be true that some particular body issues may have to do with the part of oneself that finds expression there or lives from that place. It does not mean that one character has to “win out.” But rather, that the larger Whole needs to find ways of being in the world that will use the parts effectively, or allow the parts appropriate context for expression when the time is right. We have worked in this chapter with the Upper and Lower as “separate voices.” This is in order to facilitate the differentiation process. Later chapters will address the issue of how Upper and Lower eventually achieve integration, and how we can facilitate Total Body Integration, as the title of this book suggests.

Implications Of Upper-Lower Connectivity

This has been an extremely long chapter, loaded with a lot of movement experience and anatomical information. This is not only because this particular stage was most emphasized historically by Irmgard Bartenieff, but also because our culture seems to lack an adequate understanding and embodiment of the skills gained in this arena. We need the abilities of this stage...

- to support ourselves;
- to stand on our own two feet;
- to push away and set boundaries;
- to claim our own personal power;
- to activate our lower bodies to move forward;
- to activate our upper bodies to connect to the others and reach out into our world interactively, without losing our connection with the earth...

Notes

1. This is an example of how upper body anchoring and support can make possible a full spinal reach. We see this in much more complex forms in Yoga or a dancer's arabesque.
2. Bonnie Bainbridge Cohen feels that this pattern is important in speech development.
3. Sometimes I call this "The turtle syndrome"—it indicates that you have lost anchoring for your upper body and such movement will not serve you later on. It will simply cause tense neck and shoulder muscles.
4. When a child is at a particular stage of development and her/his biological developmental mandate is to perfect certain skills—in this case, homologous Reach & Pull— it doesn't seem to make any difference that the real animal does not usually move with that pattern. A real frog uses homologous Push to Reach & Pull, but my daughter used this movement for horses, tigers, dogs, and unicorns until she was proficient at it.
5. Sweigard, *Human Movement Potential*, Harper & Row, 1974.
6. The reader is referred to the beautiful pictures in *A Color Atlas of Human Anatomy* by McMinn and Hutchings, Wolf Medical Publication Ltd., pp. 263–270, 1977.
7. See pp. 187–191 for a discussion of this issue and for exercises which address it.
8. *Rolfing*, pp. 101–121.
9. See illustration of tensor fasciae latae on p. 188.
10. Todd, *The Thinking Body*, p. 134.
11. Todd, p. 122.
12. Todd, p. 122–123
13. In the exercise called "Hang and Hollow" in [Chapter 7](#) (p. 78) I also emphasized beginning the extension phase with the hamstrings. This allows support to sequence from the seven inches we spoke of earlier up into the core.
14. Biceps femoris Long head, Biceps femoris Short head, Semitendinosus, Semimembranosus.
15. I learned this approach to the hamstring from Irene Dowd.
16. My colleague and friend, Kedzie Penfield, brought this experience to me.
17. Adductor Longus and Gracilis pull most directly toward center whereas the Adductor Longus, Adductor Brevis, and Adductor Magnus Upper part aid the psoas in flexion as well, while the Adductor Magnus Lower Part aids the hamstrings in extension.
18. See pp. 132 and 188 for illustrations of these muscles. You will notice that they are higher in the body than the outward rotators.
19. Irmgard Bartenieff, manuscript, pp. 308.
20. One could use a similar format for addressing the Lower Body. I will leave that up to the reader.
21. For a beautiful picture of the 3-D nature of the ribs, see *A Color Atlas of Human Anatomy*, p. 147.
22. Irmgard Bartenieff, manuscript, p. 327 and 314.
23. Irmgard Bartenieff, manuscript, p. 316.
24. Irmgard Bartenieff, manuscript, p. 315.
25. Irmgard Bartenieff, manuscript, p. 320.
26. Irmgard Bartenieff, manuscript, p. 319.
27. Wynn Kapit and Lawrence M. Elson, *The Anatomy Coloring Book*, Harper & Row, NY plate 32, 1977.
28. Irmgard Bartenieff, pp. 326–327.
29. Irmgard Bartenieff, p. 325.

30. When you do this, you are utilizing Effort as an inroad to Body experience.
31. I learned about working with Parts while staying attuned to the larger Whole through the Institute for Creative Development in Seattle, WA, and the work of Charles M. Johnston.
32. The questions which follow are based on the Effort Qualities from Laban Movement Analysis. See the Appendix-LMA for more about these qualities.
33. One of my own Upper Body characters is named Evelyn. She is very vertical and a bit formal, sort of Victorian. She is very efficient and takes care of a lot of the exacting business of living. She moves with clear lines and controlled flow and is very defined and specific. She is clearly a part of me, but certainly not the totality of who I am. She is a partiality. I enjoy moving with her quality, and am glad I also have many others (Such as thoroughly sensate, luscious, fluid Sylvia).
34. One of my own Lower Body characters is named Davey. He is a “let’s do it!” type. He likes rhythm and getting to the heart of what makes something/someone tick. He is fun-loving and likes to go to glitzy places. Davey likes big full-out movement that travels or rhythmic movement in place.

CHAPTER 10

Body-Half Connectivity



*I am divided
On the one hand... On the other hand...
I listen to both sides of myself.
Issues clarify and delineate into black and white,
Stable and Mobile,
Inner and Outer,
Passionate and Plodding.
I move in polarities.*

In this stage of bodily development and growth, basic skills develop in contrasts. One side of the body learns to stabilize so that the other can become more mobile. Preferences in handedness develop—she becomes a “righty,” he becomes a “lefty.” Dominant and non-dominant sides of the brain pattern their activity to function for the whole. The individual “I” which developed his/her own space and ability to move forward and backward with ease using Upper-Lower, homologus patterning, now takes sides. Each side learns its job. This clarity is an important stage in both brain development and body patterning. Spatially, the earlier homologus patterning of Upper-Lower was mainly Sagittal. When we now pattern homolateral, or Body Half movement, the Vertical plane becomes fully available.¹

From a physical perspective, the ability to establish sides for different functions is a result of clarity of sidedness, i.e., “I hold the nail with my left hand and pound the hammer with my right.” From a psychophysical perspective, the skill of perceiving and really experiencing opposites comes to its zenith in this body stage. And without this stage, it is hard for an individual to know where s/he “stands” on an issue. This stage can be very satisfying in that the world seems organized in basic polarities: Right-Left, Known-Unknown, Stable-Mobile, Light-Dark, Just-Unjust. The world is clear and perceivable in a simple way (almost too simple when looked at from later developmental stages). When one is in this stage, it can seem that the major experience is conflict between the two polarities or righteous identification with one over the other.

From a body perspective, that which was differentiated into Upper and Lower in the last developmental stage now begins to integrate by realigning “loyalties,” or connective

pathways. Upper and Lower unite in sidedness. Functionally, one whole side learns to provide a supportive stable stance, while the other side practices mobility. At every level, from lying to sitting, to kneeling to standing and galloping, as a child is learning to move there is clearly a period of homolaterality which trains connectivity for support on one side and at the same time connectivity for mobility on the other. In addition, Bonnie Bainbridge Cohen says,

“In the infant, it is important that the homolateral patterns develop on both sides to balance their spines, to establish a broad base for integrating right- and left-sided functions within their nervous system, and for tonifying their whole organ-glandular systems. The homolateral push patterns are an outgrowth of the freedom of the spine to be attentive in all directions and of the upper and lower limbs to be separated out as a force of intention in dialog with gravity and space. This process causes a weight shift to occur through first the upper limbs in regard to the free movement of the head, and then the lower limbs with the free movement of the tail.”²

But even before the baby is able to push to shift weight, when the baby is lying in bed on his back with head turned to one side, the limbs on the side toward which the face is turned extend, and the limbs on the other side flex. As the head turns to the other side, the limbs on that side extend and the other ones flex. This basic reflex (the Asymmetric Tonic Neck Reflex—ATNR) is a body-half one. On the tummy, once the upper and lower push are developed, pushing from a limb on one side causes that whole side to lengthen and reach. This leads to crawling on the belly. And when walking is being learned, the baby seems to be achieving stability by being as wide and flat as possible in the Vertical plane and letting each whole side come slightly forward one after the other, almost like rocking from side to side. Again, Body-Half is at work in the learning process. An adult cross-lateral stride comes later.

Even at advanced levels of movement proficiency, Body-Half is an important part of many training processes—particularly in the highly articulated Martial Arts. When Irmgard Bartenieff and I studied Chi Kung in Hawaii, we were frequently told to “root one side while the other side floats.” Training in the Martial Arts enables one to develop a thorough sense of groundedness and a lightning-swift mobility. It is no wonder that many of the training sequences (called “Katas” in some forms) are almost totally organized from Body-Half.

When highly articulated, differentiated movement is at issue, one cannot achieve greater mobility without first achieving greater support for stability. Another highly articulated movement study which utilizes a large amount of Body-Half in its training process is Ballet. Ballet dancers give themselves a chance to return to the simplicity and stability of Body-Half patterning every day at the “barre” before they move into their complex cross-lateral combinations. And this is an issue which Body-Half addresses. Dancers may begin the “barre” with “plies,” which primarily utilize lower body push patterns with upper body reach, but by the time they are doing “tendues” they have moved into Body Half. This gives them a chance to focally attend to

“the stable side” from foot connection into the floor, all the way up through the core and out to the hand which is connecting to the barre. This then allows the gesturing side to achieve fuller range in mobility. (Of course, not all movement at the barre is Body Half movement. Much is definitely organized cross-laterally, and cross-lateral support for stability is equally important. But one beauty about working at the barre is the clarity of Body-Half organization which is possible because the barre reminds one to connect through one whole side for support. This prevents the arm on the standing side from waving around limply once one comes to center floor.)

When I think of animals whose major mode of bodily organization is Body Half, immediately the lizard and the camel come to my mind. They are, of course, very different. The lizard reminds me of primitive push power, a being with reptilian-brain “wants” and “needs,” aware and alert to the moment for self-gratification. The camel, on the other hand, reminds me of a plodding, long suffering, persistent being who serves others by carrying them and their belongings. Anyone who has ever ridden a camel knows how unfamiliar the constant body-half movement is for a human being who is used to cross-laterality.

As we move on to our Movement Exploration, I want to remind you that all previous patterns underlie this one, so before you do these movement experiences you might want to warm-up with Breath, Core-Distal Connectivity (all six limbs finding relationship through the navel center), Head-Tail work, and Upper-Lower movement patterns. Then continue with some very basic Body-Half patterns.

Movement Exploration

A. Basic Homolateral Pattern on Tummy: *Lie on your tummy with your head turned to one side (let's use the right side first for this exercise). Now, with your head turned to your right, let your right arm and leg flex so that elbow and knee come toward each other and your thumb comes nearer your mouth. (Both limbs will be in outward rotation.) Your left side will be lengthened long, with your left arm down by your left side and your left leg long down from your femoral joint, both limbs in inward rotation.*

Now reverse the entire constellation by turning your head to the left around its axis. Let your limbs switch relationship totally. Your left arm and leg will flex, bringing your left thumb near your mouth. Your right hand will swipe the floor with its palm (bringing more sensation) as your right arm and leg lengthen long.

Continue alternating sides, initiating the change by turning your head. If you do many repetitions (around 60), you will begin to notice how satisfying and natural this movement seems—like a baby in its crib, getting comfortable by sucking the thumb of one hand and then the other. This pattern coordinates hand to mouth functioning.

B. Basic Homolateral Pattern on Back *(Related to the Asymmetric Tonic Neck Reflex—ATNR) (Figure 47): Lie on your back, sensing the earth with the whole back surface of your torso. Turn your head to the left and look at your left hand...way out there at the end of your extended arm. Let your left leg be extended long, straight down from your femoral joint...so that your whole left side is lengthened and extended, including the left side of your spine, which will be slightly elongating into convexity. Your whole right side, on the other hand, will be flexing laterally...your*



Figure 47. Basic homolateral pattern on your back (related to the Asymmetric Tonic Neck Reflex [ATNR]).

spine will be slightly concave on the right side and your right elbow and knee will be coming toward each other as the limbs flex in. Enjoy feeling this flat form in the Vertical plane. Now switch to the other side by initiating with your eyes and head. Let your head roll around its axis, keeping its back surface in contact with the floor—don't pick it up to turn it. Your head initiates the change by rotating to the right; your whole right side will begin to extend and your whole left side will begin to flex (as described above). Develop a rhythmic alternation of sides and you will notice that the movement seems to happen almost automatically. This is because your corpus callosum is functioning to help your brain switch from one side to the other.³ This Asymmetric Tonic Neck Reflex (ATNR) begins coordination of hand/eye functioning. Sometimes in baby books this is called “the fencing position.” It is important in this movement to experience a sense of flatness. Keep your torso in the vertical plane with the back of your pelvis and chest on the floor. Do not twist. Unless you stay flat, it will be difficult to experience the midline which divides right from left.

Irmgard Bartenieff called this exercise “Exercise No. 4 Body Half (Vertical).”⁴ It was one of her “Basic 6,” but it was the last to become codified as part of the Basic 6. (When I began studying with her, she referred to the “Basic 5,” excluding this one.) Also, I remember looking toward the flexed hand rather than the extended hand when doing her version of this exercise. When done that way, it is not the Asymmetric Tonic Neck Reflex, but is definitely a Body-Half exercise—probably more related to hand/mouth coordination than hand/eye coordination. She also stressed that the initiation for changing sides was from the mid-limb and occurred at the end of the exhalation, i.e., as the exhalation finishes and the body is experiencing that “hollow” moment, elbow and knee of the same side come together. The reversal to the open form then initiates from the tips of the fingers and toes. Try this exercise Irmgard's way and then compare your experience with that which is more like the ATNR. What does each give you?

You might want to try traveling the ATNR pattern. Let it travel by pushing from the foot of the flexed leg and traveling backwards, elongating that whole side and reaching out through that arm. You

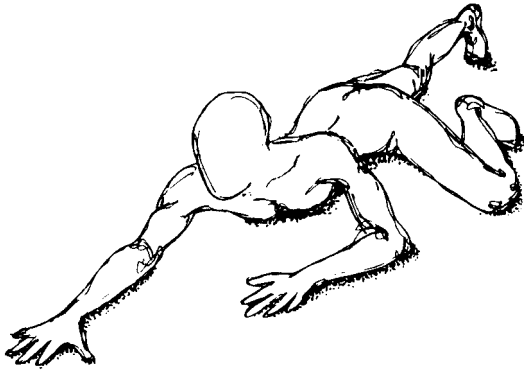


Figure 48. “Crawling”. Yield & Push from the foot of your leg that is flexed.

will need to flex your foot in order to push, and you may need help from a partner to give support under the foot to push from if your floor is too slippery.

C. Homolateral Yield & Push From the Upper: *On your tummy again, bring your arms into flexion so that your hands are near your shoulders and your elbows can feel related to the lowest point on your scapulae. Curl your toes under. Yield & Push down through your elbows until you are supporting on your lower arm. Let your spine reach forward and up away from center core. Notice how you can connect all the way down to your feet by pushing from your toes. Alternate pushing a bit backwards from your Upper Body and a bit forward from your Lower Body until the energy between the two is equalized. (You will probably remember this pattern from the previous chapter on homologous movement). Now as the push comes from the Lower let’s make the movement a Body-Half, homolateral, movement by sending more energy into one elbow and hand as if “filling that forearm and hand with weighted sand”. Then when the hand from that side is “full,” push backward from that hand and let your torso and leg on the same side lengthen and reach away long. The limbs of your opposite side will relax a bit into flexion and your torso will be concave on that side. Start again from the beginning and let the other side push backwards. Once you have worked through the whole process on each side, try continuous traveling backwards by pushing from alternate arms. Your head will turn toward the flexed side, and then you will push from that arm. Remember to stay flat on the floor and enjoy the sensation of your body sweeping the floor as it swings from side to side. (It is best to do this movement on a slippery floor; a rug is difficult.)*

D. Homolateral Yield & Push From the Lower—“Crawling (Figure 48)”: *When you feel comfortable with the Homolateral Yield & Push from the Upper, at some point let the limbs of your non-weighted side come into flexion. You will notice that one whole side is elongated and one whole side is flexed. Now push from the foot of your flexed leg (you will need to have your foot flexed and your toes curled, ready to push). Travel forward, letting that whole side elongate until you are reaching with the hand of that same side. As you travel forward, your other side will automatically flex in, ready to push again. Sense that your same-side elbow and knee are enjoying the same amount of either flexion or extension. You might also begin to notice that your flexed leg begins in outward rotation and as the push comes through the toes to send the body forward, the leg sequences to an inward rotation.*

Continue “crawling” like this for quite a while until you really sense the coordinative nature of this pattern. You can pretend you are in a jungle crawling underneath the underbrush, or that you are reptilianlike lizard in the desert. Stay close to the ground, on your belly. If the floor you are on is too slippery, ask a partner to give you a stable brace to push from (perhaps putting his foot underneath yours). You may notice that travel in this way is quite tiring. That’s one reason why babies need lots of sleep. They are working hard—they are patterning their brains and their bodies. They are moving away from reflex to muscle coordination.

Now that you have had a brief experience with homolateral movement from a developmental perspective, let’s explore a bit more movement as full adults. But before we do so, I want to let you know that in adult movement it is quite rare to see movement staying consistently homolateral for a long period. Most of the time there are moments of homolateral interspersed with cross-lateral and homologous. In a phrase of dance movement there may be many different types of bodily organization producing the stability or the mobility. I am making this statement because I do not want you, the reader, to think that homolateral movement is the only way to find stability to support your mobility. I will simply be using the Stable-Mobile polarity for now as an example as you work on Body-Half connections.

Body-Half Using Color

Many times when teaching university students or adults in the community, I have found that working with color helps solidify the nature of sidedness and makes it easier for students to give one side of the body a specific task and the other side a different task; for instance, Stable vs. Mobile. As you do the exploration below, let yourself be surprised by what colors emerge. (If, for some reason, color is not evocative for you, allow your own personal differentiating images to emerge as you do the new exercise...perhaps sound, texture, etc.)

Movement Exploration

E. Stable-Mobile Side Connections: Using Color: *Lie on your back in the shape of a large “X.” Allow your whole body to be fully supported by the floor and breathe into every cell of your being. Then allow your breath to enliven mainly the right side of your body. As your breath fills into your right side, in your mind’s eye allow yourself to see that side flooding with color. What color is it? Trace the color all the way from the tips of your right toes, through your right leg, your right femoral joint, your pelvis (including your psoas), through your waist and chest area to your right scapula, your right shoulder joint, through your whole arm and out your right fingertips. Let your whole right side vibrate with intense color, whether that color is dark or light, pastel or brilliant. Experiment with pressing into the floor with the whole right side of your body, and in so doing intensify the color on that side. As you press into the floor, confirm the connections through that whole side and sense the stability of those connections. As the color of that stability intensifies, let the limbs of your left side begin to move, doing whatever movement they want to do. Continue to give your attention to the color and connections on your right side. By attending to your stability you*

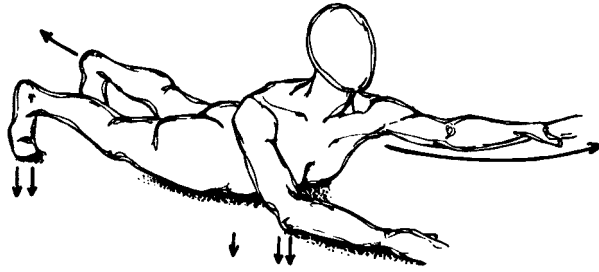


Figure 49. One whole side of your body “grounds” for stability and the other whole side is free to mobilize, reaching into space.

make more mobility possible on the other side. When you have explored this stability and movement fully, rest.

Breathe again into your whole body, filling every cell with life energy. Now begin to breathe into your left side. Continue and let your left side flood with color in your mind’s eye, probably a different color from your right side. Explore your left side as your stable side, intensifying the color, like turning on the light, brightening that side by pushing down into the floor...connecting for stability. As you sense the stability, let your right side become more mobile. Now you have two colors... one intensifying for stability, the other brightening for mobility.

Continue doing movement in which one side does one thing and the other side does something else. Let yourself change level and perhaps even travel. Play with the two colors you have, noticing whether you tend to invest in the color of the mobile side or the color of the stable side.

F. Body-Half Yield & Push Sequencing to Reach (Figure 49): *At some point return to the floor, this time on your belly. Let your legs be lengthened directly in line with your femoral joint with toes curled under. Your arms begin so that you can easily make a grounded connection from elbow into your scapula (perhaps arms bent with elbows at scapula level). Yield your weight into the earth and Push down into the floor with the entire right side of your body—you might want to intensify the color on that side. As you do this, you will be taking your pubic bone to the floor by engaging your hamstring connection and sensing a lengthening out your heel, while the ball of your foot will be pushing down, engaging the inner leg and sequencing in a kinetic chain up into your psoas. This stability will connect to the push coming from your Upper Body on the same side. Your lower arm and elbow are pushing down into the floor and sending energy back and into the core through the lower scapula connections, crossing the level of the spine where the psoas originates. These connections will continue down into the sacrum. As you confirm the stability on the whole right side of your body, in your mind’s eye begin to “brighten the color” on the left side of your body and let your limbs on that side radiate out from center core, reaching off the ground and out into space about an inch or two off the floor. (Notice what color that side is in your mind’s eye.) Your leg will go back and up, lengthening away from center core. Check to see that you are not pulling out to the right side with your leg— send it straight back using your hamstring and gluteus maximus and lengthening the psoas. Your arm will go forward and up lengthening away from center, enjoying the connection from the lowest point on the scapula. Experiment with whether your head*

and tail seem to want to join the color of the stable side or the mobile side. Release into the floor again and take the same movement to the other side.

This exercise (without the color aspect) is frequently given to physical therapy patients with disc problems to encourage a supported full spinal extension (many times discs patients are unconsciously tucking the pelvis). Generally it is paired with its cross-lateral “partner,” where the cross-connecting limbs stabilize so that the opposite cross can reach out. If you are a dancer, you will probably recognize this type of movement as an “arabesque,” when it is done standing.

G. Body-Half Improvisation: *Come around to standing; notice how stable you feel on your standing side. Let your other side experiment with what it wants to do. Travel through the room “planting” through one whole side and letting the other side press or reach out from center. You might find that at first moving the whole side in a simultaneous way will help you achieve a true body-half connection—this type of movement is frequently seen in the Martial Arts—but as you continue, experiment with sequential movement as well.*

If you would like to try a specific Body-Half pattern while you are standing, I recommend improvising the first one we did lying on the back—related to the ATNR. Go back and explore it on the floor again and then try it standing or traveling through the space. Dancers will recognize that “piqué turns,” or “Barrel leaps turning” are also organized from Body-Half.

If you are a dancer, a martial artist, or a sports enthusiast, I recommend that you spend time now exploring specific movement that you use in your training process which is organized from Body-Half (i.e., a piqué turn in dance). Go through it slowly at first, taking time to “color” the stable side and then the mobile side. Notice which side you usually attend to. How do you generally make the connections which maintain the relationships on one side and then the other? Gradually increase the speed of the movement until you are doing it “up to speed” and enjoy how your homolateral connectivity is serving you!

Kinetic Chains

As Upper and Lower begin to find their connection in Body Half we are again reminded of what Irmgard called Kinetic Chains—that is, sequences of muscles that are engaged, either simultaneously or consecutively, to produce either support or movement. Some of my friends who come out of the Roling or Hellerwork fields feel that kinetic chains are made possible because of the fascial envelope of tissue which surrounds the muscles and is filled with nerve pathways, which could convey a bodily sensation of “connection” in a linked way. Of course fascia is not a motor pathway, but it can provide the proprioceptive sensation of connection. It is satisfying to play with the idea of pathways of connected muscles which might be operative at any one moment. I do not know of any conclusive electromyographic studies which have mapped the connections, but I can certainly experience a sensation of connection as I do, for example, the *BODY HALF YIELD & PUSH SEQUENCING TO A REACH* exercise outlined above.

I feel a chain of connection in the front from the ball of the foot which is pushing, through the muscles of the inner leg, including the adductors, directly into the psoas of the standing leg. I also feel a chain of connection through to the back side of the pelvis from the heels through the back of the leg into the hamstrings into the lower sacrum.

Inevitably, many more muscles are involved in making this “standing leg” part of the movement possible, and the specific muscles involved will depend on the movement which precedes and follows it. **I do not recommend thinking muscularly, but rather in terms of lines of connection, “open tubes” or “highways.” This will allow your neuromuscular system to provide the connection.**

Inner Characters—Body-Half

Let’s look at Body Half from a more metaphoric, psychophysical level. If you think back to the movement exploration you did in the last chapter—finding a part of yourself which seemed to inhabit your Upper Body and a part of yourself which seemed to inhabit your Lower Body—you might also have an immediate sensation of aspects of yourself that are Body Half oriented as well. Perhaps one side activates to get things done in the world, while the other side is more inner-oriented and sensate. Perhaps one side is powerful and one side is delicate. Many persons become identified with the part of themselves activated by the dominant side. For instance, I am right handed and my major experience of myself for many years was one of “Active, decisive, knowing, out-in-the world.” When I began working with letting my left side lead my experience, I discovered a part of myself which is “more about Being than Doing, one which is non-verbal, and sensuous.” Unless I discover and claim both sides I cannot come to an integration of who I am as a full human being, and I cannot tap my full resources as a dynamic mover, because my palette of “color” and qualities of movement will be limited.

Many times I enter a movement process with my students through active imagination which is similar to the one we did locating “Inner Characters” in the Upper and Lower body in [Chapter 9](#). The beauty of working in this way is that the “Characters” reveal themselves through movement first and only afterwards become articulated in language. Many of our “connections” are known to us first non-verbally and only later in terms of the conscious thinking process. I recommend that you return to [Chapter 9](#) (pp. 160–161) and work with the Movement Exploration under the subheading Inner Characters, but do it with one *side* and then the other...I find it wise to work with the dominant side first. (The dominant side generally likes to have “first say” and will probably not be willing to release control unless listened to first.)

It is fun when working with characters that inhabit the two sides of the body to let them express themselves first through movement and then through drawing or sounding and last through writing.

Movement And Drawing—Body-Half

H. Inner Characters and Drawing: *When you have moved and have experienced the quality of a character who inhabits your dominant side and have amplified that movement throughout your whole body, take another moment and let the entire quality of the character and the way s/he moves come down into the movement of your dominant hand. Explore the dynamic quality of your character fully just with your hand. Then take paper and record that movement with its color and dynamism in any way you want. Let the moving quality come through your hand onto the paper. (It is not*

necessary to try to draw the specific form of the character.) Now record in words with that hand what it is that you value about those qualities and perhaps one sentence that the character might say. Rest for a moment.

Then repeat the entire movement process with your non-dominant side, again bringing the quality of the character down into the hand of that side. Then draw with that hand (not your usual dominant hand), and write the words with that hand.

Polarities⁵

Sometimes it is helpful to work from opposites, which are verbalized to begin with and which have immediate meaning in the person's life adventure. The beauty of working in this way is that one can come from conscious concerns as opposed to letting less conscious parts speak through movement. This approach is more comfortable for some people and in certain situations. Body-Half is useful for helping people locate and express polarities or contrasts in feelings or concerns—times when you might find yourself saying: “Well, on the one hand...but on the other hand...” An example might be, “On the one hand, I want to be a success at my career, but on the other hand my family and home life is clearly what life is about.” I frequently ask students to make a list of some of the polarities in their lives. A few which might come up in addition to CareerFamily are:

Yes-No
 Do it-Don't do it
 Alone-Together
 Open-closed
 Inner related-Outer directed
 Being-Doing
 Exuberant-Depressed

You might want to make a list yourself. As you do it, range through your life in your Bodymind. Let your body sense being pulled in different directions or toward different feelings or concerns. If you feel one coming to the forefront, let yourself also sense what would be its polar opposite.

Movement Exploration

I. Body-Half Dialog Amplifying Polarities and Embracing the Whole: *Using your list of polarities, pick one pair that seems important to deal with at this time. Begin to ask your body which side of your body (left or right) knows the most or has the greatest affinity with one of the poles of the pair. What would it be like bodily if that pole were embodied totally in one side of your body? Let yourself begin to take on the qualities of the concern in that side of your body.⁶ Once the quality begins to manifest, let every cell in that side of your body take on the nature of that quality. Let that side begin to move you.*

Now do the same with the other pole of the polarity. Allow the quality of that concern or feeling come into every cell of the other side of your body. Live it out fully.⁷

Once you have experienced each pole, play back and forth between the sides of yourself or even the sides of the room you are in. For instance, let your right side lead your whole body in experiencing its qualitative nature. Then gradually move to the other side of the room and let your left side lead your whole body in experiencing its approach to the world. Notice what happens as you approach the middle line and then switch sides. Notice what you value about the quality of each side. Make a note for yourself. How are you using each in your life? Perhaps one side helps you to be successful in the world, whereas the other side is more tuned-in to your own inner life. Whatever it is that each provides for you, acknowledge its value.

And now comes the most important part of this exercise⁸... Once you have amplified the polarities of the sides, spend time moving while acknowledging that both are part of you. Can you be large enough to embrace both? Perhaps through moving you will find your own path to integration.

The issue of polarities can, of course, be dealt with in many different ways with various forms of education and therapy. One advantage of using movement, particularly with two halves of the same body, is that it is obvious that both poles are contained within the same being. The sort of distancing that frequently takes place when discussing issues intellectually is absent and there is a real presence of a possibility for integration.

From a theatrical perspective, working with high contrast is one way to reveal differences in character. It is also fascinating that modern dance works from the 1940s and '50s (for instance, Martha Graham's heroic pieces), which are more based on "roles" or characters, tend to have quite a bit more Body-Half movement than the more complex cross-lateral dance styles of the '70s and '80s and '90s (for instance, Twyla Tharpe's pieces), which are more "about" continuous ongoing connectivity in Flow, with Head-Tail support for Cross-lateral Connectivity.

Implications Of Body-Half Connectivity

Body Half is an important stage in developmental progression and in movement training. It underlies brain patterning in relation to primary sidedness (sometimes call "handedness") and relates to the ability to evaluate and clarify issues.

Functionally, one whole side learns to provide a supportive stable stance, while the other side practices mobility. Upper and Lower unite in sidedness. I find it quite useful to return to Body-Half patterns to give students/clients a sense of stability for their mobility. Often they find that the simplicity of One side/Other side is satisfying—particularly if they are usually very complex movers or thinkers who have been injured and who need to re-pattern.

One Body-Half Connectivity is accomplished, the complexities of Cross-lateral movement are possible.

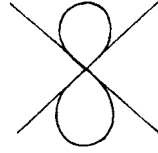
Notes

1. Complex patterning for the Horizontal plane comes later with Cross-laterality, particularly with the ability to spiral. First experiences with the Horizontal began with Head-Tail as the body turned its head to suckle at the breast.

2. Bonnie Bainbridge Cohen, *The Evolutionary Origins of Movement*, manuscript, p. 26b.
3. In even slightly brain-damaged children, one is likely to see dysfunction in this pattern—It may seem almost impossible to do it at first.
4. Irmgard Bartenieff, *Body Movement*, p. 241.
5. I learned about the importance of amplifying and going beyond polarities through the work of Charles M. Johnston and the Institute for Creative Development in Seattle, WA.
6. For instance, I can imagine letting my left side begin to feel “Inner related”—this might manifest for me in a sense of my Inner Character, Sylvia, who is “thoroughly sensate,” who moves with soft Shape Flow Mode of Shape Change, small breath-oriented movement, perhaps Weight Sensing and Free Flow. (For more information on the Laban Movement Analysis area, see Appendix-LMA.)
7. For instance, I can imagine that my right side would feel “Outer directed,” which might manifest in a clear “Take charge” type of person. This person’s movement might include Directional Mode of Shape Change with honed precision, Direct Space Effort and Controlled Flow, perhaps some Suddenness or Strength. (These qualities are Effort Qualities.) For more about Effort, see Appendix-LMA.
8. It is helpful to do this part of the exercise in an area of the room in which you have *not* moved when exploring the polar sides. This new 3rd space offers a place for a fresh perspective...one of integration.

CHAPTER 11

Cross-Lateral Connectivity



*I am complex.
I am interconnected within myself...
messages travel diagonally,
connecting right, upper, front
with left, lower, back,
The spiraling universe invites my participation,
around back up,
forward around and down.
I refine and polish my skills,
reaching and running
molding and creating,
ready to leap into the world.*

We come now to the final stage of our basic bodily differentiation process—that of cross-laterality. This is the most complex pattern in the basic developmental sequence. Now we are able to creep on hands and knees and eventually to walk. Opposite arm and leg swing forward to facilitate the transfer of weight. This seemingly simple ability is the result of a long developmental progression, as you know from having read this book. To get to this point, we have previously differentiated each limb in relation to center core, become individuated as spines, discovered the role of the upper and the role of the lower, and claimed distinctions in sidedness. With cross-laterality we now find connections between body quadrants.¹ We open passageways or highways diagonally through our core, enabling us to cross movement in a connected way from one side to the other as well as up and down and forward and back. This happens in a basic walk, and, of course, in more complicated movement, such as a tennis serve. For instance, if I serve with my right arm, I end going around down and back to the left as I finish the serve; I am connecting right and left, up and down, and forward and back. The movement is transverse in space and requires a diagonal connection bodily (going from my right arm crossing down and across through my torso to my left leg as I step forward to complete the serve). A more common example of Cross-Lateral movement might be reaching up to climb a ladder and having the opposite leg automatically available to step up.

The Not-So-Simple Walk

But, of course, the most common Cross-Lateral movement in adults is the “simple” walk. I have put the word “simple” in quotes, because it is rare to see a person who is using full Cross-Lateral connection effectively in walking. In fact, many people are walking by holding the upper body rigid, or by maintaining a fixed spine, letting arms and legs swing from the proximal joints with no transfer of alive energy or movement through the center core. Others are charging forward from the upper body, almost as if they did not have a lower body. I am amazed to see that somehow these persons’ legs miraculously manage to get underneath to catch them—but certainly not because they are enjoying and diagonal connection through the core!

Here I come to an important point in my discussion of Cross-Lateral connectivity. In the medical/scientific community, this developmental pattern is called “Contra-lateral.” When a person is using the opposite arm and leg in creeping on hands and knees or walking, it is generally said that the person is utilizing “contra-lateral” movement. I do not like using this term, because, the prefix “contra” conveys to me the sense of parts moving somehow in a battle with each other (from the Latin “*contra*” against.) **I prefer to encourage the sensation of connection rather than that of opposition. I utilize the term “Cross-Lateral Connectivity” to convey a sensation of connection along a diagonal pathway through the body’s core between the body’s cross quadrants.** This means that I would not consider someone to be using Cross-Lateral connectivity (even if they were using the opposite arm and leg when walking) unless they were letting the force of the action be transmitted diagonally through the core of the body, connecting down with up, front with back, and side with side. Such a transmission turns a “simple” walk into an exciting experience of subtle spiraling through the torso which makes the entire body active. This activity through both lower and upper is a reason for doing walking as healthful exercise. It stimulates the nerve plexes in both Lower and Upper, and engages kinetic chains of muscles all the way from foot through pelvic floor, and through spine through heart and lungs, through scapula to arms and fingertips, and through the head. Without Cross-Lateral connectivity, one can “walk for health” and actually be practicing all sorts of disconnections and body substitutions that are potentially injurious (such as hip-hiking, lack of internal support, and overuse of the low back with upper body held in tension).²

Cross-Lateral Complexity

By utilizing Cross-Laterality, we can enjoy full three-dimensionality easily moving through our bodies, which makes the complexities of diagonals, spirals, and lemniscates possible. This is because Cross-Laterality brings added ability with horizontal plane movement and graded rotation, connecting Lower to Upper. We can now add this ability to our more sagittal and vertical plane skills gained from Upper-Lower and Body-Half patterning. When using Cross-Laterality we can come to clear connection from fingertips of one hand through the core and to toes of the opposite foot. Such a clear connection may be seen in a beautiful soaring leap of ballet’s “*grand jete*”

Virtuosic Cross-Lateral movement can be seen in the ballet “grande jete en tournant” or a modern dance spiral into and out of the floor. Cross-Lateral skill is also seen in highly technical, refined movement in sports such as soccer and many track and field events, such as running the hurdles, and pitching the shot put, as well as in the more everyday-life golf swing, tennis serve, or frisbee throw.

In most activities we see rapid alternations of Cross-Laterality and homolaterality as the body is at one moment working with stability through Body-Half and at the next moment transitioning into Cross-Laterality. Even in the “simple” walk there is a homolateral moment which transitioning into Cross-Laterality.³ But these transitions and alternations are particularly obvious in complex dance sequences which change level and in sports action which accommodates to constantly changing conditions...such as dribbling down a basketball court, faking and changing direction, then going into the basket for the “lay-up.”

Why Train For Cross-Laterality?

You may be saying, “All this is well and good, but let’s get back to Cross-Laterality. Why would I want to work hard to achieve this type of connectivity? Is it really necessary?”

To this I would answer that many people live their lives without investing the energy in achieving true Cross-Lateral **Connectivity**. (They do contra-lateral movement, but their limbs do not connect through core.) These people survive, but in my mind are not enjoying their full physicality. Of course, the great percentage of the world’s population does not have the need to train for virtuoso dance and sports movement, but almost everyone at some time wants to spiral around to reach something behind them or descend to the floor in an easy spiral...or even go for a brisk, energizing walk around a lake. Without true Cross-Lateral connections in service, your limbs may feel separate from your core as you do these basic actions. You will feel less embodied.

And on a totally different note, but immensely important—I have a hunch that these cross-connections enable our brains to play effectively between right and left brain functioning, connecting the symbolic and the analytic, allowing a beginning connection between feeling and form, while also connecting “grounding” with “reach into the world.” It has been my experience that students who become interested in exploring Cross-Lateral connectivity at the body level also become more adept at making linkages and relationships in thought processes as well. This seems to be particularly true of those who become interested in spiraling or transverse movement, where constant gradated change is the issue. In our world today, the issues are constantly changing in quite complex and interrelated ways. We need to be fully embodied to deal with them adequately.

But that information leaps us ahead a bit. Let’s talk about describing movement and then get down on the floor and experience some movement.

Movement Exploration

Describing movement which is changing three-dimensionally is an overly verbose task. It would be much easier to have you see the movement than to try to talk you through it. I

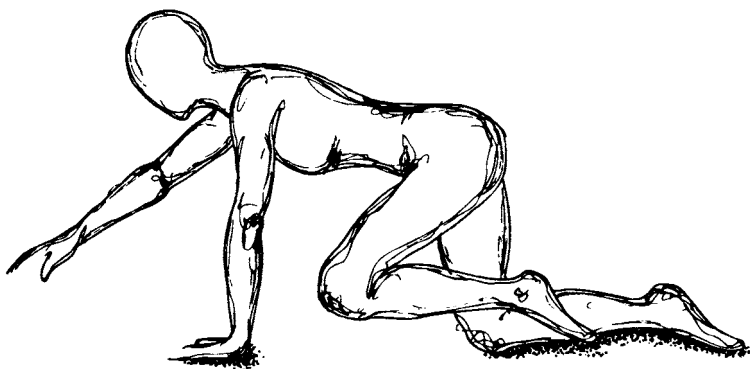


Figure 50. “Creeping” initiates with a reach and pull from your hand.

apologize to you, the reader, for the difficulty in reading this chapter. I have chosen to include direction symbols in this discussion in some exercises in hopes that they will simplify the vision of what is happening for those readers who are familiar with the Laban work (see Appendix-LMA for identification of symbols).

Let’s explore moving Cross-Laterally first, using movement a baby might use.

A. Creeping (Figure 50): *Begin on your hands and knees. Notice something which interests you that is in front of you, out of your range of reach (this motivation is very important is for babies). Reach your right hand forward to go towards it. Really see it and go for it! Pull towards it. As you do, you will notice that the knee of your opposite leg, your left leg, will come forward to support you. The energy of your reach has been conveyed, like a message, from your right upper quadrant to your left lower quadrant. It has traveled diagonally through your body. Reach with your left hand now, and sense the connection to your right leg coming forward. Continue reaching forward with alternate hands and you will be able to travel toward your goal. (This is called “creeping” by the US military. “Crawling” is on the belly and is Homolateral, beginning with a Yield & Push from the Lower.)*

Notice that if you Push from your right leg, your right arm will reach forward. This puts you into a Body-Half, or Homolateral, pattern. In order to stay Cross-Lateral, initiate the movement with a Reach & Pull Motivation is important in this process. Seeing something out in the world beyond your own kinesphere which you want to get, spurs you on to reach for it.

Just for an experiment, still on your hands and knees, reach your right leg backwards and pull back towards it. Your left hand will come back to support you and you will find yourself creeping backwards. Now you can travel backwards!

Return to creeping forward and allow an easy, rhythmic alternation to develop. Enjoy the crossing diagonal connections through your center core. Be sure you are not supporting on the outsides of your legs rather than through center. If you want to do a lot of creeping, which I do recommend in terms of working on Cross-Lateral patterning, be sure to use knees pads! (Babies have a fat layer around their knees which adults do not.)

B. Cross Connections Stable-Mobile: *Lying on your back, extend your legs onto the floor so that your whole body is in a large “X” form. Yield & Push down into the floor from the heel*

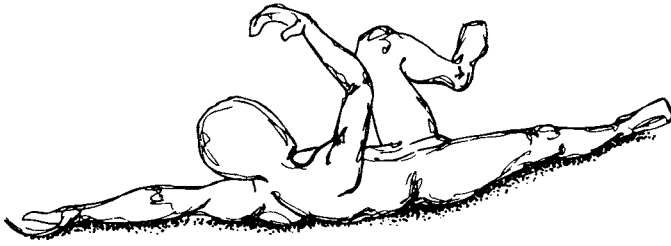


Figure 51 Confirm your stable cross-connection and embrace around the space with your opposite elbow and knee.

of your right leg through your pelvis and all the way through to the scapula of your left arm and out to your hand. Sense weight on the underside of your limbs and torso almost as if “loading” that cross-connected passageway with sand or color. (If the color imagery worked for you in the last chapter on Body-Half, you might see or sense this connection as an open tube of lighted color. What color is it? Intensify the color as a support for the opposite cross.) With this connection as your stability, allow the opposite cross (your left foot through to your right fingertips) to release slightly off the floor. (What color is that crossing pathway?) Return to the floor. Were you able to maintain the stable cross firmly planted into the earth or did your pelvis tip to one side as your gesturing arm and leg released from the floor? Use your core support and your breath to aid the stable connection.

Continue to alternate the stable and mobile cross connections, making sure to invest in the stable pathway first. (It sometimes helps to intensify the stable pathway’s color and then let the mobile pathway simply brighten a bit to release from the floor.)

Once you have accomplished the above exercise, you are ready to move on to letting the gesturing arm and leg move through a greater range of motion.

C. Cross-Lateral Elbow to Knee (Figure 51): *Again, lying on the floor in a large “X” form, confirm your stable cross-connection as you did above by yielding weight into the floor. This diagonal body connection will provide support to allow your other cross-connected arm and leg to reach out away from center core and carve around through the space until the elbow and knee of the opposite arm and leg are coming toward each other (See illustration). Let the movement be full and rounded. You will be using your rotary capacity to accomplish this both in your spine and in your limbs. Notice that your spine is involved in twisting. It is not rigidly held. Let your head rotate toward the side that your upper body is going towards. Your arm will be utilizing outward rotation and your leg will be rotating inwardly. You will have a sense of embracing or enclosing space. As you return your mobile arm and leg to the floor, again confirm your stable cross-connection and let the back side of your torso and limbs spread onto the floor, returning to a more neutral rotation, and sensing weight in the underside of your limbs.*

Importance of the Rotary Component⁴ Diagonals and Spirals

The above exercise is a simple example of the beauty of diagonal connectivity for both support and movement. It is also an example of limb-torso movement which is transverse—it is a simple spiraling action at a body level. I am emphasizing this fact, because so

much of Fundamentals as we continue further is based on the importance of diagonals and spirals. Irmgard Bartenieff came into her physical therapy training with many years of experience as a dancer trained with Rudolf von Laban. And so her approach to body training was rich in a full range of expressivity coming from the dynamic side (Effort) and from the knowledge and sensitivity to the role of spatial intent⁵ and emphasis on spatial sequencing (Space Harmony) as well.

She was acutely aware that traditional physical education and physical therapy training primarily emphasize two-dimensional rather than three-dimensional movement. These fields stress movement in the Sagittal and Vertical planes with much less attention being given to the Horizontal plane elements (particularly rotation). Irmgard felt that this lack meant the exercises these fields provided did not adequately prepare people for living fully in a three-dimensional world. When there is an excess stress on the flexors-extensors and abductors-adductors, without equal emphasis on the graded interplay of the rotary component, movement cannot be fully adaptive and interrelated with the world; since the world is constantly changing simultaneously in all three dimensions and innumerable transverse planes.

Irmgard spent a great part of her teaching addressing this imbalance. She stressed graded rotation and its omnipresent importance for full range of motion and expression. She was fond of pointing out that even what seems like “standing still” is actually swaying in a [figure-8](#) form, which includes a horizontal component. She states in her manuscript that the rotary element furnishes the third factor in three-dimensional movement:

“It produces—together with the other two ranges (flex-ext. and ab-ad)—the *diagonal* pathway in space... Diagonal pathways are used not only in powerful, far-reaching, impacting thrusts and hurls through space as in massive work actions, attack/defense actions, and the most acrobatic dances, but also, in less “pure” form, with less extreme kinetic drives, as numerous shaping actions with hand and forearm, such as stirring a soup, fluffing a pillow, and also in hand skill, such as crocheting and knitting, which form loops and knots.”⁶

Diagonal Connections through the Body

Irmgard used a lot of diagonal and spiraling movement, because in diagonals and spirals sagittal, vertical, and horizontal elements combine to provide maximal muscle usage in a sequenced way along “kinetic chains.”⁷ Bartenieff’s interest in diagonals began with Laban, but was later reinforced by her work in Physical Therapy.

Movement Exploration

Let’s return to more specific movement utilizing diagonals and Cross-Lateral Connectivity.

D. Preparation for Diagonal Knee Reach—Rotating Legs: *Lie on your back, legs long on the floor. Sense your heel connection to the floor and begin to rotate your legs to the same side by letting the backs of your heels roll on the floor. (One leg will rotate outwardly and one will rotate inwardly.) Alternate sides and let yourself develop an easily flowing and rolling rotation from one side*

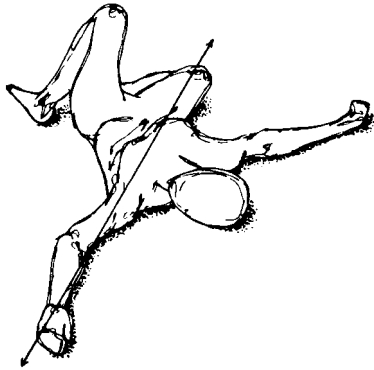


Figure 52. Diagonal Knee Reach: Reach your knees away down-forward-to-the-side and sense your lower body in relationship with your upper body through an internal diagonal connection.

to the other. Allow your knees to be soft. Gradually include your tail in the action, so that the back of the lowest part of your pelvis is also rolling, causing a slight spiral to begin to come into your spine. The front of your pelvis will be “hollow” and soft...it is not necessary to tighten your rectus abdominus, although your more internal abdominals will become activated. Let your head find how it wants to move to accommodate to the movement.

Take this experience further by doing a full phrase. Begin with the rotation as described above, but continue into a full Lower Body diagonal by beginning to flex your legs and pull your heels toward your sitzbones, letting your knees pass through the diagonal, which is down forward and to your right side from your pelvis (■). When your feet are close enough to your sitzbones to be able to come to a “planted-stand,” use your core connections to bring your pelvis to center. Your knees will come up toward the ceiling rotating your legs into parallel position. Now push down through your feet and let your knees go down forward and to the left (on the opposite diagonal, ■) as you extend your legs, still pushing from your feet until your legs are again lengthened long in line with your femoral joint, reaching out through your heels. Do this phrase several times, sensing how your breath relates to the movement and how your whole spine can become involved in a slight spiral. Let your chest be soft and pliable. Then reverse the whole phrase to the other side by rotating your legs the other direction first. This exercise should activate your lower body in a flowing way to prepare you to focus on the specific articulation of the Diagonal Knee Reach.

E. Diagonal Knee Reach (Irmgard’s Exercise No. 5A “Knee Drop”) (Figure 52): Lie on your back, knees up, feet “planted.” Arms are spread to your side with middle finger at the level of the lowest point on your scapula. Reach both knees down, forward, and to your right (■). As you do this each knee will have its own path. They do not stay together...make sure that you are allowing each leg to rotate in the femoral joint (“each leg has its own voice”). Enjoy the graded change in the rotation as you move. You will notice that you are creating a diagonal line of energy that will travel back up and to the left (☞) through your pelvis (from the area in front of your right femoral joint and back up toward your left scapula). Once your knees have come to rest, breathe into the diagonal that you have created through your torso all the way from your right knee through to your left scapula (☜). It might be helpful to begin a rocking motion along that diagonal to feel it more

fully. Make sure you have not lost your “grounding” by allowing your feet to slide. The contact of the feet with the ground simply rolls to the sides of the feet (one outside edge and one inside edge).

Return to your centered, “planted stance” by initiating in your core in the lowest part of your pelvis, following the internal diagonal you have created. This is best done at the end of the exhalation (the most “hollow” moment). At this point let your sacrum and coccyx begin to sink, retreat and spread (↓) onto the floor. This action will not necessitate tightening the external abdominal muscles or tucking your pelvis. In fact, the front of your pelvis area will sink back and in toward your spine as you return to center. Your legs will be carried along by the activation in your pelvis and will end with knees up, feet “planted” again.

If you have a tendency to break the connection between your Upper and your Lower, you may want to check that you are not making the twist in your spine happen only in your low back. This might happen if you hold your knees together on the descent—or it might happen if you are holding tension in your chest and are trying to maintain a set shape in your Upper body. (You can check this by noticing whether your clothing is revealing diagonal folds or wrinkles through your torso as you do the exercise. If you don’t see any, soften your chest.) When this exercise accomplishes its purpose, one senses a connection from the Lower to the Upper and both are participating in a slight spiral to create the body diagonal. Stay with this movement for a while, alternating sides until you are able to easily sense the internal diagonal connection.

In the Physical Therapy clinic, once this exercise is functioning well, I might give resistance with my own hands on the sides of the client’s thighs or knees as they return to the centered “planted stance” to strengthen the core muscles involved.

As you sense the knees going down, forward and to the right initiating the connection up, back and to the left underneath your left scapula, allow your left arm to flow back, up and to the left to complete the diagonal (↖). (Irmgard calls this Exercise No. 5B “Alternating Knee Drop and Arms”) This will complete the diagonal connection from Lower to Upper and will prepare you to begin the Arm Circle described below.

F. Arm Circle (Irmgard’s Exercise No. 6A “Arm Circles”) (Figure 53): Begin this experience by doing the Diagonal Knee Reach as described above, continuing into the full arm connection which you have just done. You will have created a connection along the diagonal (↖). Now begin to draw a large circle with the fingertips of your left hand coming up over the top part of a circle (counterclockwise) and continuing the circle down around the right side, allowing your chest to be soft. Continue to trace the circle down across your body, around down back and to the left (↙), letting your low pelvis accommodate. Then complete the circle, returning to where you began. Check that you are not reaching beyond the distance where your arm can stay connected to your core. (If you have “locked” your elbow, release it.) Enjoy the graded rotation through your shoulder joint, but even more importantly, allow your whole Upper-Lower connection to sense a constant graded change. You will also notice that you can allow a subtle change of relationship in your elbow, your wrist, and your hand as you circle around.

If you used chalk in your hand, you could create a beautiful rounded form on the floor (except for the part of the circle which traces across your legs).

After you have made several circles counterclockwise, go the other way around (clockwise). When you have finished your explorations, return to your centered “planted stance” as you did in the Diagonal Knee Reach exercise. Rest and then do the entire sequence on the other side.

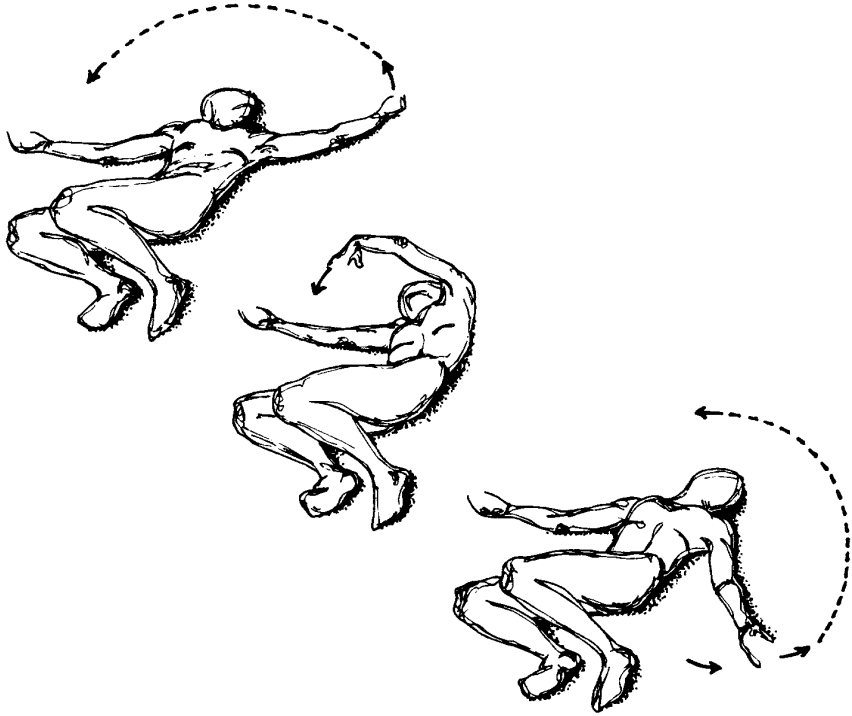


Figure 53. Arm Circle: Enjoy the wonderful gradated rotation in your shoulder joints as you sweep around this circle.

G. Arm Circle to Sitting, Sweeping Around the Horizontal: *Begin as you did in the Arm Circle above, finding diagonal connection from your knee going down, forward to the right (■), through to your left arm up, backward to the left (☞). Initiate a counterclockwise circle with your left arm, which sweeps around on the floor above your head and takes your whole spine with it as it circles around up to sitting. If you have used your core support and intent from the beginning of the movement to engage your whole body (including especially your Head-Tail connection), you will be able to easily continue the circle to sitting. Once you have come to sitting with both your sitzbones on the floor, allow your legs to reverse their rotation, coming through parallel and reaching down toward the opposite diagonal (left, forward, and down, ■) as you continue the arm circle, now letting your right arm take over the circling as you support with your left arm spreading you out onto the floor. As your right arm sweeps across your left side and continues above your head, enjoy the gradation in rotation through your whole spine as well as in your shoulder joint. You will finish the circling in a full diagonal connection with your knees down, forward and left (■) and your right arm up, backward and to the right (☞). Re-center your lower body as you did in the Diagonal Knee Reach and rest. Then repeat to the other side.*

This exercise provides a possibility to sense an alternation of sequencing from Lower to Upper and Upper to Lower. If your diagonal connection is serving you, the entire movement will flow like a “whoosh” around the horizontal plane. It is much easier to do the movement if you invest in the horizontal sweep of it, GOING AROUND and FORWARD, rather than thinking about sitting UP. If you think “Up,” you are likely to get stuck and have to push from your right arm or overuse your rectus abdominus. This is an example of where Spatial Intent aids body level patterning.

Similarity of Fundamentals and PNF

As I mentioned before, Irmgard Bartenieff became a physical therapist when she came to the United States. If you are a physical therapist, you will probably recognize that working with diagonals and spirals is an important part of the technique called Proprioceptive Neuromuscular Facilitation (PNF). When Irmgard was exposed to this technique in the early 1950s, it must have been truly confirming of her early Laban training in Space Harmony where the exploration of diagonals and transverse space was dealt with so clearly.

A diagonal has three equal operative spatial pulls and a transverse or spiraling movement has three unequal spatial pulls constantly changing their relationship.⁸ When we look at the Body level rather than the Spatial level, we notice that muscles work best in diagonal or spirals. This is because very few muscle fibers are purely dimensional in their orientation. Most are set up along some sort of diagonal pathway in the body, even if the three pulls of the diagonal are not equal. In PNF work this is stated very directly.

“The spiral and diagonal character is in keeping with the spiral and rotatory characteristics of the skeletal system of bones and joints and the ligamentous structures. This type of motion is also in harmony with the topographical alignment of the muscles from origin to insertion and with the structural characteristics of the individual muscles . . . The function of an individual muscle is a three-component action. The motion component, which places the most stretch on a muscle, determines its primary action component. The other motion components determine the secondary and tertiary action components. Thus, a muscle may be primarily a flexor, secondarily an adductor, and thirdly an external rotator. Such a muscle is the psoas major.”⁹

And so . . . how does this relate to Cross-Laterality? The psoas is a muscle which is at our core and which is working along a modified diagonal pathway (three pulls, with the vertical pull emphasized). This makes the psoas an important part of the “kinetic chain” of Cross-Lateral Diagonal Connectivity which we speak of in Fundamentals. It can connect the lower components of the pelvic-femoral area diagonally (energy coming up from below through the hamstrings, adductors, low rotators) back and up through the torso to the diaphragm and to the upper body on the opposite side through the juncture at T-12 into the thoracolumbar fascia and the muscles which control the lowest part of the scapula (such as the lower trapezius and latissimus dorsi). Thus the idea of an internal diagonal connection for Cross-Laterality begins to make sense. I encourage you to spend time looking at the diagonal pulls of the muscles in anatomy books or in the anatomy drawings in this book. You will notice immediately that the back of the torso is made up of layers of

diagonals and the front of the torso underneath the rectus abdominus is also abounding in diagonal musculature. Once you study these, begin to imagine sequences of diagonals and spirals that could be possible if certain “chains” of muscles were operative. This technique makes anatomy and Laban’s Space Harmony come alive in interaction.¹⁰

PNF also address the action of muscles as “chains” and speaks about the importance of the interplay and gradation of muscle sequencing: ...“A single muscle is not solely responsible for a single motion component. The individual muscle is augmented by other related muscles and, in turn, augments the action components of related muscles. The interrelationship of action components with reference to a specific pivot is finely shaded and graded and contributes to smoothness of motion... The spiral and diagonal patterns of facilitation provide for an optimal contraction of the major muscle components. A pattern of motion that is optimal for a specific “chain” of muscles allows these muscles to contract from their completely lengthened state to their completely shortened state, when the pattern is performed through the full range of motion... As a pattern of motion is initiated, rotation enters the motion first as the spiral characteristic of the pattern, and the other two components combine to give the pattern a diagonal direction... Optimal, sequential contraction of a “Chain” of muscles implies true synergy of these muscles as they move the part through the available range of the pattern of motion.”¹¹

What Makes Fundamentals Unique and Different from PNF?

A true synergy of muscular usage is an important part of Bartenieff Fundamentals as well as PNF. But Fundamentals is certainly not the same as PNF. PNF defines itself as “methods of promoting or hastening the response of the neuromuscular mechanism through stimulation of the proprioceptors.”¹² This stimulation is achieved through providing maximal resistance along a diagonal or spiraling pathway throughout a full range of motion...the motion relates to primitive patterns and the employment of postural reflexes and righting reactions. The “patterns” put related muscle groups in a position of maximum elongation and then the client works to achieve a diagonal or spiraling motion against resistance provided manually by the therapist.¹³ This enables the stretch reflex to be elicited throughout the pathway of the “pattern,” thus strengthening the contractile power of the muscles involved. One of the beauties of this technique is that the stronger muscles in the groups help to strengthen the weaker ones through cooperation. This happens because of the use of diagonals. **PNF is clearly a powerful rehabilitative technique at a Body level, as is Fundamentals.** It deals with patterns of motion that are common to all human beings, as does Fundamentals.

What makes Fundamentals different from PNF or other therapies that address muscular imbalances? Fundamentals is unique because it works within a context which is larger than a simple Body level focus. It deals with individual expressivity in the rehabilitative process. One of the interesting facets of the Fundamentals work is that it is housed within the entirety of the Laban Movement Analysis work. This includes the recognition that movement contains a dynamic Effort life which is attitudinal, change in Shape (which is also attitudinal), and Spatial intent and pathways. In Fundamentals, one can come into movement repatterning from any of these

perspectives. When dealing with Cross-Lateral Connectivity and diagonal patterning it is useful to use the Space Harmony material, because it provides a clear understanding of diagonals and spirals. It can provide a powerful tool both diagnostically and therapeutically. “Since Laban’s spatial analysis allows for exact defining of the balance or imbalance of the spatial components, the contribution of any of these three components (flexion/extension, abduction/ adduction, internal/external rotation) can be accurately assessed in either anatomical or spatial terms.”¹⁴

Designing an Individualized Recuperation Program

Perceiving muscular usage spatially is one the most exciting aspects of the Fundamentals work for me. Once the assessment is made and any imbalance is noted, exercises can be devised from a spatial perspective which will individually address any imbalances in a client’s movement and muscle usage. For example, in a client whose job encourages working in the forward and down spatial area (↳), such as an architect leaning over a drafting table, I might design movement recuperation which goes back and up (↶). This will give the spine a chance to go from a preponderance of flexion into extension. But Space is not the only partner with Body in the Laban work. Because the material is contexted within a Laban framework which includes the Effort and Shape material, the exercises can be designed to confirm personal expressive preferences as well. For the architect just mentioned, who tends to be very direct and employ a lot of controlled flow in his attention to his work (↵), I might ask him to release his directness in his recuperation, let his flow change to free, and add strength (↗). I might suggest that he draw powerful swooping pictures in the air all around him, and that he “paint” with different body parts in various imaginary colors of differing intensities (for instance, use his elbow to make deep crimson scallops). I would also work with providing a variation in his shape aspects. For instance, as he bends over to focus on his drawings, he encloses, sinks, and advances (↵↗) in a very goal-oriented, directional way (↗→). To relieve the stress caused by this, I might suggest he spread, rise and retreat (↵↖) in his torso while writing his name in huge cursive script on an imaginary wall behind him. This might be direct in effort quality, but hopefully the voluminous hugeness and the craziness of this request will encourage a change to free flow along with a change in shape from directional to carving. **To my knowledge, no other system of body corrective work has such a rich potential for movement re-education at the specific muscle level as well as in the dynamic and spatial arenas. This makes possible true psychophysical training, because personally designed movement programs can address individual uniqueness.** The above recuperation prescription for the architect might also illicit self-observation around issues of “need to control, contain, and form the world.” These could then be discussed with the therapist and also moved bodily within the framework of LMA and Fundamentals. **Because Fundamentals is broader than simply a Body perspective, it can address a wider range of personal meaning-making with movement as well.**¹⁵

The Tensor Fasciae Latae Problem

Let's look at a potential area for problems in relation to both "centered" standing and Diagonal Connectivity. If you are having problems accomplishing the Diagonal Knee Reach or find it difficult to maintain diagonal connection as you switch your Lower Body to the opposite diagonal in the ARM CIRCLE TO SITTING exercise, you may be overusing your Tensor Fasciae Latae. I recommend that you read the section below and practice the exercises and then return to the Diagonal Knee Reach and Arm Circle to Sitting (pp. 182–184).

A tight Tensor Fasciae Latae (including Iliotibial Tract, see [Figure 54](#).) limits pelvic movement in all directions and is particularly detrimental to the ability to find an effective interplay of the ab-adductors, the internal/external rotators and the iliopsoas. When the Tensor is overly tight, proper initiation from the lowest component of muscular usage in the pelvic-femoral connection is prevented. Action is happening "one story too high." Irmgard called this "The Tensor Fasciae Latae Problem."¹⁶

Some possible symptoms of the problem are:

1. Hip hiking in leg flexion or abduction.
2. Inability to utilize internal muscles of core support—support tends to be on the outside of the leg rather than through the center core.
3. Insufficient pelvic tilt, either forward or backward—The Anterior Superior Spine of the iliac has been fixed by a tight tensor.
4. Disturbance in the Pelvic-Femoral Rhythm—This Rhythm cannot operate effectively if the lowest components of pelvic-femoral action are not sufficiently used (psoas, rotators, ab-adductors, hamstrings).
5. Tendency to "break connection" of Lower and Upper in the low back when doing diagonal movement.

Irmgard Bartenieff was well aware of these issues. She stated:

"These symptoms appear when the interplay of abductors/adductors, external rotators/internal rotators with the iliopsoas is weakened in any of its components, and, as a result, the tensor fasciae latae assumes the role of a very weak hip abductor and hip flexor. This leads to that well-known tightness of the lateral fascia of the thigh and rigidity around the anterior superior spine, preventing proper initiation of the pelvic tilt in either direction and setting up various combinations of faulty input from muscles above the pelvic rim... In polio, this is a frequent problem in the presence of partial or full paralysis of hip flexors and abductor. However, we have also found this problem frequently in highly trained dancers, with the result that the pelvic floor muscles were insufficiently used or developed. It is a stubborn problem, because, if severe, it causes increasing tautness in the fascia and rectus femoris and prevents full use of all the muscles around the big trochanter. It is especially stubborn in male dancers, but is also frequent, though less severe, in female dancers."¹⁷ I have also noticed this problem in persons who are avid skiers.

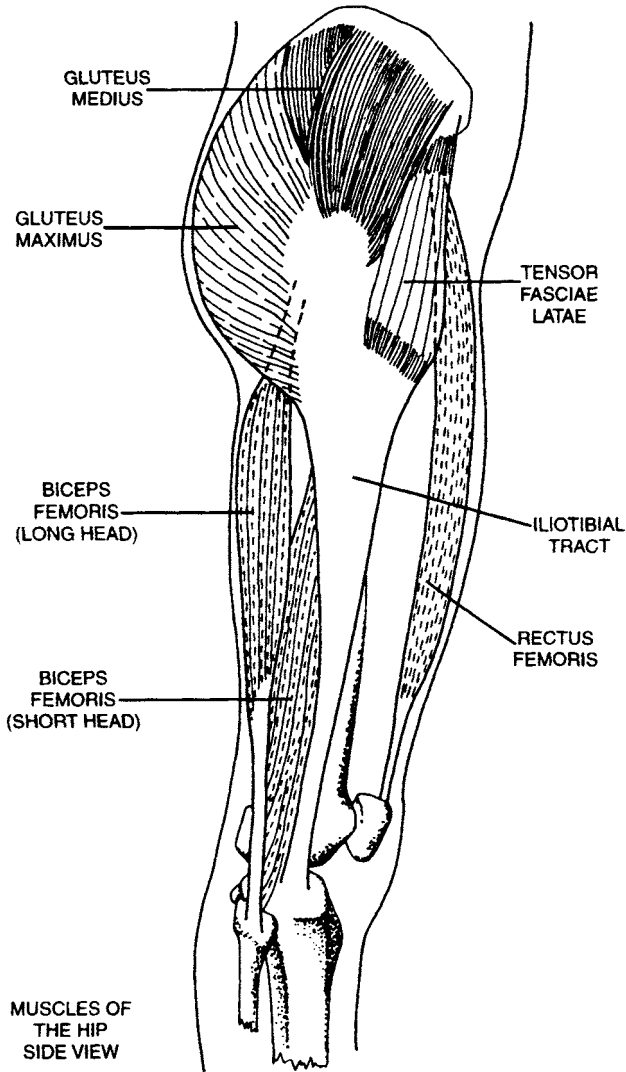


Figure 54. Muscles on the outside of your leg are often overused.

The Tensor Fasciae Latae is a very small muscle which originates from the anterior superior spine of the iliac crest and inserts into the long band of fascia on the outside of the thigh. Its major action is as a lateral stabilizer of the thigh, although it is frequently combined with the Rectus Femoris (which also originates at the anterior superior spine) as a hip flexor—or with the hip abductors and internal rotators (anterior fibers of the gluteus medius and minimus). If one is using the Tensor to fulfill all of the above jobs, one is overusing it, and in doing so one is depriving the muscles which are better suited to

fulfill those jobs of their proper function. Hence, those muscles will become weak and the whole system will be rigidified.

“The purpose of the exercises below is to actively deal with the exaggerated tension around the anterior superior spine caused by the Tensor Fasciae Latae shortening the Iliotibial Tract of the thigh, and by the overuse of the Rectus Femoris as hip flexor (as opposed to the Iliopsoas)... All of these exercises are variation of lateral weight shifts or partial lateral weight transferences, abductive or adductive leg gestures with emphasis on the rotation aspects... Specifically, the “Tensor Fasciae Latae problem” can be treated:

1. By preventing the Tensor Fascia Latae from acting as a thigh flexor, because that reinforces the Rectus Femoris dominance due to their common origin at the anterior superior spine. Instead, one of the objects is to strengthen the use of Iliopsoas as dominant thigh flexor.
2. By minimizing all suprapelvic initiations. This is done by emphasizing the pelvic floor component, Iliopsoas, posterior external rotators, and Hamstring initiation from the Ischium.
3. By counteracting the use of the Tensor Fasciae Latae as a dominant hip abductor. This is done by strengthening “pure” hip abduction in contrast to hip “hiking” with the suprapelvic Quadratus Lumborum.
4. By emphasizing the interplay of the above-mentioned muscle groups, all exercises given below pursue as their goal a juxtaposition of one thigh flexed, abducted, externally rotated while the other thigh is flexed, adducted, and internally rotated.”¹⁸

Movement Exploration

The following movement experiences address the Tensor problem, but are also extremely useful in training for diagonal connectivity in general.

H. Diagonal Knee Reach From Sitting: *Sit on your sitzbones on the floor with your knees up to the ceiling and your feet “planted.” (If it is impossible for you to sit up vertically without support, add support from your hands by putting them in back of your pelvis on the floor.) Reach your knees down, forward and to the right (■), allowing each leg to rotate in the femoral joint. Allow your knees and thighs to come to rest on the floor and breathe into the diagonal connection which you have set up. (Check that you are not pushing forward from your low back and breaking connection between your Lower and your Upper. If your top leg does not reach the floor, don’t push it. Breathe into it.) Your feet will stay where they are in space, but will roll onto their sides (One will be on the outer edge and one on the inner edge.)*

Return your legs to their “planted parallel stance” by sinking back, down and to the left (■) in your left femoral joint, creasing fully and allowing your sitzbones to return to contact with the floor. Your sacrum area will sink, retreat and spread (↓) as well, as you return to your neutral spine.

Repeat the sequence to the other side. As you alternate sides, notice that you are allowing the lowest part of your pelvic area to be mobile and that your legs are enjoying a full range of graduated rotation in the femoral joint (one rotates outward and abducts while the other rotates inward and adducts).

Once you have explored your diagonal connection from your Lower Body, let the connection sequence up into your Upper Body and ADD THE ARM CIRCLE TO THIS DIAGONAL KNEE REACH FROM SITTING. When you circle your arm, you will notice that your spine feels easily able to support the movement with a Head-Tail connection if you let your eyes follow your hand as it circles.

I. Horizontal Weight Shift Around the Feet From Sitting: Sit on your heels in a low kneel. Shift your weight directly side and to your right using a lateral shift at the level of your greater trochanter (▷). You will be sitting to the right of your feet. Now “plant” your feet and bring your knees toward the ceiling, and then down forward and to your left (◀). You will now be sitting on the left side (◁) of your feet and facing a different direction. Using your core support and lower pelvic support, lift your weight slightly off the floor and shift it horizontally across to the right (▷) until you are again sitting on the right side of your feet. If you continue and repeat the whole phrase several times, it will feel like you are circling around your feet by shifting your weight and rotating your legs. Enjoy the smoothness of this shifting and the sensation of roundness which it gives. Go around several cycles and then repeat to the other side. Engage your Core Support throughout!

As a **variation** you can try rising all the way up onto your knees as you shift your weight. The weight shift now becomes a true diagonal since your center of weight is traveling up and forward as well as to the side when you come to a full kneeling position (i.e., changing three spatial pulls). As you sit down, back and to the side to sit next to your feet, the movement is a diagonal again. Enjoy the power of your internal support and propulsion from the lowest part of your pelvis as you do this.

J. Leg Rotation, Sitting with Weight Shift: Sit on the floor with your legs bent at a 90-degree angle at the knee joint, both knees pointing left and forward (◁) and both thighs on the floor, with the knee of the right leg touching the heel of your left foot. “Ground” and “plant” your heels as you slowly reverse the rotations of the legs, letting the knees go in an arc toward the ceiling and down to the floor again on the other side, i.e., until the knees are both pointing right and forward (▷) and both thighs are on the ground, with the left knee touching the right heel. As you begin to feel your heel connection to this change of rotation in the femoral joint, you will probably also be able to shift your weight laterally, slightly in the direction the knees are going. Also locate your hamstring connection and use it to extend the femoral joint slightly at the end of the rotation. When you do this, you will notice that you can begin to travel forward ever so slightly on each reversal of rotation.

Repeat the exercise several times traveling. This is really enlivening to the lowest components of your pelvis-leg connection! Once you find this movement, play with using your arms improvisationally, enjoying their Cross-Lateral Connectivity.

More Diagonal Connections through the Body

The above exercises and the exercises entitled “TURNING OVER USING DIAGONAL CONNECTIONS” (below) were used by Irmgard Bartenieff not only to address the Tensor Fasciae Latae problem, but to build lower body readiness for diagonal connectivity in Cross-Laterality. You will notice that you can create fascinating movement which sequences from Lower to Upper using diagonal connection if you begin with the above exercises and let yourself improvise. As I discussed earlier, much of the more advanced movement in Fundamentals is organized utilizing diagonals or spirals. And even though

this movement is more complex than purely planar movement, Irmgard would not hesitate to use it even with beginners. She felt that calling on the neuromuscular system to fulfill the goal of manifesting diagonal movement boosted the possibility of the muscles to respond with maximum power. The muscle groups did not need to rely on any one muscle to fulfill the entire movement, but could use the synergy of several muscles, each reinforcing the others in an interplaying sequence (as I discussed above when talking about PNF). This is why she emphasized the principle we discussed in [Chapter 5](#)—“**Muscle sequencing is more important than muscle strength producing coordinated movement.**”¹⁹ Let’s now do some more movement experiences which will provide more chances to explore diagonal connectivity.

K. Diagonal Weight Shift From Hands and Knees: *Begin on your hands and knees. Explore your Cross-Lateral connection by yielding weight into the earth and pushing through your left hand to send energy through your torso back, down and to your right sitzbone. Rock along that Cross-Lateral energy connection several times until you equalize the energy between your Upper Body and your Lower Body. Now reach your right sitzbone back, down and to the right (☑), creasing in your femoral joint, until you are sitting on your right hip. You have just phrased from a Yield & Push to a Reach & Pull. Now push from your Lower and shift your weight up, forward and to your left (☒), toward your left hand. Repeat to the other side. This exercise utilizes the support from the lowest part of your pelvis as well as graded rotation and pelvic femoral rhythm.*

(If you are having trouble feeling the Cross-Lateral connection, it is sometimes useful to have a partner give pressure on the opposite shoulder and sitzbone.)

L. Big X Horizontal Sweep Around: *Begin lying on your back in a Big X shape on the floor. Imagine a large circle which surrounds you on the floor. Initiate movement in the fingertips of your left hand and sweep around that circle in a counterclockwise direction, letting yourself come through sitting and back around to lying down in the process. More specifically, you will circle with your left arm, which sweeps around on the floor above your head and takes your whole spine with it as it circles around up to sitting. If you have used your Core Support and intent from the beginning of the movement to engage your whole body (including especially your Head-Tail connection), you will be able to easily continue the circle to sitting. Once you are sitting and are beginning to go around back to lying down, switch to leading with your right hand as you descend on the back left down diagonal (slide out using your left arm for support), letting your right arm continue the circle and sweep above your head enjoying its graded rotation. You will end again in the Big X. On the descent, it is crucial to allow your Lower Body to sequence energy through on a diagonal to your Upper Body. This will entail softening through your low back and ribs. If you are holding your chest flat and rigid, this movement will not be possible. Again, check for diagonal wrinkles in your clothing and enjoy letting the back surfaces of your torso greet the floor successively, like a sandbag being laid out on the floor..*

M. Turning Over Using Diagonal Connections (Figure 55): *(Irmgard called these “Turns in width.”) There are several variations. As you do these, explore how the rotary element makes each possible. If you sense that you are “stuck” and don’t know what to do, re-initiate the movement using rotation at your distal end and sequencing that rotation back through your core: The illustration shows both of the exercises described below.*

a. Lower to Upper—Turning From Supine to Prone: *(See left side of illustration for this exercise) Begin on your back in a Big X shape again. This time reach your right leg out and*

around in an arc over toward your left foot (an ice cream cone shape), initiating with outward rotation. Continue to reach down and across to that diagonal corner (■) as you pull your whole body onto your tummy, sequencing through your center core. As your right leg comes near your left foot, you can sense a connection along a diagonal through your core back up and to the right into your right arm (a homolateral connection revealing a diagonal in space ■ to ▤). You will also be able to sense a Cross-Lateral connection through to your left arm. As you continue onto your tummy, let your body unspiral and spread onto the floor so that you will arrive in a Big X on your tummy.

b. Upper to Lower—Turning From Supine to Prone: (See right side of illustration) Begin lying on your back in a Big X shape. Reach with your right arm across your body carving up toward your left, beyond where your left hand is on the floor, as if molding and pulling toward your back, left, high diagonal (▤). Keep pulling toward this diagonal and let your body accommodate to this reach as you sequence through your whole body and roll yourself over onto your tummy, ending in a Big X prone. You will notice that your entire spine winds into and out of a spiral in this process. As you reach your arm across to begin with, you will be creating a form of a cone (like an ice cream cone) in your Upper Body. As you do this, sense how this movement connects both to your right leg (which will now be in back of you—a homolateral connection which is creating a diagonal in space) and to your left leg (which will be lengthening away from your left femoral joint, providing Cross-Lateral support). As you continue your reach to pull you to your tummy, your left leg will spread out to the X-shape on the floor as your right leg completes its reach around the trace form of a cone in the air, returning to the ground (see illustration). This sequence works from Upper to Lower using diagonal connectivity.

If your Big X shape is askew when you arrive on your tummy or again on your back, you have probably not maintained the diagonal countertensions in your body. Experiment with maintaining “alive energy” radiating away from center in **all six limbs**. This is a tensile support system and is training you to be able to work both on and off vertical later on while still maintaining body connection.

Variation: It is also possible to turn from your tummy to your back using diagonal connections. Simply let either your fingertips (and your eyes) or your toes begin to reach back and out around a cone shape and keep pulling to the diagonal. If you allow this movement to sequence through your whole body, you will be able to turn yourself onto your back again. Your body will accommodate to the spiral and then will spread out flat again by the end of the turning. This movement provides a wonderful possibility to sense the diagonal connection through your torso so that your body spreads and unspirals successively, arriving again at a Big X shape on the floor.

As you do all the variations above, make sure that you are not breaking connection in your lower back. This movement is not about Upper versus Lower, but is about how the Upper body movement can sequence through to the Lower body and vice versa.

Spatial Diagonals

N. Standing Diagonals (Figure 56): Come to standing with a wide base, your left foot forward and to the left of your right foot. (Some people call this a “diagonal stance.”)

a. Shift your weight down forward and to the left over your left foot to begin (■). Now push with your left foot and travel the energy from the Push back up and to your right, as if to the opposite

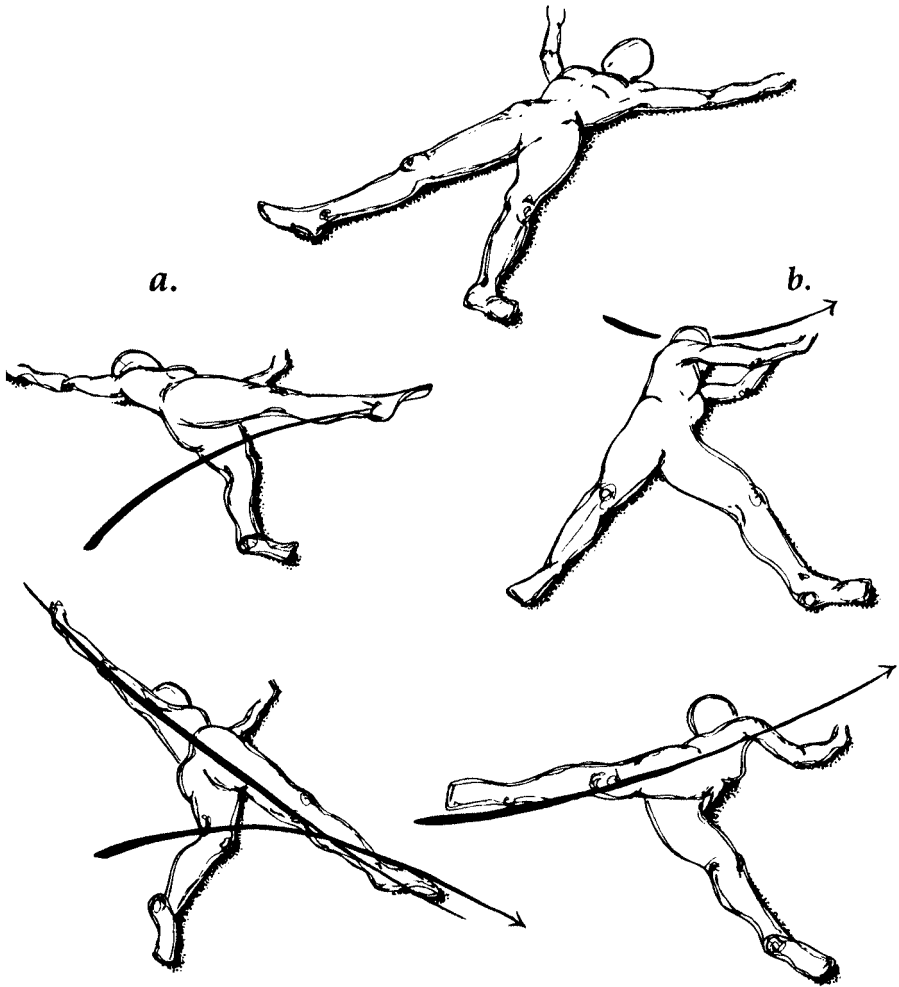


Figure 55. Turning over using diagonal connections.

diagonal corner of an imaginary cube (⊞). Let the “chain” of energy run from your left foot, through your left leg, shifting your weight with retreating, spreading and rising onto your right leg as the energy travels through your pelvis along your left psoas, then through to your right scapula, sending your right arm reaching back, up and to the right (⊞). Your whole body will now be revealing a diagonal in space from down-forward-left to up-back-right (⊞). Check to see that your chest is participating fully in this energy line. You will probably be able to see diagonal wrinkles in your clothing if it is. If your chest is not participating in the retreating aspect, re-initiate the movement. (Many people reach forward and up with the chest as the arm goes back and up to the side, but this means that a break in the diagonal connection and a separation of Upper from Lower has happened. Check also to make sure you have not flattened yourself into the vertical plane.)

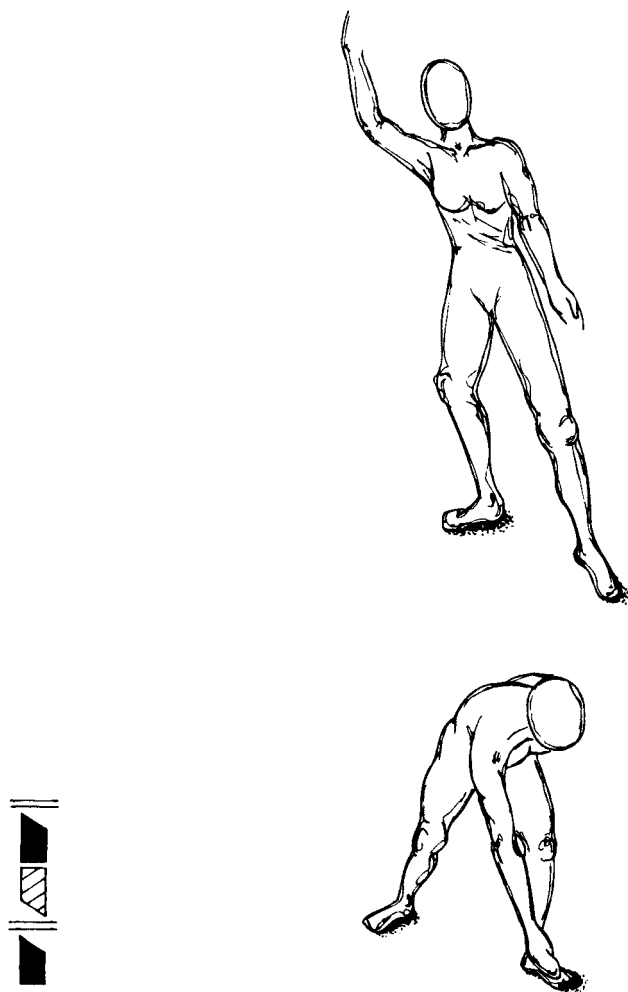


Figure 56. Begin left-forward-low. Sequence through your whole body diagonally to right-back-high; spreading, retreating, and rising.

b. Now reverse your movement along the same diagonal path. Press down, forward and to the left with the heel of your right hand as you sink, advance and enclose to shift your weight over your left leg again (■). This motion helps to “ground” the Cross-Lateral connection when you sequence your arm Push into your weight shift.

Repeat (a.) and (b.) several times. Do any images come to your mind?

Sometimes my students who enjoy imagery like to imagine that there is a powerful fountain of water, beneath the ground under the left foot, which is aimed back up and to the right. As they push down on the foot, the fountain turns on and they “ride” the water back, up and to the right. Some students visualize a neon-lighted line of color that turns on to initiate the diagonal connection.



Figure 57. The Diagonal Scale provides a chance to practice cross-lateral connectivity.

Experiment with your own associations. Some students feel this action is very much like work movement. Traditional Laban theory agrees. Laban associated this diagonal with the power of work action or fighting energy.

Now switch sides. As you do the diagonals leading with your opposite side, you might notice that different effort qualities seem natural when leading with your opposite side. This might relate to what we discussed in the “Inner Characters” sections in the Body Half chapter...even in the “Inner Characters” section of the Upper-Lower chapter. Make notes for yourself about your differences in feelings or sensations as you experiment with these diagonals. This could be called “Personal Research,” as is part of confirming for yourself your own meaning-making aspect of your relationship with movement.

O. Diagonal Scale: *If you want to practice all the different diagonals in a sequence, I recommend that you learn and practice what Laban called the Diagonal Scale (Figure 57). (It is a “scale” in that it is a progression through points in space with a distinct pattern of intervals in space in the similar way that a musical scale is a progression of intervals of tonal change.) It is organized in an imaginary cube and the movement goes from one corner of the cube to another corner, alternating whether the pathway is through the center of the cube or along the edge. (See diagram for full sequence)²⁰ By doing this scale on both sides, sequencing your movement through the core each time, whether you are initiating from Upper or Lower, you can practice cultivating Cross-Lateral Connectivity. This is an excellent example of using a Space inroad to Body level connectivity.*

Variation: *Once you have explored several different diagonals, try traveling with them. Experiment with where they are leading you if you follow the energy line to its fullest completion. They are extremely enlivening and will take you either into the air or down into the earth. Irmgard Bartenieff taught numerous classes on “the flying and falling diagonals.” It is truly exciting to ride the three spatial pulls of the diagonal!*

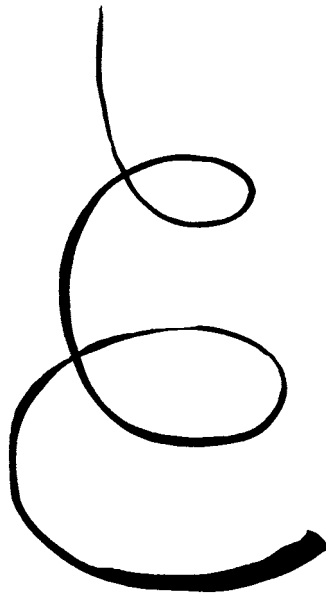


Figure 58. Spiraling: Every part of you is proportionately changing as you rise or descend.

Transverse Movement

The Laban Space Harmony work is replete with “scales” which could serve as excellent training vehicles for Cross-Lateral Connectivity using diagonals and transverse movement (parts of spirals). I refer the reader to Laban’s book, *The Language of Movement* (Choreutics) and Valerie Preston-Dunlop’s *Point of Departure* for excellent examples and a full discussion of the field of Space Harmony. I am including here only two more examples of movement exploration—an improvisatory spiraling one and one a specific example of transverse movement which partakes of elements of spiraling, but actually forms a ring in space.

P. Spiraling to Stand and Descend (Figure 58): *Begin lying on the floor. In your mind’s eye see yourself spiraling around and up to standing. Notice in your mind’s eye that all parts of your body are participating in the roundness of the spiraling form, particularly your Head-Tail connection. Notice that every part is proportionately changing as you spiral around to rise. Now see yourself spiraling down around to lying on the floor. Again, all parts of your body are participating in the spiraling line of energy. Once you have seen the movement clearly in your mind’s eye, do the movement. Savor the moments of Yield & Push sequencing to Reach & Pull. Relish the gradated rotary change through your limbs and spine. Try several different spiraling variations. Enjoy the process of closing to opening or opening to closing.*

Q. Transverse Three Rings (Figure 59): *Begin sitting cross-legged on the floor directly on your sitzbones with your left leg in front. Let your right arm begin left side high and circle clockwise, sweeping around a ring in space going from left-high to forward-low to right-back-middle*

and returning to left-high (◁ ▣ ▷ ▷). Allow your spine to go with the movement of your arm and enjoy the sense of changing connections in your internal core as you are in different parts of the sweep. You will notice that the ring is not in any one of the three cardinal planes. Each point is in a different plane, which encourages the movement between them to be transverse. The ring moves from a point in the vertical plane (high-left▷), to a point in the sagittal plane (forward-low ▣ to a point in the horizontal plane (right-back-middle▷), and returns to the vertical plane. This type of sequence through space is quite stimulating to the neuromuscular system and can be as exciting as a carnival ride if you let your whole body be pulled along, relishing the off-vertical nature of the sweep around and letting your Head-tail connection serve you. Irmgard used the French word “bouleversé” to refer to the sensation this movement gives of being rolled around and turned sort of upside-down. This movement is Upper body initiated, but requires a highly developed sense of Core Support and Cross-Lateral connectivity to facilitate the continual movement off-vertical without disconnecting Upper from Lower. Check to be sure you are not simply doing an arm movement which is separate from your core. Also, notice that this movement is not “about” pointing to the three points in space, but is rather a chance to experience a continuously changing body connection which creates a ring that is inclined in space. It is the movement between each of the three clearly delineated points that gives the ring its character. Allow yourself to utilize your full three-dimensional ability in your body to create the rounded form (this includes all eight of the aspects of Upper Body mobility we discussed in Chapter 9).

This movement is transverse and is deflected from diagonals. For example, the movement between forward low and right back is deflected from the same diagonal we worked with in the previous exercise called “STANDING DIAGONALS (a) (p. 194).”

When you have explored the ring leading with both sides while sitting, you might want to try the same ring

- standing—using a “diagonal stance” with your left foot in front and to the left of your right foot. (for illustration of this, see p. 58)
- traveling—by shifting your weight and taking steps to fulfill each change spatially. (Each of these changes is called “a transversal.”)
- turning one part of the ring—for instance, making a full turn to the right as your right arm sweeps from forward-low around through right back and returns to left high. (▷ ▣ ▷ ▷)

Why would it be worthwhile to practice a transverse three-ring? I have already mentioned that they provide an excellent chance to practice Cross-Lateral Connectivity through your body. But in addition, **the Transverse Three-Rings²² provide a chance to practice living with complex interrelated phenomena without falling apart. They offer a harmonic “handle” for enjoying complexity.**

Walking

R. Walking: Now return to very basic movement—simple walking. As you walk around the room or go for a long walk outdoors, check-in with your core connections for cross-laterality. Can you sense that your opposite arm and leg are connected through your core as you take a step? Enjoy the complexity of this movement as well as its obvious simplicity.

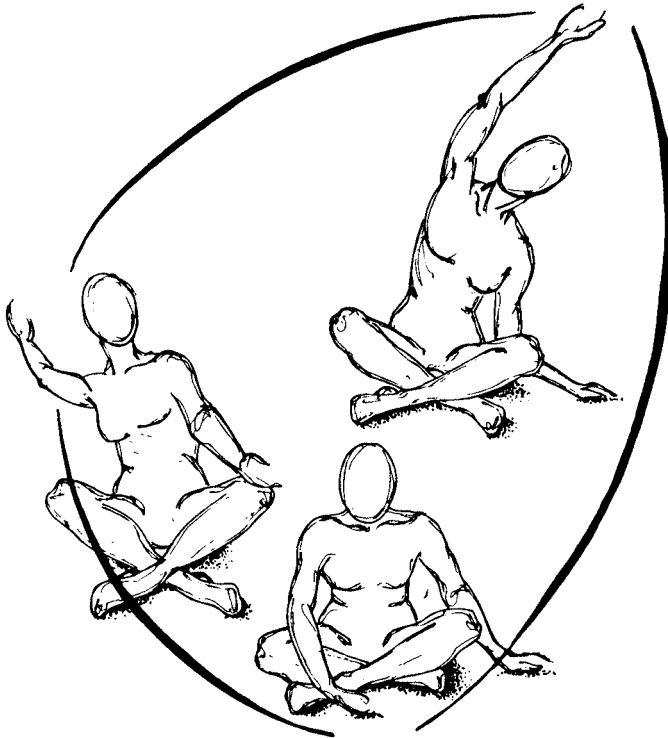


Figure 59. Transverse Three-Rings provide a chance to practice your total body connectivity in a full off-vertical three-dimensional way. They offer harmonic complexity.

Walking is a Fundamental movement which most humans start doing around one year of age.

Implications Of Cross-Lateral Connectivity

When we walk cross-laterally, we have arrived at the zenith of early childhood movement skills. And when we spiral into and out of the floor or play tennis, we are utilizing our complex adult movement skills involving diagonal connections for Cross-Laterality. **Cross-Laterality as a pattern of total body organization is the final phase of body differentiation.** Later work is in the area of Integration.

Cross-Laterality makes possible the complexities of tying and untying forms in three-dimensional space. There is a rhythmicity inherent in bodily and spatial relationships. One can sequence flexion, rotation, and laterality enclosing in a graduated way, and because body parts are connected, this winding in one body area will initiate an unwinding in another to complete the phrase, thus opening space in a new way. I am speaking of a rhythmic phenomenon here, but not a rhythm in time. This is a sequence of spatial closing

and opening with a **constantly changing possibility in the proportionate relationships of body parts** flexing and extending, adducting and abducting, and inwardly and outwardly rotating. This tying and untying found in three-dimensional movement is excellent practice for working on body part connectivity. Indeed, **proportionate change in all body parts participating in a movement is a prime definer of connectivity. Hence, spiraling into and out of the floor is commonly used to practice connectivity in Fundamentals classes.**




Once fully Cross-Lateral three-dimensional movement is established, the possibilities are astounding! One need only travel around the globe and note the infinite varieties of movement in the peoples of the world to appreciate the richness that is possible once we have fully developed our human movement potential. And my sense is that we constantly continue to develop our potential, to challenge ourselves in new ways!²³

Cross-Laterality (particularly when practiced with spiraling) also aids in the ability to conceptualize complex interrelationships and think about how phenomena are connected in multifaceted ways.

Now we have a rich store of movement resources available to us which can go from simple to complex. Movement can be relatively amorphous or highly articulated, formed, and refined. And in either case, core connections are operative. We can now revel in the first principle of Bartenieff Fundamentals: **“The whole body is connected. All parts are in relationship.”** In the next chapter we will discuss integrating all the various body patterns to develop an even fuller range of movement potential. We will discuss, perhaps more importantly, how that movement potential, that Total Body Integration, relates living a rich and meaningful life,.

Notes

1. By this I mean connection between the right upper quadrant and the left lower quadrant, and between the left upper quadrant and the right lower quadrant.
2. Of course, all previous developmental patterns underlie healthful adult Cross-Lateral walking. Walking utilizes Breath, Core-Distal connections, Head-Tail Connectivity, efficient proximal joint usage including both pelvic-femoral and scapulo-humeral rhythms, and Body-Half abilities with stability and mobility. Walking is much more complex than it seems!
3. See illustration in Muybridge's *The Human Figure in Motion*, Bonanza books, New York, 1989, p. 17.
4. For a specific discussion of rotation in the femoral joint and in the shoulder joint (including anatomical illustrations), see [Chapter 9](#).
5. See Appendix for more on the concept of “Spatial Intent” and Laban’s Space Harmony.
6. Irmgard Bartenieff, manuscript, p. 321.
7. See Appendix-Concepts for a discussion of “Kinetic Chains.”
8. See Appendix-Concepts for more discussion of Spatial Pulls and Transverse movement.
9. Knott and Voss, *Proprioceptive Neuromuscular Facilitation*, pp. 9 and 12.
10. I enjoy playing with these ideas as I approach the more advanced Laban Space Harmony material. For instance, when I read in my anatomy book (Pansky, Review of Gross Anatomy, Ben Pansky and Earl Lawrence, MacMillan Publishing Co., Inc., NY, 1975, p. 152) that “there are interdigitations of the costal origin of the latissimus dorsi with the

external abdominal oblique muscle,” I can begin to get a sense that a “chain” of energy could connect both through the core and down along the back of the right side of the body as I do a transverse movement using my right arm going from right side high to back low (). I can see in the anatomy picture and feel on my own body that the diagonal of support goes from down forward left to back up right () (lengthening the line of the left psoas and the right external obliques) while the motion of the arm itself goes along a deflection of the right forward high to left back low diagonal () (the line of the right latissimus dorsi). Of course, many more muscles than those mentioned are operative to achieve the fully three-dimensional nature of this movement.

11. Knott and Voss, *Proprioceptive Neuromuscular Facilitation*, pp. 12–13.
12. *Ibid*, p.4.
13. Fundamentals frequently uses exercises where a partner or a therapist provides resistance, but not always.
14. Irmgard Bartenieff, manuscript, p. 317.
15. The work with Inner Characters and Polarities which I described in Chapters 11 and 12 also offers possibilities to incorporate Effort and Shape for personal meaning-making in the rehabilitative process.
16. I am using information and quotes from Irmgard Bartenieff’s manuscript, pp. 337–352, in my discussion of the Tensor issue. Most of the symptoms listed below were discussed in [Chapter 9](#), when we talked about the Lower Body.
17. Irmgard Bartenieff, manuscript, p. 228.
18. Irmgard Bartenieff, manuscript, p. 340.
19. If, however, there is an acute spinal injury, such as a herniated disc, I would not begin with diagonal movement since diagonal movement requires a rotary component which is difficult at first in an injury situation. In order to have a full range of human movement, however, rotation must be introduced and so diagonals and spirals become a powerful tool in the rehabilitative process if used at the right time.
20. As you look at the illustration, you are seeing the movement from the audience’s point of view. The symbols in the notation, however, are written from the dancer’s perspective and are read starting at the bottom of the motif and reading up.
21. This ring is contained within the crystalline form called the Icosahedron. See illustration of Icosahedron in Appendix.
22. Numerous Transverse Scales which Laban mentions in his book, *The Language of Movement* (formerly *Choreutics*). I encourage you to explore these further in a class situation or with his book.
23. Consider the extreme Cross-Lateral Connectivity needed in the recent developments in freestyle skiing, skateboarding, and surfing, as well as in the rich styles of movements from countries such as Brazil with its magnificently 3-D cross between martial arts and dance called “Capoiera.”

CHAPTER 12

Integration

*I am Body, Spirit, Emotion, and Intellect
Embodied.*

*I am rich in my Core while highly articulate
at my Distal Edge.*

I am connected inwardly...expressive outwardly.

*I embrace the whole, allowing my parts to be articulated and
interconnected.*

*I question: How can I use my abilities to lead a more meaningful life?
How can my skills enrich life?*

We come now to a stage of study that is not about developing specific new skills of bodily articulation. Nor is it about simply adding up all the skills we now have and combining them in different ways. This next stage is about using all the patterns of moving and skills that we have acquired in such a way that the “whole is more than the parts.” Each skill becomes “more” because the individual skills are viewed in terms of relationships between them and how they can contribute to our larger life’s purpose. At this point we must include **the wisdom of contexting. This is a time of asking questions of meaning and purpose in our moving life.** It is a time of being sensitive to which skills will best serve in a particular situation and how to phrase what we know so that it will enrich us. This is a time of **Integration.**

Integration—Parts Functioning Cooperatively to Create an Interrelated Whole

According to the dictionary,¹ **“integration” implies keeping the integrity of the integers, the essential elements of the parts, while also having the ability to coordinate the separate elements so that the constituent units function cooperatively...providing an interrelated whole.**

What might this mean in terms of our journey towards wholeness in the movement realm? In the last several chapters we have worked with many specific “parts,” becoming more articulate in, for instance, enlivening movement from the Breath, or gaining clarity

in femoral joint usage. We have worked with early patterns of human bodily development and we have also explored personal images and feelings which arose during the moving process. This brings up the question, “How do all these “parts” interrelate? **What is the larger whole which contains these parts? In one sense the larger whole might be the larger movement phrases which link together all my specific body articulations into meaningful movement. It might also be the ability to move easily from one pattern of total body organization to another in the service of using movement in my life to do what I want to do, express who I am. But in another sense, this “larger whole which contains the parts” is simply “My Life as a Human Being Moving (Living) on this Earth.”**

To make this statement, however true it may be, provides no real “answer.” To make a statement such as this is primarily an invitation to get involved in asking the really difficult questions which come up as we engage the larger whole, moving life. Whether I move as a professional dancer/athlete, or whether I move to be in touch with my feelings, or whether I move to brush my teeth; I am moving through life—moving as life. I am phrasing my movement, transitioning constantly from one body patterning to another. What does it matter how I move? Does it matter?

Integration—Remembering What Matters and Asking Again, “What Matters?”

The time of INTEGRATION is a time to re-member all the earlier stages of development and ways of knowing bodily. It is a time to remember WHAT MATTERS about

BREATH
CORE-DISTAL
HEAD-TAIL
UPPER-LOWER
BODY-HALF
CROSS-LATERALITY

Perhaps you might want to take time right now to sense how your own body is organized. What is important to you about that pattern? Can you remember times when you have organized from a different pattern? Take time now to re-member each stage bodily. Then list *what matters to you now about each one*. And also make a beginning stab at answering the question, “**Now that I have all these possibilities available, how is my life richer?**”

For instance, when pondering how my life is richer, what matters to me about organizing from Breath today is that it puts me in touch with my own depth of Being and helps me be available to that quality in others. I notice myself phrasing from Breath to Core-Distal as I embrace my daughter when she crawls into my lap in the early morning for a quiet time of simply being with each other, sensing the contact. My Breath patterning confirms her flow of life, and my ability to connect my Core to all of my Distal limbs enables me to send an alive energy through to my lap and my upper limbs as they

surround her, my head resting on hers. I can truly be “with” her from the whole of myself. In your own life, when does taking time to be with the simplicity of your Breath enliven you?

For an Olympic ice skater, what makes life at this moment meaningful may be totally different. Being able to phrase from skating rapidly forward using Cross-Laterality...then laying back into an arabesque spin organized by Head-Tail connectivity...ansitioning flawlessly into a spin leaning to one side organized in Body-Half might mean the difference between winning a Gold Medal or not. Being able to integrate patterns at will then becomes meaningful. When in your life do you need this kind of complex ability? Perhaps in playing a sport or scrambling over rocks on a mountain hike.

You might want to context this study into even larger life questions. Ask yourself: What matters most in my life? What is the purpose of all this study to become an articulate mover? How is my life different because of it? Why would I want skills to tune-in to what I know at a pre-verbal level—at a level of BODILY KNOWING? How does this Bodily Knowing relate to other ways of knowing which I already employ? Is studying Fundamentals or Laban Movement Analysis meaningful? What would “meaningful” be in my life or our world today? What are the changing relationships, the patterns of movement, in my life, my world? How would understanding meaning in movement and change process aid in living a fuller life?

There is no one answer to any of these questions. Each one of us will answer the questions in our own way. Each of us will have different questions that matter most to us. **The important thing is that we do engage the questions which are most purposeful for each of us.**

This type of questioning might seem to be a large leap from the type of detailed body articulation issues we have been working with for the last several chapters. In some ways this is true and in some ways it is not such a large leap. Hopefully, the seeds for these questions have been planted in earlier chapters in the work we have done relating movement to inner imagery and to personal life processes.

Perhaps we are discussing two different layers of integration here:

- a. Bodily Integration using Movement—integrating the various body patterns and phrasing them for fuller movement possibility.
- b. The Integration of Movement and Bodily Knowing into Life.

To some extent there are two layers, but it is also a slippery issue with much intertwining of a “chicken and egg” nature. Each can be dealt with separately, but my sense is that they are most effectively addressed at the same time, for the following reason:

As we approach INTEGRATION, we are simultaneously integrating the stages we have gone through to create ourselves bodily and also the process we have gone through to acknowledge movement as meaningful in our lives. **As the movement patterns are being established, each individual is at the same time forming his/her unique expressive interaction with the world (way of “moving in the world”)...and, therefore, that interaction and its “meaning” is included within the body patterning.**

When the stages of bodily differentiation are complete and all the patterns are laid down, it is the effective functioning of changing relationships according to context that takes us to the integral stage with our moving. Context, of course, is not a vague generalization, but a specific reality—where am I now, in my own process, in my life, in the culture? Am I a budding young performer aiming for movement vitality and virtuosity in a culture which values technical excellence? Am I a Senior Citizen aiming to maintain my moving vitality in a youth-oriented culture? How do I deal with this? **The integration stage is about re-mem-bering all that has been developed and using those abilities in a timely way when they are most needed to make our lives richer.** What will make each of these person's lives richer? For the Senior to imitate the young performer's movement training routine would, in all probability, not make her life richer—only more painful. An integral approach might be to discover what sort of movement feels enlivening to her, and do that. Conversely, if the performer did not acknowledge his need to actualize his full technical virtuosity and work to his highest capacity in integrating his body patternings, he would feel impoverished in his moving life and the time for professional performing would pass him by. **Contexting in time is a definite part of discovering what is true and fundamental for each person.**

As choiceful movers we can acknowledge differing aspects of ourselves, using all of who we are in our lives to be responsive both to ourselves and our world. **We can be attentive to change as movement wherever it exists and mindful of our participation in it. This implies an interactive and co-creative existence with movement in ourselves and in our world.**

How do we achieve this co-creative, integrated existence? My hunch is that we need training to do it...a different sort of training than we normally receive in school. Our society does not usually offer adequate training in dealing so interactively with issues in a multi-faceted, ever-changing world. **Ours is a world in which most domains require that we consider a variety of interplaying elements simultaneously, weighing their proportionate importance and making decisions that reflect an embodied intelligence. Where can we practice these skills? One avenue where I received training in this was my education to become a Certified Laban/Bartenieff Movement Analyst. Another place has been through the Institute for Creative Development and the work of Charles M. Johnston.**

In the Laban work the complexity of constellations in Body, Effort, Shape, and Space... the phrasing of these elements and their ever-changing relationships form a mobile but consistent framework which underlies Fundamentals. Irmgard delighted in pointing out that movement is "highly orchestrated"; awareness of one or two aspects is not enough to gain a meaningful understanding. As I write about Fundamentals I am constantly reminded that **my world view and that of Laban & Bartenieff is essentially TRANSVERSE.** That is, I am continually considering at least three elements or ideas at once and in changing proportional relationships. I am **Networking** in 3-D. I attribute this skill to having trained bodily in movement based in the Icosahedron. Action within that crystalline form requires constantly changing relationships with three spatial pulls. Moving in this way confirms that coping with more than one or two things at once can be a gratifying

experience. It teaches that **gradated proportionate change is happening all the time in the “natural world” where growth happens in spirals. One need not, in fact cannot, be reductionistic when dealing with living phenomena.**

I am also aware that **the timeliness of an action, discussed above, which is part of contexting, provides a fourth dimension which is continuously operant.** I am indebted to Charles M. Johnston, Pam Schick, and my colleagues at the Institute for Creative Development in Seattle, Washington, for help in understanding this time-specific aspect of contexting as well as the nature of Integration and Integral Thinking in different realms. At the Institute we discuss how to deal with important issues in our culture without falling into polarized positions—positions which would imply attaching ourselves to “The Answer.” Charles M. Johnston’s book, *Necessary Wisdom: Meeting the Challenge of a New Cultural Maturity*, is an excellent source for examples of dealing in non-polar ways with questions in realms such as government, education, psychology, and religion. Before we discuss more about Integration, let’s deal with the issue of Polarities and some specific polarities that effect our ability to utilize movement in a way that can contribute to Wisdom.

Polarities

Much of the schooling we receive is based on seeing issues as if there were only two choices for resolution. We are encouraged to “take sides” and learn to support our position (similar to the Upper-Lower or Body-Half stages in bodily development). Dealing with issues in Either/Or, or Polar, ways is a useful stage, but one which is seductively over-simplistic. Sometimes we deal with ourselves in this way, as well, when we become over-identified with one aspect of our being (i.e., Body over Mind or vice versa). This type of thinking is not always a bad thing. In fact, “twoness” is a part of the developmental process of “individuation”...coming from unity with the mother to being a separate person. It is also a part of the basic life rhythm of breath...inhale/exhale. Polarities are always with us and polar opposites serve us in a very useful way in the differentiation process. At a stage when we need to make distinctions in order to grow and progress, it is useful to have clear definitions of opposites to guide us and give form to our lives. It is obvious to both parents and educators that in development children go through periods of locating and investing in opposites. It is also obvious to anyone that there are differences in the world—that the world is not all an undifferentiated unity. Life in the United States is different from life in Brazil. More immediately, you can look at your own body and know that the Upper Body is different from the Lower Body and serves a different function, that right is different from left, and that front is different from back. Having these distinctions and differentiated functions in movement (which come developmentally), you are potentially richer. You can accomplish more bodily. You can utilize the parts fully for what they know and can do. In fact, one must be differentiated in order to have connectivity. **The concept of connectivity is meaningless without differentiation. Polarization is part of that differentiation. However, if we never move beyond polarity, we will feel “stuck” and unable to be present as a whole person.**

Integration—Moving Beyond Polarities to Embrace the Whole

We have spent the largest part of this book dealing with stages of differentiation; and I have encouraged experimentation with the technique of letting the polar parts move to amplify their “voices” (for instance, Upper Body characters and Lower Body characters). Yet with all the importance of differentiation and articulation, you know also that any part is only partial. You know there is a larger whole, and that there are connections and interrelationships between the parts. I have encouraged you to **value the characters that emerge from the partialities, while also realizing that YOU are the whole that contains and facilitates their interaction. YOU are a third entity that is fully identified with neither pole, you have a perspective coming from a third space, and your intent to facilitate cocreative interaction enables you to integrate.**

In the discussion of most polar issues, whether in the realm of the body or in a realm such as politics, the ability to move beyond a polarity and embrace the larger whole which contains both (and perhaps even more elements) is important if we are to engage life in an integral way. These points may seem blatant, yet some polarities (such as Right/Wrong, Formed/Unformed, Graceful/Clumsy, or Inner/Outer) seem more elusive and we become more easily identified with the truth of one pole. As we attempt to grasp the larger whole which contains these parts, it is important to develop skills for moving beyond polarities. The first stage in moving beyond polarity is locating what polarities are actually operative in any given situation.

Polarities in the Realm of Movement

Let’s look a bit at some polarities in the movement realm. First, of course, it is useful to look at what is polarized with the concept of MOVEMENT itself. Notice what comes to your mind immediately.

Unexpectedly, my mind jumps to DEATH. This surprises me! And it lets me know that I am really identified with movement as a life indicator! In fact, as I follow my feelingful thought further, I realize that “Movement is Life” is a part of my basic belief system. But I am not alone. The children’s television show, “Sesame Street,” tells children that one way to tell if something is alive is to notice, “Does it move?” *A Dictionary of Synonyms and Antonyms* by Joseph Devlin lists the following synonyms and antonyms for movement, among others:

“Synonyms: motion, change, transitions, journey, progress, advancement, action, motility, enterprise....”

Antonyms: inactivity, abandonment, resignation, stoppage, idleness, laziness, stagnation, passiveness....”

When I read the above lists, I am aware that perhaps our culture is nearly as polarized as I am in relation to movement. Where are the less judgmental antonyms, such as “repose,” or “stillness?”

It is always useful to identify your own polar biases, perhaps even amplifying them, before you attempt to move beyond them. And so, at this point I am identifying that I frequently find myself “on the side of movement.” For example, I find myself almost jumping up on a soapbox about the importance of movement and the body when I am discussing “knowledge.” Sometimes this seems appropriate, since our academic institutions in particular are almost 100% unrecognizing of knowledge that is body based. By being a voice for that opposite pole in an academic institution I can serve to bring a missing part into focus, and hopefully encourage a wider discussion of what is included in “knowing.” If, however, I do not look to the larger whole, I will be doing myself and the institution a disservice. Movement and Bodily Knowing are not “The Answer” in Education. They are simply important parts of the whole—parts of the many ways of knowing.

If you are a movement professional, you might want to look at your own beliefs. Do you find yourself proselytizing for movement? It is worth being aware that there may be a context when movement is not the most appropriate avenue of exploration. Having said this, I realize that this is a book about movement, and so I will continue with that premise. Let’s look a bit more at polarities.

I realize that unwittingly dance teachers sometimes refer to categories such **MOVERS AND NON MOVERS**. This is, of course, a strange and rather useless categorization. All people move! At times they simply move in a smaller range and perhaps less visibly. Some people identify themselves as **DANCERS** and other people refer to themselves and others as **NON DANCERS**. The non-professional still dances! It is worth looking within a specific context to discover when these distinctions are useful and have meaning...and when they are limiting. You might want to take time to ponder your own categories around **MOVEMENT**. What are some of the polarities that occur to you?

Inner-Outer

One that comes immediately to my mind is “**INNER-OUTER**.” Before you read further, take a moment and let your own associations to these words come into your awareness. Within the field of movement study, when you hear the word, “**INNER**,” what comes to mind? When you hear the word, “**OUTER**?”

I have spent quite a bit of time over the last several years in my personal process and professional life looking at some of the important issues in Dance and also being aware of the various polar positions which are frequently taken in dealing with these issues. I am consistently saddened by the infighting that goes on within the field of Dance. It seems that we are stuck, because we are unable to get beyond polarities in our approach.

For instance, one major issue in the field of Dance is “How can we train artists?” Polar approaches, which seem in some way to relate to “**INNER-OUTER**” are:

1. “Give students a chance to move from their own **INNER** voice—they need to listen to their own movement impulses.”
2. “Teach them the skills they need to meet the **EXTERNAL** demands of the field—they need to be able to leap high, do multiple turns, balance on one leg in a specific form, etc. Give them rigorous training in Dance Technique.”

As you can see, one pole comes from a “Let artistry emerge from the unformed mystery” perspective; whereas the other pole is clear that “Artists need formal skills—give them the skills and they can use them creatively.” Ah, ...and then the other pole returns to say, “But what if they have no creativity left after all their technical training—perhaps they have no idea what they want to ‘say’. Art is not about external forms, but is an expression of an inner life.” ...The discussion continues back and forth between the poles. And it is not just a simple discussion; whole dance companies, and University dance programs, are made around each side...or flounder in conflict because of the polarities.

What would an Integral approach to this issue be? There would be no one correct “answer.” As you engage the question, it would be worth, perhaps, standing on one side of the room and speaking from one pole and then moving to the other side of the room and speaking from the other pole. You might want to let one part of your body move one of the poles, and another part move the other pole. As you do this, **you will probably begin to get a sense of what larger whole might contain both poles.** If you are an educator you will also be aware that there are age-specific developmental issues to be factored-in the training of artists. And if you are an administrator you know that any one teacher may not have the skills to teach everything. How can you embrace the whole and value each contributing part in your faculty team? Even more importantly, how can you create a container in which the separate parts can connect and interact in a meaningful way, both for the faculty and the students? Of course, the training of artists is only one issue and the polar pair of INNER-OUTER is just a small part of the whole picture. If you are a Bodyworker or a Sports Trainer, what comes up for you when you hear the polarity Inner-Outer? Let’s explore further....

More Polarities

Here is a partial list of some of the pairs of polar opposites in the field of movement study. Some of the pairs are body-part oriented, some are concept oriented, some relate to aesthetics, some to values. You are probably aware of others. As you read each polarity, you might want to amplify the poles as they relate to your particular field of application. Are you aware of being identified with one of the poles? Do you feel that your culture would take sides in the polarity?

Good-Bad	Body-Mind
Right-Wrong	Inner-Outer
Graceful-Clumsy	Mobile-Stable
Beautiful-Ugly	Exertion-Recuperation
New-Old Fashioned	Function-Expression
Student-Teacher	Simple-Complex
Conscious-Unconscious	Efficient-Inefficient
Lower-Upper (Head-Tail, etc.)	Parts-Whole

We frequently become identified with one pole to the exclusion of the other, thus limiting our access to knowledge. (This has become particularly true in our educational

system around the Conscious-Unconscious polarity). One pole becomes “true” and the other becomes “false,” one is “good” and one is “bad.” This polarized stage in knowing is also developmental, as I mentioned above, and is timely and appropriate in certain contexts. But as a culture we are beginning to be able to move beyond this stage and as we do so we will be less imprisoned by polarities which continue beyond their usefulness. At this point more and more people are realizing that our capacity for knowing resides in our living body (including physical tissue, spirit, emotion, and mind). “Knowing” is also in creative relationship with “not knowing,” uncertainty. As we come to this point we begin the integration process which is necessary for our continued growth.

You might want to take time now to list any polarities that seem to be highlighted in your life at this time. If this feels like it might be difficult for you, don’t give up. Sometimes it is challenging to recognize and really see polarities in one’s own life... particularly if they in some sense touch a core in you. This is true because there is a tendency to identify with one half of the polarity and attribute the other half to someone else, or “the world.” One way to approach this is to ask yourself what questions seem to be coming up over and over again for you. Then with each question list the “sides” of the issue. (Or while going through the list above in relation to movement study, you might have found a pair than felt particularly vital and charged with energy for you at this point.) Pick one pair of polarities that seems particularly potent for you. Then follow the outline below for dealing with polarities.

Active Exploration: Moving Beyond Polarity

A simple (and also challenging) technique for dealing with parts or polarities which I learned through my work at the Institute for Creative Development is:

- a. Discover what might be operative polarities in any realm you are discussing, locate the **parts or poles** (i.e., Function/Expression, Conscious/Unconscious, Upper/Lower, Right/Left, etc.—you have probably already done this in relation to your “issue”).
- b. Find the life and vitality in each—let each pole “speak” its truth—This can be done in movement, through imagery, words, etc. Sometimes dividing the room and actually changing sides is useful as you let each pole “speak.”
- c. Value each pole for what it knows.
- d. Explore the dynamic relationship in different contexts, noticing “who speaks when.”
- e. **Explore ways to become large enough to embrace both poles.**
- f. **From the perspective of the larger whole, notice when the relationship of the poles feels that it most enlivens or resonates with “What Really Matters.” What is the truth that is timely at this moment? How are the parts related when they serve the larger whole most effectively? When is the relationship of the poles most “alive?”**

Notice that what you are working with here is the ability to sense what is “alive” in the whole. **Using “aliveness” as a reference for what is true enables you to get**

beyond isolatedly polar postures. “Aliveness” deals with perceiving the life in a situation...and sometimes it can be surprising where that life lies. Use your own body to sense when you are dealing with issues in a way that brings them to a heightened sense of live interaction and truth. You will feel enlivened (which doesn’t necessarily mean “happy”). If you are dealing in this way, you will probably sense yourself being in some way at your own creative edge. In all probability it will not feel totally comfortable or certain, because that creative edge is always dealing with the relationship of Knowing/Not Knowing.

g. Keep exploring The relationship has no doubt altered slightly already.

As you did the polarity exercise above, hopefully you experienced a possible way for dealing with issues in your life. Working in this way will take practice. Do not be discouraged. Try another polar pair, or read on to encounter several more examples of dealing with polarities.

It is easy to say “find a way to become large enough to embrace both poles.” But, in fact, it can be quite another thing to actually do it! Without even knowing it, many times I am personally identified with one of the “sides” or poles, and whether consciously or not, I cling to it as the “right” way to answer the question at hand. For instance, I might feel that I should keep working hard at perfecting movement even though I am injured. Or...I might feel that I should do nothing because I am injured. What is tricky is realizing that *the “rightness” of the poles has to do with perceiving the polar parts to be in a relationship to a larger whole within a time specific context.* I might want to ask myself at what point in the healing process am I, and also what lessons do I need to learn in my larger life at this time? Am I in this first acute stage of the injury? Or am I past that point? Am I needing to learn to keep pushing myself past a difficult stage in movement, or do I tend to push too much and need to learn how to breathe easily and work with less intensity at this moment?

It is important to keep in mind that the poles are in relationship, and that the relationship is happening in an established place at a definite time in personal or cultural development. Understanding this fact can potentially lead to a greater sense of “aliveness” in the whole system and an ability to take a more integral perspective. One of the poles could contribute in an important way at one stage of development or in one moment, while being actually destructive at another moment in time. By asking the question, **“What would make this situation more ‘alive’ at this time?”** one can frequently come to find a larger vision—one which resides in the space of neither of the two poles, but in a third space.

In the previous chapters I have attempted to both amplify polarities and embrace them into a larger whole. For instance, we amplified the polarity of Upper-Lower by working with very specific differentiation of each anatomically, functionally, and in personal imagery. We embraced the larger whole as we discussed Total Body Connectivity through Homologous movement and also how the Upper and Lower connect in Body-Half and Cross-Laterality. And we personally claimed “Inner Characters” from Upper and Lower as part of an inner family which contribute to a whole personality.

It is possible to take an Integral approach even with polarities such as “Efficient-Inefficient” and “Right-Wrong.” What might seem to be movement that is “inefficient” or “wrong” in terms of facilitating body connections and healthy movement, might be the “perfect” movement statement within a theater piece or a particular choreographic style. Or it might be totally appropriate developmentally at a particular stage in growth or healing. In the “Part-Whole” pair, it might be of prime importance to articulate a Part (for instance, the scapular movement which accompanies the movement of the upper arm) before it is reintegrated into a Whole phrase of movement. Let’s take another couple of examples of polarities:

Mobile-Stable

In my own life the Mobile-Stable polarity has needed a lot of attention. Of course, in every movement (from a kinesiological perspective) there is the stabilizing, supportive part and the mobilizing, moving part. But Mobile-Stable is also a larger issue. I have been a dancer most of my life, and have identified with the Mobile side of the polarity. I have spent years teaching classes to “get people moving!” This perhaps has fulfilled a great need within the larger culture which is overly sedentary. But now, for the health of my own body I am having to learn to phrase that Mobility into a more interactive relationship with Stability. I have a hunch that this is a lesson most people need to learn as they age. The trick is not to fall into the opposite pole and stop moving totally, nor continue blindly pushing oneself to be as Mobile as a 20 year old might. Integration in this case might have to do with finding the type of Mobility that is most enlivening and the type of Stability that is supportive rather than rigidifying. It will then be important to honor how the appropriate interrelationships of these two may serve to create an embodied existence which is rich and satisfying in its phrasing. It would also be important to acknowledge that what is most alive for one personality style might not be enlivening for another style, even in relatively the same life situation. This type of approach to dealing with Integration is not easy to grasp because it will not lead to the same “answer” for each person across situations.

Function-Expression

Let’s take another example of a polarity: Movement practitioners in the Health fields often find themselves identifying with one end of the Function-Expression polarity.

We can look at movement through the filter of “Function” as is done in Physical Therapy and Conditioning Classes, perhaps working with weights and machines to strengthen a particular muscle and approaching health through exercise in aerobics class. In these cases, personal expression is not the issue—having strong muscles to move the bones and pump the blood is.

Or we can look at movement through the filter of “Expression,” perhaps looking at the movement message—what the movement is saying as is done in a Movement Therapy session. Healthful movement then becomes moving in a way which is “saying something

that needs to be said,” which is empowering for the individual—muscle strength is not the issue.

Each of the above approaches to health will give truth, and each will give partial truth. Truly, one cannot move without muscle strength and one cannot truly move if one is shutting down what needs to be said bodily. One challenge for health care professionals in our culture is to find the **larger whole** in which these partial truths are in relationship, letting what is timely truth emerge from the enlivened space of that relationship. We need to acknowledge that working from a functional perspective might be appropriate at one point in the healing process and working from expression may be appropriate in another part of the process. The difficult (and exciting) part is that there is no “recipe” that would work for everyone. It might be that in a healing process one individual “phrases” from strengthening her muscles to finding what she wants to say with her movement in the world (Function-Expression). Another individual might need to go inside, delving into expressivity, to find that he has something he wants to do with his life in order to be motivated to strengthen his muscles to do it (Expression-Function). Again, we are back to questions of meaning and purpose as we move toward integration. Again, the journey is individual.

Examples of Non-Integral Approaches

Before we discuss Integration further, perhaps it would be useful to locate some things that would *not* be examples of Integration.

- a. **ONENESS**—It is tempting to confuse Integration with a return to undifferentiated Oneness. Especially in our complex, layered world, it sometimes feels that the answer to over-complexity is to renounce it and return to the simple knowns of the past. In cultural terms this might mean a renouncing of city life and a return to a communal style in a “back to nature” existence, disavowing city skills. In personal relationships this might mean giving up a sense of one’s own personal uniqueness to melt into oneness with another person. In the realm of movement training this might mean refusing to do highly formed, intricate movement, preferring instead to let movement emerge from formlessness, perhaps aided by the flow of the Breath. **Any of these solutions might be useful and extremely right for a time, but it is unlikely that the culture or person will feel comfortable forever with this as “the answer” if they are excluding the more complex parts of themselves that need outlets. Therefore, this is not integral because it is not encompassing the whole.**
- b. **MANY ARTICULATED PARTS**—It is also easy to feel that integration is achieved when all the parts are illuminated and available, sort of “out there on the table.” In the study of Whole Systems one frequently hears the statement, “Both/And is the Context for Either/Or.” This is a fundamental truth, but also might mistakenly lead one to a confusion that having Both is “The Answer.” Perhaps I have my city home *and* my country farm. I recognize that I am myself *and* you are yourself...*and* we are not the same. I have developed each specific movement skill of the developmental

stages *and* I can demonstrate each in an articulate way. I can move simply using my Core *and* I can do highly skilled, articulated Cross-lateral movement. **But this is not integration, because I have not discovered how these separate parts are connected in my life in a meaningful way.** I agree that “Both/And is the Context for Either/Or.” It is an important Context from which to move to wholeness. But simply having Both as separate parts doesn’t mean I am necessarily able to use them in an integral way. This will take the ability to phrase the parts and find how they sequence and interrelate to make my life richer. **Phrasing is a key issue in Integration.** Phrasing deals with the ability to connect the parts and sequence them in time. It is one of the beauties of the LMA system that phrasing is addressed so clearly within the system.

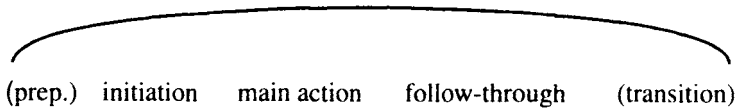
- c. **LAYERED COMPLEXITY**—Rather than returning to simple solutions or clearly analyzing and naming the parts, it is also tempting to confuse Integration with becoming increasingly complicated, i.e., layering separate parts on top of each other to make a dense, almost opaque infrastructure, where each part is “blaring” its message at the same time as the other parts. This is frequently seen in theater and dance today, as well as in government and in interpersonal relationships. This solution might also be useful for a time, since it keeps all the parts acknowledged. **What is missing here is that the parts are not enlivening each other or working in an interactive way to create an interrelated whole.** Most often the parts are not even listening to each other, much less communicating.

Now that we have talked about some of the possible confusions or masquerades in relation to Integration, let’s return to the concept of Integral again.

Integration—Parts-Whole and Phrasing

Looking at Parts in relation to the Whole is an important aspect of Laban Movement Analysis (LMA).

The field of Laban Movement Analysis which includes the Bartenieff Fundamentals is a field which **values a full exploration of the elements of movement**—the Parts (Effort qualities, Shape Qualities, Spatial Pulls, Body Part Relationships, to name a few)—**and encourages their use in connective patterns, phrased to create a Whole.** LMA and Fundamentals are also quite wonderfully able to talk about the sequencing of these changing relationships of the constellations of Parts through time—**Phrasing.** This ability to deal with Phrasing is one of the aspects which makes LMA and Fundamentals unique within the systems of Body Therapies and training which exist today. It is also one aspect which helps in understanding Integration. As you will discover in my discussion of Phrasing in the Appendix-Concepts, every phrase of movement has a preparation, an initiation, a main action (exertion) and a follow-through or recuperation, which may perhaps transition in to the next phrase.



Being sensitive to these phases of the phrase trains us to tune-in to the full creation that is taking place in the life of the movement, not simply its most spectacular or visible moment. Most people who are not trained in LMA are focally aware of only the main action. For instance, they are much less aware of what preceded and followed a beautiful leap than they are of the leap itself. By being aware of the larger phrase, the LMA and Fundamentals practitioner learns to value the contribution of the less visible elements as well. This is useful when we speak of coming to an INTEGRAL PERSPECTIVE, because frequently that which is truly Integral looks less spectacular than the moments of highest differentiated articular form. We will return to this thought a bit later. While we are discussing Phrasing, it is also important to remember that one may be involved in multiple overlapping phrases happening at the same time. The concept of Phrasing is applicable to individual movement sequences and also to larger life events.

Frequently in LMA we talk about teaching in a format which includes



In this format it is important to remember that the WHOLE which one returns to after differentiating the PARTS is not the same as the original WHOLE of oneness. THAT LATER WHOLE IS ACTUALLY INTEGRATION. It might be more effective to teach from the format which follows.



As a Phrase, this could describe the learning process in the creation of an embodied human being.

Integration in Body Patterning

Let's look more specifically at Body Patterning from the perspective of INTEGRATION. Through the course of this book, we have gone through an entire Developmental Progression—we have gone from the Oneness of Breath through to the differentiation of each body area. We have articulated specific joints and have organized the specific joints into patterns of movement, each of which delineates different connective patterns. As **we reach Cross-Laterality, all of the early patterns are now available. The differentiation is complete. If we stopped now, we would be falling into the temptation listed in above as “Many Articulated Parts.”**

Even if we cherish the skills obtained in Cross-Lateral complexity to manifest ourselves in external form and we re-member the beauty and mystery of Breath to create a sense of oneness and connection from within... Even if we utilize the relationship of each limb connected to Core and we enjoy the differentiation of Upper and Lower, Body-Half, and Cross-laterality as well as the patterns of total body connection which are made possible because of those articulations... Even if we do all these things, we are not necessarily Integrating our movement, or using movement in an Integral way.

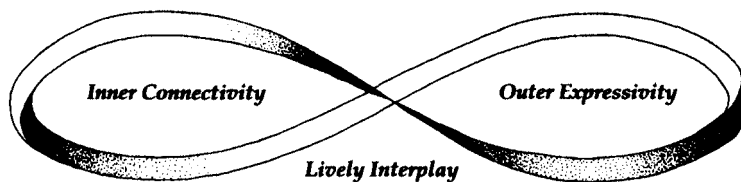
The issue then becomes: **How can I use these abilities to make my life richer, fuller, and more meaningful? Doing this will require an ability to Phrase the skills as well as find the meaning of these skills in Life.**

How does one do this? It is important to realize that what is meaningful to one person might be meaningless to another, and what is meaningful at one stage in your life might seem irrelevant at another time. It is also important to acknowledge that phrases overlap. One can be at different stages in different aspects of body/life processes—perhaps at a very complex stage in body skill training, but at a very germinal, beginning stage in learning about the personal meaning of movement. Or one might be at a fairly advanced stage in terms of movement ability, but not yet virtuosic either in terms of executing movement or using it to speak expressively. Let's look at a specific example:

Envision yourself as a professional dancer. What would make your life richer? Perhaps enriching your life in this moment might be to make your performing more articulate, both bodily and personally. The next stage for you might be to be able to move in ways in which you are able to reorganize your body patterning with split-second timing for changes in the context of what you are saying. For instance, you might phrase within one movement sequence from the stability and clarity of Body-Half through a lightning-quick spiral into and out of the floor using complex Cross-Laterality...then spreading into a soft, open radiance using Breath. The internal message of the phrase might be "I stand, action-oriented... open." If this is, in fact, a statement supported from your core and relating to your purpose in life, that movement phrase would be an expression of Integration for you.

And then again, ...it might not be. Maybe you have done that movement too many times and it is no longer "alive" for you. As a professional dancer, you might be contracted by the dance company you work for to move in ways that do not feel either integrating or integral to you. **What would you have to risk to have the movement in your life mean more for you?** Would you need to risk going deeper within yourself, perhaps giving up some of the technical virtuosity in order to feel more of the personal potency of the movement? Or, on the other hand, perhaps you have always worked from your inner spirit and have been less concerned about producing clean lines and exquisite forms. Perhaps moving toward Integration for you would be challenging yourself to go further out—perhaps working for more technical virtuosity and performing for larger audiences, while not losing a sense of your inner spirit. Your answer this year or this week will not be the same as the next.

Whether you are a movement professional or not, **you are moving in your life. Look at the movement you do, and ask yourself in what ways it is contributing to connectivity and expressivity in your life. Does it feel**



integrative or not? What would you have to risk to have the movement in your life mean more for you?

Fundamentals—An Integral Approach

How does our discussion of Integration relate to the study of Fundamentals? Let's return to look at the Goal of Bartenieff Fundamentals again.

The goal of Bartenieff Fundamentals is to facilitate the Lively Interplay of Inner Connectivity and efficient body function with Outer Expressivity.²

As I have stated before, this means that Inner Connectivity and Outer Expressivity are in a co-creative relationship to each other...a relationship that is always changing. There is no prescribed path for achieving success in reaching this goal of **Lively Interplay**. And it will "look" different on each person and in each different circumstance. This is because the quality which will make an experience more "alive" (**Lively**) for any particular person at a specific point in time is unique for that person at that moment. The embracing of both Inner and Outer requires staying attuned to which aspect is most needed at any one moment to spur the whole system on to greater capacitance for life and liveliness.

Another aspect is that parts which are in **Interplay** create a rhythm of interaction. This creative rhythm will be unique for an individual in a specific time in life. Work in Fundamentals may provide a context which values the Interplay and which facilitates learning about that interplay, but of course it is the individual person who takes the knowledge and makes it meaningful in his/her life.

Let's take a couple of examples: Sally (a dancer skilled at producing exact forms in complex movement) studies Fundamentals and discovers that for her, tuning-in to the simple filling and emptying of her Breath enables her to feel more "alive," both in her dancing and in her personal expression in the world. After her work with Fundamentals, rather than mechanistically producing shapes as she dances, Sally breathes her life spirit into the movement. She begins to take time to listen within—to let her Core "speak" to her, not only coordinating her limbs, but also informing her of her inner feelings as she dances. She comes to value her Bodily Knowing and is able to use it along with her more usual techniques of analyzing and conceptualizing when making decisions in her life. She is able to know when to use which aspects of herself, when each would be most meaningful.

Jim (a massage therapist skilled at kinesthetically identifying and becoming one with his clients through Breath and touch) studies Fundamentals and discovers that for him, locating specific spatial patterns for his massage movement and attending to Cross-Lateral body connectivity as he works on a client enables him to stay "lively" in interaction—

rather than losing track of himself and getting pulled-in to the client's pain or injuring himself through poor body usage. After studying Fundamentals, Jim continues to value his more "oneness oriented" empathetic self, while also gaining specific observational tools and more form-defined skills which will aid him in his work. He is able to use clarity of Spatial Intent and specific body connections, and he is able to change them frequently in an Exertion/ Recuperation rhythm. He is able to recognize when each would serve him and phrase his action accordingly.

Both of these students could conceivably be in the same Fundamentals classroom fulfilling the "Goal" of Fundamentals. Though it would seem that what each is learning is at the opposite end of the spectrum developmentally, what Sally and Jim have in common is a willingness to participate actively in changing patterns of relationship within themselves and between themselves and the world. (For more on this, see Chapter entitled, "What is the Core?") And what the context of the classroom is providing is **an appreciation for stage-specific diversity**.

Neither of these students is being asked to renounce his/her own personal skills in a Fundamentals classroom. One of the beauties in the teaching of Fundamentals is that each student is valued for her/his uniqueness. What is provided is a context that exposes students to the variety of possible ways of gaining connection within the body-mind and manifesting that in the world.

You may remember that the first Principle of Fundamentals I listed in [Chapter 5](#) is:

The whole body is connected, all parts are in relationship. Change in one part changes the whole.

You will also probably remember the last Principle:

Movement patterning, like life, is a uniquely personal journey, an adventure.

These two fundamental truths seem important to remember at this time in our discussion. In fact, I recommend that you re-read the chapter on Principles at this point ([Chapter 5](#)). What seems crucial here is that the intervening principles (i.e., 2–9) make possible the full realization of these two.

We have spent a lot of time in this book delving into the commonalties of human beings, both anatomically and in terms of movement development. These commonalties contribute to the ability of any individual to utilize the body connections which are available to him/her for life enrichment. I have also included sections in the text in which I encouraged you, the reader, to locate some specific images or metaphors you have of your own body connections or "Inner Characters." Hopefully you have located some of your own body-soma-psyche connections which make you different from any other person. I have also included examples throughout the book of how movement and the various body patterns are at work in the world—in sports, dance, or everyday actions such as climbing stairs. Hopefully as you read, you tracked the application in your own life.

Where are you with this body of material now? What aspect of your own connectivity are you working with? What is your own personal Body/Life journey like at this point? What are the major issues you are dealing with in your body? ...in your life? Take time now to

tune-in to your own body-mind. Listen to what it is “saying.” Perhaps move with any questions that come up for you, or draw with them, or sing, or write. Let an image surprise you about what possible relationships might exist.

Let yourself discover where you are in the assimilation of what we covered in this book. We have covered a lot of material. It might be useful to sense where you are with it. Do any of the following apply? If not, take time to make your own statement.

- “There’s something here in all this material that feels very unfamiliar, yet potentially powerful. I don’t know what it is yet.”
- “I’m inspired to explore further. I’ve gotten some new ideas and want to play with them.”
- “I’m grappling with some of the parts of the work that are difficult for me.”
- “I’m practicing refining my skills and it was good to get some more detailed information.”
- “I’m in the process of integrating my learning about my body with my learning about life, and I feel furthered in that process.”
- “I’d rather be reading romance novels and/or science fiction.”³

As you continue to work with all of this material, remember that while there is skill and accomplishment in acquiring all the body patternings, there is no one “correct” body pattern. You will find what is true for you at any given moment. This book has provided a perspective on a multitude of possibilities for discovering what is **Fundamental** in body training, and it has provided guided movement explorations to aid you in **Making Connections** which can be **Integral** to your development.

Louis Pasteur, the great scientist, said, “Chance favors the prepared mind.”

It is also true that readiness for appropriate action favors the prepared person, one who is alive to his/her resources as a human being and able to mobilize them interactively with the environment in the moment.

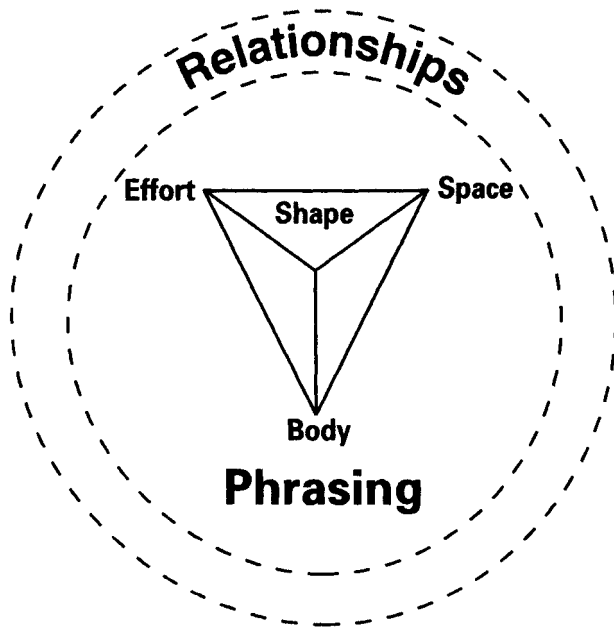
Good luck on your continuing adventure....

Notes

1. *Random House College Dictionary*, p. 692.
2. At this point it is probably obvious that one could also state this goal in a different way as well: “The goal of Bartenieff Fundamentals is to facilitate the lively interplay of Inner Expressivity and Outer Connectivity.” Play with that one and see which is most alive for you.
3. Every book needs at least one humorous statement. You just read it. Did you laugh? (Oops, maybe it was the Truth.)

APPENDIX A: A Brief Overview of the Framework of Laban Movement Analysis

Laban Movement Analysis provides a rich overview of the scope of movement possibilities. These basic elements can be used for generating movement or for describing movement. They provide an inroad to understanding movement and for developing movement efficiency and expressiveness. Each human being combines these movement factors in his/her own unique way and organizes them to create phrases and relationships which reveal personal, artistic, or cultural style. By understanding these elements we can begin to more effectively appreciate what human beings have in common and how each of us is unique.



In the classroom or client session, Laban Movement Analysis approaches each new understanding of movement and body function with experiences which incorporate change in the relationship of BODY, EFFORT, SHAPE, and SPACE. As the diagram

illustrates, even when focusing on the BODY area, the support of the other areas is always available to aid the learning process. It is in the PHRASING of the elements—how they are patterned and sequenced together—that the individual is personally expressive and forms RELATIONSHIPS.

Body

BODY—“How is the whole body organized/connected?” “What is consistently maintained in the body?” “Which body parts are moving?” “Where in the body does movement initiate?” “How does movement spread through the body?” To fully understand what is going on at the BODY level we must address all of these questions.

Patterns of Total Body Connectivity—“What pattern of connection is organizing the whole body?” The whole body can be organized from the following connective patterns:



Breath—includes both cellular and lung respiration and is a key to fluidity of movement, internal shaping, the experience of inner space as three-dimensional, and a basic sense of trust in Being.



Core-Distal Connectivity—includes developing support from the internal core of the body (Core Support) and minimizing over-dependence on external muscles. This pattern also coordinates the relationship of each limb to center core and through center core to the other limbs and out to the world.



Head-Tail Connectivity—builds a sense of the individual self connected through the body’s internal vertical. This stage patterns the ability to give attention to the world and enjoy a flexible, sensuous, supportive spine in all three planes—particularly important for level change.



Upper-Lower Connectivity—builds grounding, strength, and intention through Yielding & Pushing into the earth. It patterns an ability to come from that grounded Push to Reach out into space and enable a Pull without disconnecting from Core; relates to building a sense of personal power. This connectivity pattern stresses pure iliofemoral flexion and extension to prevent hip-hiking and/or substitution of low back usage for femoral joint action. This stage also emphasizes pelvic shift in the sagittal and lateral for clarity of weight shift and ability to travel through space by connecting from the earth into the lowest part of the pelvis.



Body-Half Connectivity—organizes the body to be able to work with one side stable while the other side is mobile; patterns sidedness functions in the brain, aids in clarifying issues.



Cross-Lateral Connectivity—develops diagonal connections through the body and graded rotation in the proximal joints to facilitate full three-dimensional movement and ability to spiral with complex level change and locomotion; prepares for multidimensional relational thinking and commitment to action.

Body Attitude—“Is there a maintained or habitual ‘stance’ or constellations of body parts from which the individual moves and to which s/he returns?” See section on Concepts for more discussion of Body Attitude.

Active/Held Body Parts—“Which body parts are most active in this person, and which body parts are frequently held, i.e., not actively participating in the movement?”


Initiation-Follow through—“Where in the body does the movement *begins* and how does it follow-through to complete the phrase?” See Concepts of Phrasing for more on this topic.

Sequencing of Movement through the Body

Simultaneous—“Do all active body parts move at once?” (i.e., head and both hands make an action at the same time)


Successive—“Does the movement of one part of the body flow successively into the movement of the next adjacent body part?” (i.e., a succession within one movement phrase: shoulder, elbow, wrist, hand)


Sequential—“Does the movement of one part of the body flow sequentially into other non-adjacent body parts?” (i.e., a sequence of movement of non-adjacent body parts within one phrase: head, leg, and arm move—one immediately after the other)

Effort 

EFFORT—“What is the dynamic quality of the movement—the feeling-tone, the texture?” Effort reflects the mover’s attitude toward investing energy in four basic factors: Flow, Weight, Time, and Space. These inner attitudes need not necessarily be conscious to be operative. Effort change is generally associated with change of mood or emotion and, hence, is an inroad to expressivity. Effort coordinates the entire being in a dynamic way. Engaging the mover from his/her own inner Effort Intent (perhaps from imagery, voice, or metaphor) enlivens movement. Each of the factors is defined by two polar elements, called Effort Qualities or Effort Elements. Many adverbs and adjectives such as “sharp,” “tranquil,” or “commanding” indicate combinations of two, three, or four Effort Qualities.


Flow Effort 


Free  outpouring
fluid
released
liquid

Bound:  controlled
careful
contained
restrained

Flow is the baseline “goingness,” the continuity, of the movement out of which the other effort elements emerge and return. Often Flow becomes the major expressive statement. In everyday language we sometimes associate flowing movement with Free Flow, but Bound Flow is also “goingness” (i.e., going in a controlled way). Flow is frequently related to feelings—either outpouring or containing them.


Weight Effort 

Light:  airy
delicate
fine touch
buoyant

Strong:  powerful
forceful
firm touch
impactful


Light and Strong are *active* attitudes toward using the weight of your body.


It is also possible to be *sensing* the weight of your body as opposed to *using* the weight of your body. The ability to *sense* the weight of your body underlies your ability to actively yield weight into the earth and push away with strength. This sensing of weight also precedes the ability to rarefy your weight with lightness.

We call this quality **Weight Sensing.** 

It is also possible to have a *passive* attitude toward your weight. These attitudes have to do with letting gravity be the active force, surrendering. They are:


Passive Weight


Limp:  weak
wilting
flaccid

Heavy:  total collapse
giving in to gravity
“It’s hopeless.”

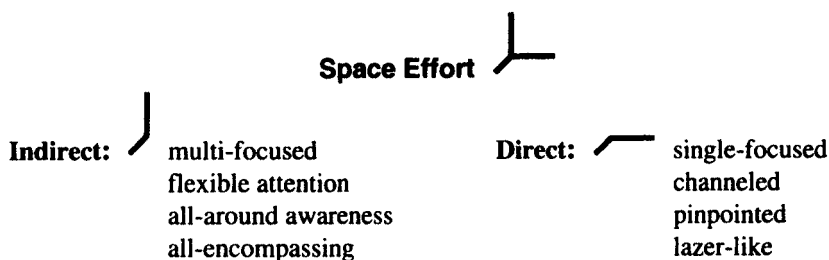
The Weight Effort generally has to do with your sensation of Self and your own intention in moving; whether that intention is to activate and assert weight, sense weight, or surrender to passive weight.

Time Effort 

Sustained:  leisurely
gradual
lingering
prolonging

Sudden:  urgent
quick
instantaneous
staccato

The Time Effort has to do with your inner attitude toward the time you have, not how long it takes to do the movement. (For instance, the same two minutes can be approached as “I have two *whole* minutes,” or “I *only* have two minutes.”) It is related to your intuition



and sense of timing when committing to action. We do not generally use the words “fast” and “slow,” for the Time Effort as those words have to do with clock time, or metronome pulse rather than inner attitude.






The Space Effort deals with how you give attention, not the place in space. Both Direct and Indirect approaches to paying attention are active. Indirectness is not the same as being “spaced out” or out of space; it is giving active attention to more than one thing at once. Both types of Space Effort relate to thinking.

Shape

SHAPE—“What forms does the body make? Is the shape changing in relation to self or in relation to the environment? How is the Shape changing—what is the major quality or element which is influencing its process of change?”

Basic Forms/Shapes¹

The most basic forms the body makes when it is not moving, “Still forms,” are:


- Linear, Elongated (Pin) 
- Flat (Wall) 
- Round, Spherical (Ball) 
- Twisted, Spiral (Screw) 
- Tetrahedral (Pyramid) 



Shape Flow Support²


Underlying all shape change is the basic change in the body’s form which happens in the process of breathing. This baseline process of Growing and Shrinking is called **Shape Flow Support**.

Modes of Shape Change³

Mode of Shape Change reveals an inner attitude about changing the form of the body — whether the shape change is self-oriented or environment-oriented. This inner attitude need not be conscious to be operative.

 **Shape Flow** is shape change which is about the mover and the mover's changing body part relationships self-to-self. It creates a sensation that the movement is not “about” making something happen in the environment at all, but is about “Me sensing my own body as I am with myself or the world—my own responses change my shape.” An example is adjusting to get comfortable. Shape Flow brings access to self, the ability to be in touch with the “inner” world.

 **Directional Movement** is location, or goal-oriented shape change. It creates a bridge to the environment, “I change my shape in order to go out to someone else or the world.” Directional movement can be either spoke-like or arc-like () For example, I can spoke my hand out from my waist to reach to shake someone's hand, or I can let my arm swing from my side to reach in an arc. With Directional Mode of Shape Change I am able to contact the world outside of myself and accomplish specific tasks such as picking up a pencil, hammering a nail, or shooting a basketball.

 **Carving** is shape change which is oriented to creating or experiencing volume in interaction with the environment. “I mold or contour or accommodate to the environment or other people.” For example, as I describe a complex project with many parts that interact to create a rounded whole, I am probably molding the space in front of me with my hands. Or, when I hug someone, I contour and accommodate my body to theirs in a voluminous way. Carving provides a quality of movement that leads to integrating the self and the world; “I am involved in a co-creative relationship with others or the world.”

Shape Qualities⁴





Shape Qualities give information about the attitudinal process of changing the shape of the body. Every movement is an action of shape change from Closing to Opening, or Opening to Closing, even if the movement is very subtle. Opening/Closing is the most general statement of Shape change.

This Opening/Closing can be felt or spoken about more specifically in terms which describe “toward where” the shape is changing—the essential spatial pull which is coloring the expressive quality of the movement. These pulls are related to a Dimensional matrix in space.

Rising  Sinking 




Advancing  Retreating 

Spreading Enclosing


These Shape Qualities can be done in any of the Modes of Shape Change described above, i.e., Rising in Shape Flow , Rising in Directional movement , and even Rising in Carving  with Shape Flow Support. It is also possible to record simply a generic shape change which Rises with clear Shape Flow Support of the breath. () Fundamentals and Laban Movement Analysis stress investing in the changing shape from within as an expressive *process*. For instance, Spreading is different from simply arriving at a wide shape. Awareness of this sort is particularly important for dancers who seem to get stuck in trying to “make the right shape,” but are not connecting internally to enjoy the forming process itself. These shape qualities or elements are also laden with personal emotional meaning for each individual, as are the Effort Qualities. It is worth spending time with each one to discover personal meaning associations.


Space


SPACE—“How large is the mover’s Kinesphere and how is it approached/revealed? Where is the movement going? What are the active Spatial Pulls? What crystalline form is being revealed?” Space aspects include information about the mover’s own personal movement sphere, the Kinesphere, as well as whether the approach to the kinesphere is Central, Peripheral, or Transverse. Spatial aspects also include whether the movement is Dimensional, Planar, Diagonal, or Transverse Spiraling, and which of the major crystalline forms is most operative. This area is sometimes referred to as Space Harmony.

() **Kinesphere**—“The space that is mine”—the mover’s own personal space surrounding the body. How large is the space? Is it **small**, near the body (); **medium**, at about elbow distance away; **large**, as far as the mover can reach (). Kinesphere is defined *physically* by the distance that can be reached all around the body without taking a step. Kinesphere is defined *psychologically* by the space the mover senses is hers or his, the space s/he effects. For example, even if the actual movement is done using a small physical kinesphere, a performer or a speaker might enlarge his/her psychological kinesphere to include the whole audience. “I invite you into my space. This entire room is my kinesphere. I influence the whole space.”

Approach to Kinesphere⁵—“How do I approach my kinesphere and reveal it?”

 **Central**—“Is my kinesphere revealed with movement radiating out from and coming back into the center?”

 **Peripheral**—“Is my kinesphere approached by revealing the edge of the kinesphere and maintaining a distance from the center?”

 **Transverse**—“Is my kinesphere created with movement which cuts or sweeps through the space, revealing the space between the center and the edge?”

Spatial Pulls—Where is the movement going in space? How many pulls in space are active?—When we clearly locate ourselves and our movement spatially, we help our bodies coordinate movement more easily. **Spatial Intent**, knowing clearly where the

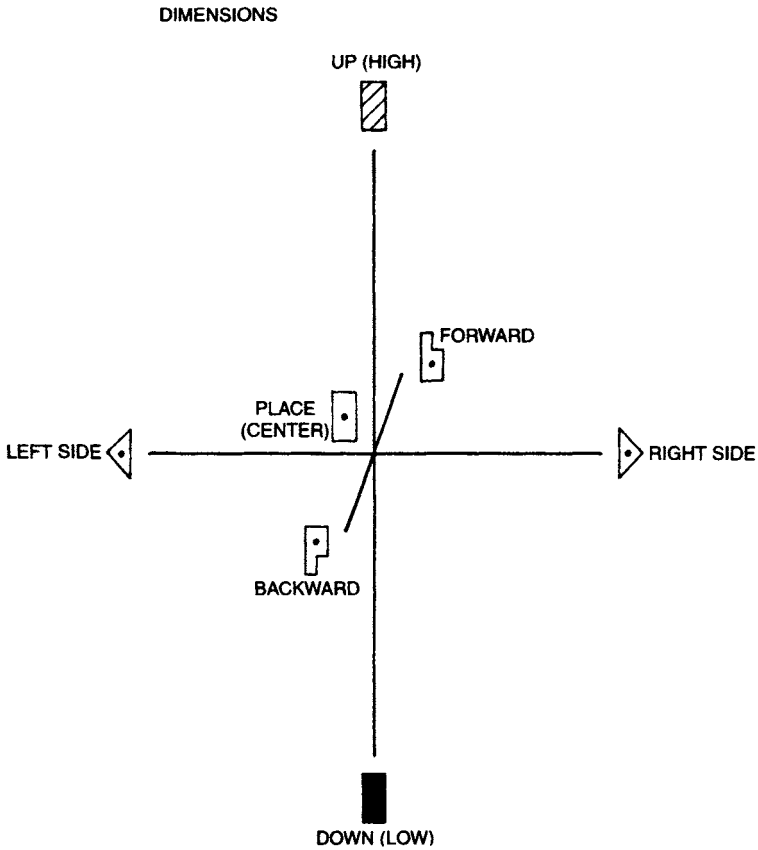


Figure 60. Dimensions.

body intends to go, organizes body connections by establishing a clear pathway/goal for the movement. These pathways are “alive highways” which the body can ride in both vertical and off-vertical movement. The clearer the Spatial Intent or goal of the movement, the more easily the neuromuscular system can accomplish the action in a fluid way. In addition, each individual has personal preferences for organizing movement in space. Space-use contributes to an individual’s style and how s/he relates in the world just as do Body, Effort, and Shape. For instance, some movers prefer the simplicity and purity of Dimensions while others enjoy the spatial dynamism and excitement of Diagonals.

Dimensions⁶—Our world has three cardinal dimensions. Each dimension contains two directions which are opposite poles. (See [Figure 60.](#))

- Vertical**—Up/Down
- Sagittal**—Forward/Backward
- Horizontal**—Left/Right or sideward open/sideward closed

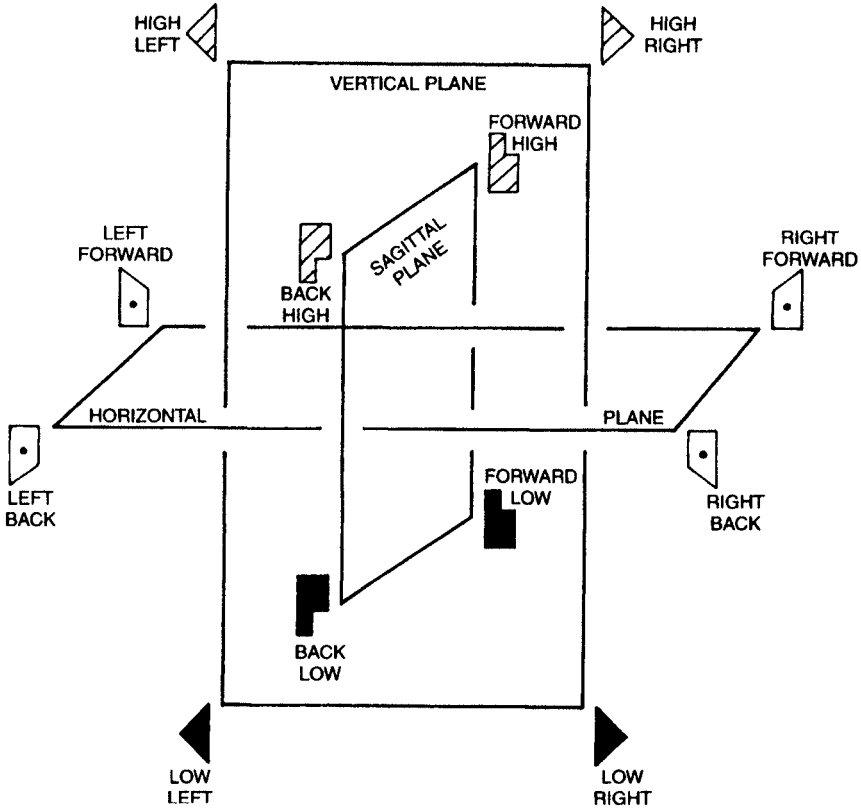


Figure 61. Planes.

Each direction is *one spatial pull*. For instance, the vertical dimension has “up” as one pull and “down” as another; the sagittal has “forward” as one pull and “backward” as another; the horizontal has “right” as one pull and “left” as the other. Moving with a pure sense of “up-ness” is, for instance, to be moving with *one spatial pull*, i.e., moving up in the dimensional cross. Dimensions form the internal structure of the Octahedron.

Planes—Movement in the three cardinal planes is movement which invests in *two spatial pulls* at the same time; for instance up and left in the vertical plane (see Figure 61). Each plane is like a flat cycle, or rectangle. These planes form the internal structure of the Icosahedron.

- ✱ **Vertical Plane**—combines Up/Down and Right/Left
- ✱ **Sagittal Plane**—combines Forward/Backward and Up/Down
- ✱ **Horizontal Plane**—combines Right/Left and Forward/Backward

Diagonals—Diagonal movement consists of *three equal spatial pulls*; for instance, left-forward-down (■) or right-backward-up (◻). Diagonals form the internal structure of the Cube (see Figure 62).

Transversals or parts of spirals—Transverse movement involves *three unequal spatial pulls constantly changing their relationship to each other*. A general example is movement which is related to a three-dimensional spiral. In making a spiral, one is always changing the Vertical, Sagittal, and Horizontal components in a graduated proportionate way, cutting or sweeping through space. A much more specific example of transverse

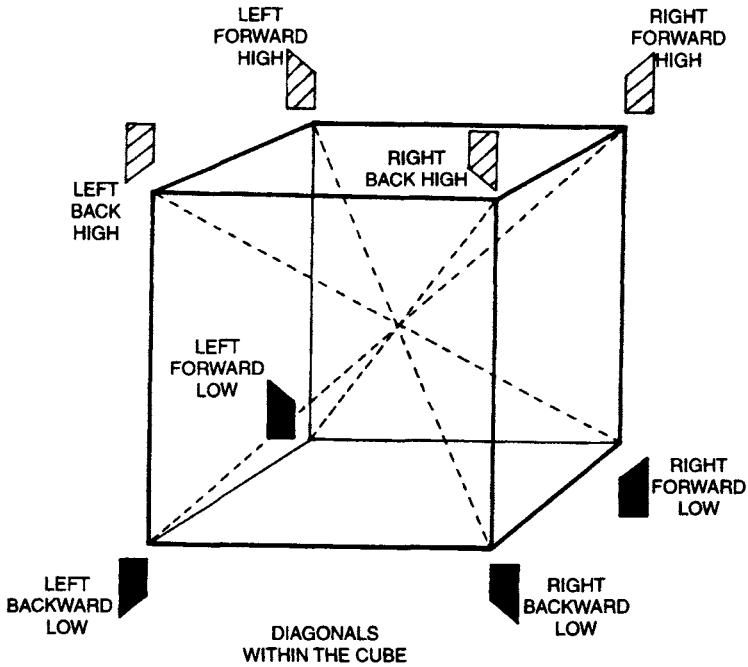


Figure 62. Diagonals within the cube.



Figure 63. The Transverse Three-Ring is composed of three transversals in the Icosahedron.

movement can be found and practiced in the Laban Space Harmony work with Transverse Scales in the Icosahedron. In these scales each movement is a transversal. For instance, a movement from the corner of the Vertical Plane (i.e., Up-Left ↖) to the corner of the Sagittal Plane (i.e., Forward-Down ↘)

has the greatest change in the vertical aspect, the second greatest change in the sagittal aspect, and the least change in the horizontal aspect (see Figure 63). Note that **the transversal is the movement that is happening between** the planar landmarks, not the landmarks themselves. For more discussion of Transversals and a specific discussion of a Transverse Threeing, see “Spatial Pull” in Appendix—Concepts. For an illustration of a Transverse Three-Ring, see p. 58 and p. 197.

Crystalline Forms-Movement can be organized within or reveal any of the following polyhedral forms...or a changing between them. For an illustration of the Icosahedron, see [Figure 64](#).

Tetrahedron Octahedron Cube
Dodecahedron Icosahedron

Phrasing

The basic elements of movement discussed above can be combined in a myriad of different ways. Each person will have his/her own unique repertoire of and preferences for combinations of these elements. And each individual will also organize and sequence these combinations into phrases of movement which are expressive of his/her personal style. Two people may have exactly the same elements in their movement, but if they have organized and phrased the elements differently the movement message will not be the same. For instance, one person might initiate his phrase with his right arm Spreading and Rising into a large kinesphere Vertical Plane movement that is Strong and Direct, and end his phrase with a small Light, Free-flowing Advancing into the Sagittal. Another person might begin his movement with a Free outpouring of Strength Advancing into the Sagittal using the right arm and then end by Spreading and Rising into a Light Direct stability in a large Vertical Plane. See the Appendix-Concepts which follows for more specifics about phrases and phrasing.

Relationships

Relationships between people can be experienced and looked at in new ways by becoming aware of the quality of the movement in the relationship. To do this, use the above elements of movement to help you become aware of the moving quality of each person and how the qualities “converse” with each other. Look for the interaction in movement. How is the relationship established? Is it through being in the same quality of movement? Is it through sharing the same Kinesphere or Crystalline form? Notice what is a commonalty and what are the differences. Notice what precedes and follows each major movement. It is frequently in the transition moments that relationship is most obvious. For a larger discussion of Relationship, see [Chapter 2](#).

Notes

1. These symbols for the Still Forms were developed by Leslie Bishko and Pamela Schick. The entire area of SHAPE is one of the richest but least fully developed in the Laban/Bartenieff system. For many years this author, Peggy Hackney, has been working with colleagues and encouraging the field to flesh-out this area. Development is ongoing in any living system. The footnotes for this section are simply to provide a check-in point for the work on SHAPE at the time of printing.
2. The symbol shown here for Shape Flow Support is used by the Laban/Bartenieff Institute of Movement Studies to refer to both basic Growing and Shrinking enabled by Breath (which this

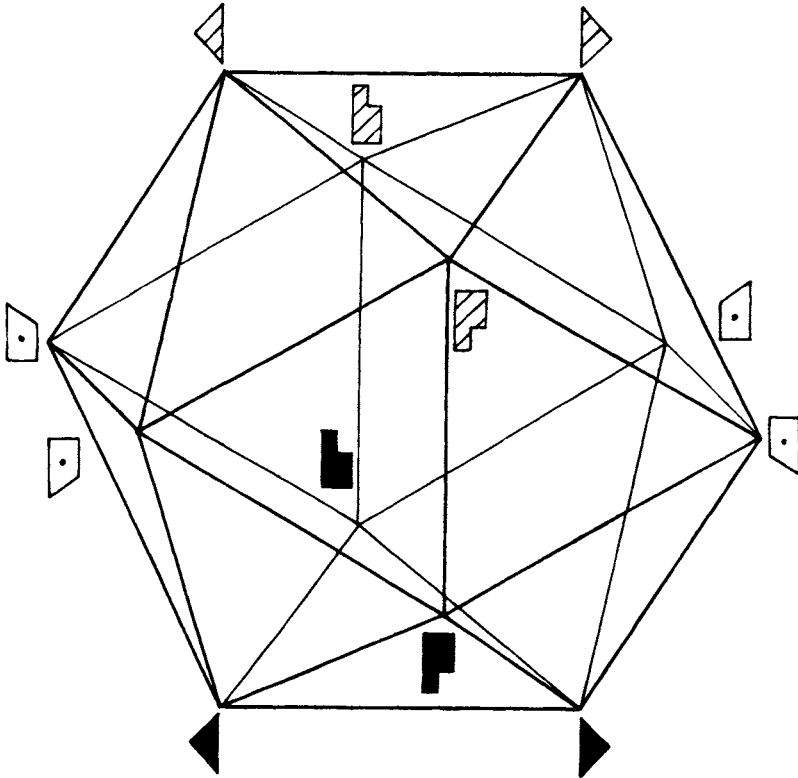



Figure 64. Icosahedron.

author has called Shape Flow Support) *and* for Shape Flow as a Mode of Shape Change (see below).

3. Symbols for the Modes of Shape Change were developed by Peggy Hackney (symbols for Directional and Carving were developed in collaboration with Janis Pfsich). Note that the symbol for Shape Flow as an expressive Mode of Shape Change is slightly different from the symbol for Shape Flow Support (above). As in the other Modes of Shape Change, the symbol for Shape Flow as an expressive Mode of Shape Change is made by allowing the Shape Action Stroke (the two slanting lines in the middle of the symbol) to cross through the symbol. This author believes that this symbology keeps the clarity of the nature of the expressive Modes clearer and distinguishes them from shape change which is more breath support oriented. Note also that the Mode of Shape Change which this author calls “Carving” is often referred to as “Shaping” or “Contouring.” This author prefers to reserve the term “Shaping” for use in a more general way for the large category which includes all aspects of describing the changing form of the body.
4. The symbols this author is using for the Shape Qualities are generic. They give information about the attitudinal process of changing the shape of the body through locating the essential spatial pull which is affecting the shape change (i.e., “toward where” the shape is changing).

They do not indicate a Carving Mode of Shape Change (as these symbols do at the Laban/Bartenieff Institute of Movement Studies). It is thus possible to prescribe Rising, for instance, without having to tell whether that shape change in the vertical is done in Shape Flow, Directional, or Carving. The Mode of Shape Change symbols can be combined with the symbols for Shape Qualities when more specificity is desired. And the symbol for Shape Flow Support may be add when needed (for instance, Rising in Carving with Shape Flow Support ).

This author believes that this symbology system allows for both generality and specificity in either prescriptive or descriptive writing. For a fuller discussion of the topic of Shape, readers are referred to the paper, “SHAPE: What’s Shaping Up?”. This paper was presented in Berlin, Germany in 1993 at the Eurolab Conference (the European organization for the advancement of the Laban/Bartenieff work).

5. Symbols for Approach to Kinesphere were developed by Peggy Hackney and Carl Wolz.
6. Cross of Axes-type symbols for the Dimension and Planes were developed by Carl Wolz.

APPENDIX B:

Concepts Used in Fundamentals

As opposed to “Principles,” which are fundamental truths, “Concepts” are ideas, thoughts, or general notions. Sometimes a certain concept word (or words) becomes a “label” for a larger thought or set of expectations. The above is true about concepts in Fundamentals such as “Connectedness” or “Core Support.” Indeed, learning theorists¹ postulate that labeling the central topic and all important sub-topics is essential for “Robust Thinking” to take place. Certainly a word such as “Connectedness” stands for a multitude of experiences associated with that word.

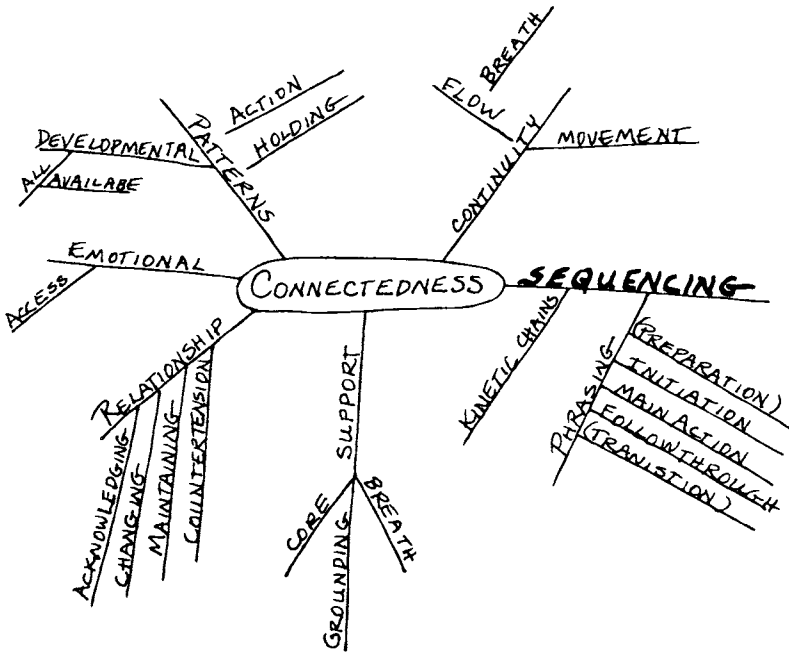
It would be wonderful if Practitioners of Fundamentals had graphic symbols for all the concepts which we teach, for symbols are more generalizable and also more easily differentiated than words. Each reader will probably have many everyday meanings associated with the words which have been adapted by practitioners of Fundamentals to stand for something relatively specific. This can be confusing for students of Laban Movement Analysis and Fundamentals. Hopefully this section will add clarity.

Colleagues² and I have made numerous lists of the ideas and concepts which come up again and again in the process of teaching Fundamentals classes. As we discuss these ideas, it is clear that there is no one definition for a concept which would accurately capture the essence of every situation. Because the concepts are known through multiple body experiences, anyone reading a definition will no doubt experience it as disappointing and lacking in the richness it deserves. When I read in two dictionaries that the definition of “red” is “the color of blood,” I was astonished. “Yes”, I say, “but what about ripe tomatoes or a rose?” I have listed below some of the concepts we teach in Fundamentals, and I have included some further thoughts about each concept. For those people who enjoy definitions, these may serve as a beginning. But I must let you know that definitions of concepts change according to the context in which you are applying them. I could also choose to group the concepts differently, according to different purposes. For that reason I have included several varieties of associative clusters.

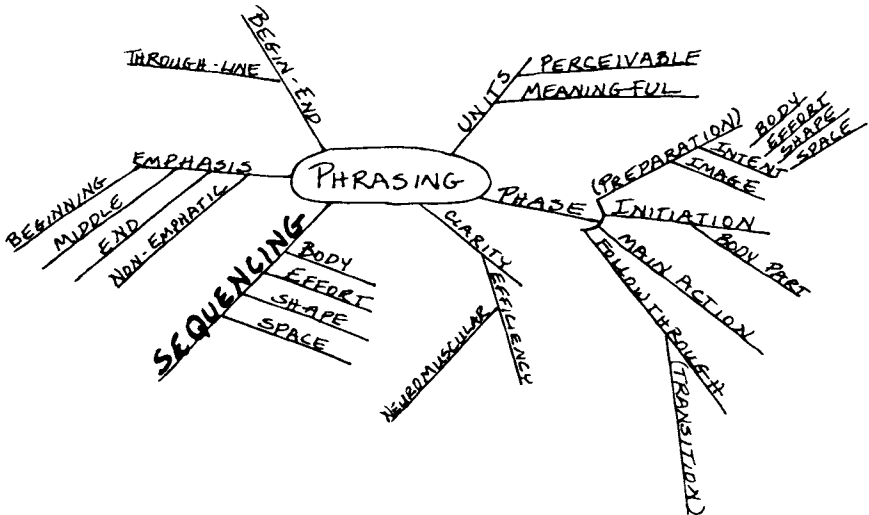
Tony Buzan, an internationally recognized expert on the human mind, calls this type of free-associative clustering “Mind Mapping.” It allows you to see what is linked together in your mind in any one moment. Associations can thereby be non-linear and need not be confined to a logical progression (such as an outline).³ No two persons would mind map the same concept in exactly the same way.

Let’s look at the concept of “sequencing” (see below Figure 65). Notice how you get a different sense of a concept when it is mapped within different associative bundles.⁴

A.



B.



When planning a class it is sometimes fun to pick three major concepts to cover and see what seems to come into automatic association. For instance, if I am teaching a class on Head-Tail (spinal level) patterning, I might play with:

You might experiment with picking any three concepts and letting what comes from their association be your challenge for such various activities as:



1. choreographing a dance combination.
2. taking a class in Yoga, Tai Chi, or Dance.
3. cleaning your house.

You might try picking the three concepts first and then let the activity (context) reveal itself. Or you might play the game of picking the context and noticing which concepts immediately jump into your body-mind. Or you might simply begin moving and notice what you seem to be moving “about” and in which context that “knowledge” might best serve you.

Here Are A Few Concepts

ANCHORING

Anchoring provides stability for one body part through active connection with another body part in countertension. “Anchoring” is slightly different in my mind from “grounding” in that grounding is clearly related to the earth, whereas, for example, the scapula can be “anchored” by countertension in divergent spatial pulls even when not in a direct line with gravity. The concept of countertension is explained later in this section on Concepts.

BODY ATTITUDE

“Body Attitude” refers to the characteristic body stance (torso relationship or torso/limb relationship) that is persistently used and from which all activity develops and returns. It is what is maintained in the movement.⁵ The concept of “Body Attitude” was utilized extensively in The Choreometrics project⁶. It became an important cultural definer, describing spatial stress that is maintained (for instance, “Body Attitude is vertical with diagonal stress” in much of India) or the nature of habitual torso usage (i.e., one unit in tundra cultures, two units in tropical Africa).

In Fundamentals work the practitioner knows that it is equally important to notice what remains the same or is constant in working with a client as it is to notice what is changing. What is maintained or held in the body can become rigid and will restrict movement in certain characteristic ways. For instance, a set relationship in the head-neck will probably contribute to an immobility in the lowest part of the pelvis (tail) area.

Irmgard Bartenieff stated, “The trunk is decisive as to how the limbs are used. Body attitude is the type of readiness that is expressed in the trunk to act.”⁷

CONNECTED (“CONNECTEDNESS”), (“CONNECTIVITY”)

To connect is to join or link, to establish communication between or place in relationship, to associate mentally or emotionally.

In Fundamentals when we say that an individual is “connected” we are speaking about multiple levels. This term is probably one of our most important core concepts; yet also one of our most complex and richly textured. Of course, as we already know from the chapter on Principles, it is a fundamental truth that the whole body is connected. All parts are in relationship. This is true because of the nature of our human organism. But it is also true that many people are not able to utilize their connectivity fully to support them when they are moving.

The statement “He/she is connected” might be utilized to refer to any one or all of the following: (It is always wise to ask the practitioner.)

1. An individual who moves using “Core Support” and is in relationship with the earth (i.e., “Grounding” is present).
2. Someone whose limbs are moving in relationship to (acknowledging links to) the central core or trunk of the body and to each other. All parts are in communication.
3. A mover who is enjoying sequencing movement in fluid kinetic chains through his/her body, sensing a sequencing of flow and an ability to produce proportionate change in body part relationships.
4. Someone who has all of the Patterns of Total Body Connectivity easily available and accesses them in appropriate situations.
5. An individual who has a kinesthetic and proprioceptive awareness of his/her own coordinated body functioning.
6. A person who is able to integrate postural and gestural movement at will.
7. A person who, *while moving*, has access to his/her feelings and emotions (not necessarily *likes* the emotion) and is able to express them dynamically in the world through giving form to his/her body (i.e., using Effort, Space, and Shape).
8. An individual moving in harmonic relation to him/herself, other people, and/or the universe. This sense of the word touches on the spiritual, which seems to be under-acknowledged in our current culture. Being available to sense connection is an essence of spirituality in most spiritual traditions.

CORE SUPPORT (INTERNAL SUPPORT)

When I perceive “Core Support” in someone, I experience in that person an alive, central core which actively engages to both uphold the body and energize interaction within the individual and with his/her environment. The word “support,” according to Webster, means “to carry the weight of.” The weight of the body is carried or borne up effectively, so that there is an ease in being in his/her body in either movement or stillness. The word “support” also means “to encourage, help, advocate.” When I think of “Core Support” in this sense, I think of being able to do what I want to do effectively, with faith that I can function and express myself as a mover. I have faith that my organism will follow its

intent into function without having to shut down other parts of the system in order to accomplish the task. My body both supports and encourages me.

Both of these types of support seem to be facilitated on the Body level by establishing a lively connection in the inner core of the body, including (but not limited to):

1. Cells which are nourished through breath to provide a fullness and fluid presence, a sense of a ground of Being.
2. Healthy organs which provide adequate volume and inner shaping experiences as they move in accommodation to one another.
3. Muscles with vital tonus and balanced work around a joint, able to engage in a serial elastic effect to create and re-create proper spacing in the bony structure.
4. A bony structure (legs through spine to head), which functions more like a tent pole than a column, but is utilizing both aspects of support (i.e., with upward thrust provided by tensile support as well as downward compression).

Central to this kind of support is the rhythm of breath in relation to psoas function, heart and lungs in relation to sexual organs, pelvic floor in relation to diaphragm, and abdominals in relation to back extensors.

All of the above provide inner networking which give a physiological basis for a Core Support. This facilitates a psychological core which can say, “I accept who I am, and move in action as myself. I can be an ‘advocate’ for myself.”

When I do not see Core Support I see an individual moving in a way which seems strained or inefficient, pushed or held up by something other than the core. I frequently see extra muscular holding, generally in the head/neck and chest or in the lower back coupled with spinal misalignment. I sense an Effort intensity unwarranted by the situation, as if the person is trying too hard yet “doesn’t have his heart in it.” This is one manifestation of lack of Core Support.

I frequently also see the opposite—rather than an overly involved external intense musculature, I see an individual whose body seems totally amorphous, an unformed “mush” or “blob,” with internal organs, muscles, and spine hanging passively into gravity. This individual seems to be asking for motivation, for involvement from core-activation of weight; waiting for a sense of an active support from self.

Both of these problems can be addressed in a most basic way by beginning with activating the breath at a cellular level (cellular respiration) and progressing through the developmental progression.⁸

COUNTERTENSION

“Countertension” means to go against the line of tensile pull of an action. In general, practitioners of Fundamentals use the concept of “Countertension” in a spatial sense; that is, going in a direction that is against the line of “spatial intent” or “spatial pull” of a movement. Countertension is stabilizing.⁹ It can provide “anchoring” or “grounding.” A simple example of this is the countertension provided by roots of a tree going down to facilitate the upward growth of the trunk. In a more complex instance, a fall backward

and downward (⬇️) to the floor can be “anchored” in space by a countertension of an arm pulling forward and upward (↗️) or “grounded” by legs pushing down into the floor to thrust the thighs and pelvis forward and upward for momentary support of the hinging torso before the whole body accepts the floor.

In actuality, Countertension is *always* present at a micro level within the neuromuscular system to facilitate efficient functioning of even the smallest movement. Sometimes approaching repatterning from clarifying necessary Countertension is the most effective (and least frightening) way to open up a range of movement. Frequently, students (clients) are unable (or unwilling) to move fully because they do not feel stable. Helping them find the subtle countertensions that give support (even if only momentarily) will work wonders in alleviating fear of plunging into the unknown of full mobility. In a metaphoric sense countertension provides “history,” a place to come from as we explore.

So far we have been discussing functional Countertension. Frequently in a theatrical statement the inner emotional conflict of a character reveals itself through heightened Countertension. For example, Martha Graham’s heroines approach a dreaded encounter by steadfastly advancing in their legs and arms while simultaneously contracting and retreating in their torsos.¹⁰ In the audience we “get” the double message and feel the conflict. The expressive Countertension “works” artistically. It is truly functional.

Similar conflicts are expressed by clients whose habitual Countertension might be preventing them from going forward in life. Perhaps the Upper Body charges ahead and the Lower hangs passively behind. In this case it might be important to heighten the polarity to let the full story or “inner character” of each part emerge, rather than insisting that the pelvis mobilize. Perhaps a dialog between these “characters” will follow. If the pelvis decides to go forward certain body level skills may need to be practiced, such as Lower Body Yield & Push patterns, activation of hamstring/psoas reciprocity, sitzbones bone-heel connection, etc. The Upper may decide to soften and be less strident as a “go-getter.” This may entail working with Breath patterning, or releasing held tension in ribs and sensing the weight and flow of the internal organs.

Function and expression are intertwined in relationship. Sometimes one speaks more loudly than the other. An effective practitioner can follow the client’s clues as to which inroad is timely and appropriate.

Of course, countertension is not only spatial. Opposing *Efforts* provide a dynamic Countertension. Ballet is certainly an example of strong power (⬇️) in the lower body to support delicate lightness (⬆️) in the upper.

And some of the most interesting countertensions expressively come from pairing a shape quality such as sinking (⬇️) with an opposite spatial pull of going up (⬆️). This produces a pathetic sense of “having to be up when I’m down,” (perhaps as the person comes up from the floor or perhaps a plie, but is experiencing an interior body form change that is sinking). Clowning utilizes these countertensions extensively.

GROUNDING

Stabilizing through connecting with the earth—when I perceive that an individual is “grounded,” I see him/her in active relationship with the earth. This active relationship is

achieved through a weighted outpouring of flow from the person into the earth which allows him/her to then sense the earth meeting that weight and providing support. Whatever part of the body is in contact with the earth allows its pores to open in flow and sense the weightiness of the fluid nature of all the cells and organs in the body flowing through that contact point toward the earth to come into relationship with gravity.¹¹ If that point of contact is the soles of the feet, it is almost as if there are palpable spongy conduits or deep taproots going from the foot to the center of the earth, and then from the foot up into the pelvic basin (ball of the foot connected to the adductors, sequencing through the psoas to the 12th thoracic vertebrae and from the heel to the sitzbones bones.) Sometimes an image of a large figure of 8 relationship helps to connect the whole body in a dynamic relationship with the earth, as in the illustration on page 101. A solid footing or rooting provides a base which can be a foundation for “anchoring” the Upper Body (see **ANCHORING**).

In a psychological sense, grounding also refers to a person who is present with him/herself, “at home” in his/her own body/mind.

HOLLOWING

This term is moving somewhat out of usage, but was used prior to about 1984 as a shorthand for “Core Support” (as in “connect from your hollowing”) or sometimes more specifically for initiation from pelvic floor, lower internal abdominals, and psoas (as in “hollow and let your leg float up into its full flexion”). The word itself is defined by Webster as “having a cavity within,” and I think we began to use it in Fundamentals when teaching femoral flexion to let people know and experience that they need not tighten and grab the external abdominals to flex the leg (thereby bunching up the lower abdomen and not allowing the muscles within the internal cavity to do their work). When doing the “Basic Six”¹² exercise called “thigh lift” (I call it “femoral flexion”), it is possible to experience the lower pelvic area flowing back and in, without eccentrically contracting the external abdominals to produce a change of pelvic alignment. The psoas as major femoral flexor will be pre-dominant and the external abdominals will not be overly engaged. To some people this lack of external tension allows them to drop into themselves and to feel the internal work going on within the pelvic “hollow.” Yet it is not passive; it is an active engagement.

I sometimes use the term “hollow” (as in “sense the hollow movement at the end of your exhalation”) to encourage students to tune-in to the quiet depth and stillness between the exhalation and the next inhalation—that empty space between “death” and “new life” in which the diaphragm is at its height and one feels that it is almost suctioning the abdominal contents back and up into itself.¹³ This is an example of utilizing Shape Flow Support.

In a larger sense, “Hollow” may be related to “hallowed”—preparing the sacred holy space in the lowest part of the pelvis in front of the sacrum, the sacred bone.

INTEND (INTENTION), (INTENT)

Webster defines “intend” as “to have in mind as a purpose or aim;” “intention” as “a determination to act in a certain way;” and “intent” as “directed with keen or eager attention.” These definitions seem usable for our purposes.

In Fundamentals and LMA we speak frequently of “intent”—intent in terms of Body usage and body part relationship, intent in Space, intent in Effort (dynamics), and intent in Shape (the process of changing the form of the body). Intent is a fundamental part of every movement phrase, whether one is consciously aware of one’s intention or not. **Intent is part of the preparation stage of phrasing and it is at this crucial point that the brain is formulating (even in a split second) the motor plan which will eventually be realized in action.** Clarifying intent can produce amazing results in the motor pattern. (This implies also acknowledging vagueness or purposelessness if those had previously been present or even locating an unconscious intent that might be at counter purpose with your stated aim.) It is sometimes helpful to use internal imagery to establish clear intent—actually seeing oneself doing the desired action. The intention phase (preparation) of the movement is one point at which the light of consciousness can be effectively applied to pattern movement. (See also **PHRASE, PHRASING**)

KINETIC CHAINS (SEQUENCING—see also PRINCIPLE #11, CHAPTER 5)

Kinetic Chains are groups of muscles which are engaged either simultaneously or consecutively to produce either support or movement.¹⁴ These muscle groups generally span several different joints or body areas,¹⁵ but can be linked functionally to behave as a single unit to complete a specific task (though they are also capable of contracting independently of each other). The linkages which are set up in Kinetic Chains govern and actuate movement. Some linkages are set up through early childhood development, some come through movement habits, and others appear or adjust spontaneously to accomplish a temporary task.

It is important to conceive of movement in terms of Kinetic Chains rather than single muscles or static positions because it is the chain reaction through the muscles of the Kinetic Chain which allows movement to flow from one part of the body to another, thus providing a sense of total body connection and making movement coordination possible. Irmgard Bartenieff always taught that muscle sequencing was more important than muscle strength in producing coordinated movement, because Kinetic Chains make possible the phrasing of the movement; and clearly phrased movement is more coordinated than movement in which the phrasing is vague.

Some of my friends who come out of the Rolfing or Hellerwork fields feel that the action of Kinetic Chains is facilitated because of the fascia. Fascia is a fibrous envelope of tissue which surrounds the muscles and is filled with nerve pathways. This fascia conveys a bodily sensation of “connection” in a linked way. (It is almost like the muscles are wrapped by an elastic material such as nylon hosiery which increases proprioception.) Of course fascia is not a motor pathway, but it can provide the proprioceptive sensation of

connection which can send a message to the brain which says, “These areas of the body or muscles are connected; move them in partnership.” I have not mentioned specific chains of muscles here, because in any given situation the actual chain depends on where the movement is coming from and what is its goal. In addition, **I do not recommend thinking muscularly, but rather in terms of imagery or metaphors—“lines of connection,” “open tubes” or “highways.” This will allow your neuromuscular system to provide the connection.**

PATTERNING, PATTERN

Quite frequently in Fundamentals we speak of “patterning” a movement sequence or “re-patterning” a sequence.



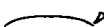
The implication underlying both these is that **the neuromuscular system develops a plan or model (guide) for executing movement sequences (actions)—an habitual firing of muscular pathways which come into play to fulfill an intent** Many of these basic connective patterns of life are set up very early as the baby experiences all the cellular and core connections, plus reflexes, righting reactions, and equilibrium responses, as well as all the neurophysiological patterns of development. In addition, as the baby is going through this development, s/he experiences what works in relating to her/his own inner impulses and to the outside environment; s/he feels feelings, becomes vertical and begins moving out into the world, traveling. What worked then becomes the model, the plan, the pattern, for later movement experiences. For instance, the response to the command “lift your leg” is likely to initiate an entire action sequence which may have been learned in early childhood, perhaps in a response to a situation such as making the leg available for mommy to out on a snowsuit. What worked in that situation then becomes a neuromuscular plan associated with the intent to “lift leg.” Frequently children fulfill this action by lifting from the side and top of the leg, letting the hip hike up and the leg rotate inward rather than initiating the action from the iliopsoas. Later in life that *patterning* is there when a dance teacher says, “lift your leg.” Unfortunately, the childhood pattern may not be the most efficient use of the femoral joint to fulfill the aesthetic of a dance technique class which requires pure femoral flexion and outward rotation. At this point the individual then needs to re-patterning from the moment of the intent (preparation) and into the initiation. Often it is useful in re-patterning to change the verbal command associated with the action (for example, “Let your leg float forward and upward”).

PHRASE (PHRASING)

Phrases are perceivable units of movement which are in some sense meaningful. They begin and end while containing a through line. Such a perceivable unit might be a full specific action such as serving a tennis ball, a small gestural movement accompanying spoken words, or a “sense unit” of movement in itself such as a “glissade-assemble” in ballet. These units are usually preceded and followed by momentary pauses. In Laban Movement Analysis we call each of these units of movement a “phrase.” How an individual “phrases”

his/her movement is a major aspect of individual style. Two people might have the same Effort elements present, or the same body parts utilized, but if they have organized and combined the elements differently the message will be dissimilar.

In a spoken phrase a group of words convey a single thought. In movement we can use this “single thought” as a metaphor, or we can follow a single flow line in order to define phrase boundaries. Sometimes it is difficult for students to sense a phrase, but if I ask them to “sing it” as they move, they usually have no trouble in perceiving where the phrase begins and ends. By “sing it” I mean accompany the movement with some sort of sound such as “ta dum ta da.” Students frequently have difficulty organizing their bodies because their sense of the beginning and the ending of the movement phrase is unclear. Sometimes they are attempting to run movements endlessly together in what might be called a “run-on sentence.” The neuromuscular system is thus confused and will not function adequately. This is particularly true in movements which are repeated numerous times (in dance, sports, or other skills). It is important to consider whether each repetition is a phrase in itself, with its own initiation, or whether each repetition is really only a *phase* in a larger phrase. In the latter, the sense of *flow-line continuity* connecting the repetitions becomes a crucial issue, as does the *point of emphasis* in the phrase. It is important to ask the following questions:

1. Is there an emphasis in the phrase, or is the phrase non-emphatic?
2. If there is an emphasis, where is it?
 - a. Is the emphasis of the phrase at the beginning? 
 - b. Is the emphasis in the middle of the phrase? 
 - c. Does the phrase come to its emphasis in the end? 

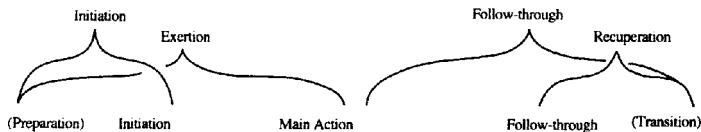
Clarity in phrasing leads to clarity and efficiency in body usage. This simple fact could make a world of difference in most people’s movement!

And how does one clarify phrasing? As mentioned above, singing is one way. It may also be helpful to **tune-in more specifically to the phases in the phrase.** Some practitioners speak about Initiation-Follow-through and some speak about Exertion-Recuperation when speaking about Phrasing. I have included both. The following diagram might be helpful.

In terms of emphasis, “beginning phrase emphasis” might have the greatest crystallization of energy in the Initiation moment. “Middle emphasis phrasing” might have the greatest crystallization in the middle of the Main Action. And “End emphasis phrasing” would have the greatest energy crystallization, either at the end of the Main Action (no followthrough) or at the end of the Follow-through.

In looking at the following diagram it becomes easy to see how characteristic elements in an individual’s movement repertoire recur in a regularly patterned way, thus creating a rhythm. This is also why repatterning is complex. Because in changing one element, for instance the Initiation, the rhythm of the known phrasing is totally disturbed, and the individual can feel out of synchrony with him/herself. That is why in repatterning the total

A Phrase



phrase must be considered.¹⁶ Let's look a bit more closely at some of the phases in the phrase.

- **Preparation**—Before visible movement actually happens (i.e., body parts move), an individual prepares within for that action. There is a moment of making oneself ready, coming to intent. This phase is generally done without conscious awareness (especially in an adult doing familiar movement). But this phase can be brought to consciousness in the process of training. It is at this point that one can clarify the *intent* (see **Intent**) or motivation. For instance, in training to do a forward kick with outward rotation (called a “grande battement” in ballet), one can clarify intent in several ways:

- Through imagery:** For example, “Send your leg out like water through a fireman’s hose,” “Let your leg paint the sky with a whoosh of arcing color,” “As your leg comes down, let the insides of your legs come together in a gentle kiss.”
- Through anatomical knowledge:** For example, “Intend to let your greater trochanter excursion down around nearer your sitzbones-bone.” This encourages outward rotation.
- Through dynamic intent (Effort):** For example, “Use your strong direct power as you brush down and out through the floor, then let your leg fly freely before it glides softly down.”
- Through spatial intent:** For example, “Send your leg forward and up. Take out the sided-ness.”
- Through shape intent:** For example, “Make a U-shape at your femoral joint, rather than a V-shape, as you do your ‘grande battement.’”

It is in the preparation moment that we claim our intention. Intention patterns the organism.

- **Initiation**—Where in the body does the movement *begin*? Where does action originate? Perception of the first movement moment is crucial because by this point in the phrase, action pathways are already set up. Any desired change in the action phrase (or pattern) will have to return to this moment (and perhaps even to previous internal preparation) in order to repattern.

Any body part can initiate or begin movement. In looking at “style” in movement it is important to distinguish where the movement is initiated (for instance, Martha Graham’s dance style is characterized by movement initiated in the *Core* of the body, whereas ballet frequently begins its movement at the *Distal* end.) Terms such as “Core,” “Proximal,” “Mid-limb,” and “Distal” are generally used in LMA to refer to Initiation (as opposed

to “Central,” “Peripheral,” and “Transverse,” which refer to an individual’s approach to his/her Kinesphere).

Most of us are used to waiting for the results of action before we pay attention, i.e., seeing the football go through the goal post. But if a movement, such as a kick, is to be repatterned, we must begin to notice the first moment of movement. Then perhaps we will need to look back to the preparation phase to clarify what intent is energizing that action. In this way we can begin to deal with repatterning the phrase.

- **Main Action/Exertion**—The Main Action needs little explanation. It is the primary action most people notice and refer to when they speak about movement. For example, “He *kicked* the ball,” or “She did a beautiful *leap*” When we refer to the “Exertion” phase of the movement, generally we are also including the initiation moment along with the Main Action. For a thorough discussion of Exertion-Recuperation, see [Chapter 5](#).

- **Follow-through/Recuperation**—After the Main Action happens, there is generally a natural change of movement quality which allows the mover to recuperate from the exertion of that action. Often the movement continues to follow the same spatial trajectory and use the same Pattern of Total Body Connectivity that was set up in the Main Action, but the Effort Quality changes. This happens, for example, in a tennis serve. The pathway of the movement continues, but after the ball is hit, the active Strength releases and Flow takes over as the movement continues to sequence through the body Cross-Laterally. Sometimes, particularly in repetitive tasks such as hammering or typing rapidly, there is a minute rebound and change in movement quality after every contact with the nail or computer keys. In these cases, there is also a change in spatial pathway—generally a simple reversal (i.e., If the Main Action is downward to hit the keys, the Recuperation will be a brief instant of upward movement, generally with a change in Effort Quality as well—perhaps more Free Flow and less Directness).

When patterning or repatterning it is important to discover the individual’s own unique tendency to rebound or recuperate in Body, Effort, Shape, and Space. Confirming this will allow the individual to complete phases and continue into the next phrase without undue stress and exhaustion. Fulfilling the Follow-through or Recuperation moment facilitates movement vitality. For more discussion of Exertion-Recuperation see [Chapter 5](#).

- **Transition**—

I am moving in a particular direction... How do I change it?

I finish a speaking gesture... What happens before the next one?

I am round like a ball... Suddenly I am flat like a wall. What happened?

These moments of passage or change from one direction, shape, or state to another are called “transitions.” Transitions make possible the fluid linking of movement phrases.¹⁷ Sometimes the Transition is an internal “Preparation” (see preparation). Sometimes the “Transition” is an “upbeat” for a phrase, and sometimes it is a Follow-through into a brief recuperation from the Main Action exertion which may then become the upbeat to the next phrase. In any case, “Transition is an important definer of the *style* of the movement, because it defines what space is available to you and what your attitude is towards changing your environment. You can *never* correct movement from the middle of the movement. Look for the transition or the upbeat. At that point the body is already

distributed. That moment when you decide to change is the crucial one. After that it is too late.”¹⁸

**SEQUENCING—see KINETIC CHAINS, PHRASING, and
PRINCIPLE #11 in Chapter 5**

SPATIAL INTENT (see also “INTEND” and “SPATIAL PULL”)

In everyday movement as well as in dance athletics, **having in mind a clear purpose or aim in space will lead to more efficient movement.** All of us have probably experienced trudging up a flight of stairs, feeling an exasperated sense that our body just won’t make it. The next time you are in this situation use it as a chance to experiment with “Spatial Intent.” Sense the spatial pull “forward and up,” and make that your clear intent through your pelvis and out the top of your head. Then just begin moving. Your climb will seem much easier.

The above is an example in which the goal of the movement is to reach the top of the stairs. “Spatial Intent” helps to make that happen. Sometimes, especially in dance, our goal is actually to make visible “Spatial Intent” to reveal a purity of line in space. We want the audience to palpably sense in their own musculature the pull in space. (for instance, the forward-backward pull in the arabesque revealing the sagittal dimension, or the vertical pull of upness in an air moment or in a balance). This is particularly true in dances which depend on live patterned geometry for their expressive message (such as some of George Balanchine’s work—*Agon*, for example). In these dances a deviation or unclarity in the spatial intent will change the entire message of the piece.

In sports, the intent to really *go forward* with no deviation in up-down or side-side can make the difference in a track star who wins and one who doesn’t. Sports trainers who do computer analysis of Olympic track stars note that in runners who *win*, the center of weight travels steadily forward in an undeviating path. Of course, it is one thing to *notice* that in winners and quite another to *train* athletes to produce that action! When I questioned Gideon Ariel (a computer analyst who looks at Olympic track stars) about this, he replied, “Well, that is the coach’s job.” Laban Movement Analysts, such as Janet Hamburg, who are working with athletes, are finding that giving very specific information in the area of Spatial Intent (along with Effort, Body, and Shaping) can make a major change in the athletes ability to modify his or her own movement behavior. For instance, in training the runner to leave the blocks one might say, “Go purely forward from underneath your thigh. As your heel contacts the ground, continue to push sending your pelvis forward. Now *Go!* Forward, forward, forward.” **Spatial intent organizes the neuromuscular system.**

As Laban stated so beautifully in his introduction to *Choreutics*, “Space is a hidden feature of movement and movement is a visible aspect of space.” *We reveal space* whether we intend to or not. But if we choose to intentionally invest in space, we are rewarded richly. The clearer our spatial purpose (motivation), the more space will truly “partner” us. If our “Spatial Intent” is clear, countertensions in the body needed to support and

facilitate that intent will automatically happen. It is like the old saying, “The person who leads clearly in ballroom dancing has a partner who dances well!”

SPATIAL PULL (see also “*SPATIAL INTENT*” and *SPACE* in
Appendix-LMA)

Laban has said, “Empty space does not exist. On the contrary, space is a superabundance of simultaneous movements.”¹⁹ This view of space is supported by current findings in the field of physics. In this sense, space has its own liveliness and can be interacted with, like a partner. Also like a partner, space offers us pathways for expression of our energy, drawing us or pulling us towards a source. A “Spatial Pull,” then, is an invisible line of inherent power (potential energy) which can be revealed in movement. As we move we reveal space (see “Spatial Intent”).

Our world has three dimensions (Vertical, Sagittal, and Horizontal) in which form is revealed. Each of these dimensions has two directions, each direction is one pull. **The six most basic spatial pulls are those which relate to the end poles (directions) of the dimensional cross, the six cardinal directions: Up, Down, Forward, Backward, Side to the Right, Side to the Left.**

For instance, the vertical dimension has “up” (☶) as one pull and “down” (☷) as another; the sagittal has “forward” (☵) as one pull and “backward” (☲) as another; the horizontal has “right” (☱) as one pull and “left” (☴) as the other. Moving with a pure sense of “up-ness,” is, for instance, to be moving with *one spatial pull*, i.e., moving up in the dimensional cross. (See illustration of volleyball player moving predominantly upward on page 73.)

Movement in the cardinal planes²⁰ is movement which invests in *two spatial pulls* at the same time—for instance, up and left (☶☴) in the vertical plane. Each plane is like a flat cycle, or rectangle. These planes form the internal structure of the Icosahedron. (See illustrations on pages 225 and 227.) To experience just one plane do the following: Begin up-left and stay flat while moving as if tracing the edge of a door—to down-left, down-right, and up-right, then returning to up-left (☶☴☷☱☲☳) are now doing planar movement in the vertical plane.

Diagonal movement consists of *three equal spatial pulls*—for instance left, forward, and down (☷☵☴) or right, backward, and up (☶☲☱) (See illustration on page 226.) Diagonals form the internal structure of the Cube.

Transverse movement involves *three unequal spatial pulls constantly changing their proportional relationship* to each other. A general example is movement which is related to a three-dimensional spiral, such as the one illustrated on page 196. In making a spiral, one is always changing the vertical, sagittal, and horizontal components in a graduated proportionate way, cutting or sweeping through space. A much more specific example of transverse movement can be found and practiced in the Laban Space Harmony work—for instance, in what is called a “Three-Ring” traveling from up-left to forward low, to right back and returning to up-left (☶☴☵☱☲☳) see illustrations on pages 58 and 197.)²¹ Note that **the transverse movement is the movement that is happening between** the planar landmarks, not the landmarks which are illustrated. If all these words seem a bit confusing, I recommend that you *do* the movement and simply get a bodily experience of

sweeping or cutting through your own space in this very spatially dynamic way. It is almost like a carnival ride.

THREE DIMENSIONALITY-(3-DIMENSIONALITY)

(see also “**SPATIAL INTENT**” and “**SPATIAL PULL**”)

In one sense this term defines itself in a simple everyday meaning such as “having depth or thickness as well as width and height.”²² A human being is three-dimensional, a chair is three-dimensional, and so on.

A *movement* which is Three-Dimensional, however, brings in other important considerations. It is not enough for the human being who is moving to be a three-dimensional being. **The movement itself must create a plastic volume. In a more specific sense, it must be changing three spatial pulls constantly in a graded way.** Let’s also look at the following examples. If you stand with your right arm hanging down by your side and bring it in a straight path to directly above your shoulder joint (■ to ☒), you would not be doing Three-Dimensional movement in the specific Laban Space Harmony sense. You would be revealing one spatial pull, “upness” (doing a purely one-dimensional movement going from down to up). This is true even though at a joint level your elbow and shoulder joint have probably done something much more complex (including rotation at the global shoulder joint). A similar thing could be said about taking your arm from hanging down at your side to the right, forward, and up in a direct path (an arc ■ to ☒) ending in a diagonal. This diagonal reveals three spatial pulls, but I would *not* call it “Three-Dimensional movement” because the movement itself (the process of moving) wasn’t creating a volume—it was a flat arc. From this we can see that purely Dimensional, Planar, or Diagonal movement is not Three-Dimensional in that it is not moving a changing volume and creating plastic form in space. This means that a large percentage of our dance and sports movement is not really 3-dimensional (for instance, a ballet glissade traveling side, or cross-country skiing, or bicycling).

The implications of this are important, if you believe (as I do) that **moving Three-Dimensionally leads to more global and relational thinking.** I encourage you to look at the movement you do daily and notice if it is Three-Dimensional.





VERTICAL THROUGHNESS (THROUGHNESS OF THE VERTICAL)



Vertical is the major dimension of the human body. It is through this dimension that we confirm our relationship to gravity—that each of us takes our individual stand in relation to the earth. “Vertical Throughness” refers to a clarity of relationship to the vertical dimension through the center core of the body. There is a balance of body around the central axis. Bony structure is in dynamic relationship and the muscles around the joints are equally long and alive in their tone, thus leaving the central axis rushing upward like a fountain, or upward and downward in an alive countertension. When I perceive the “throughness of the vertical” in someone, I see a delight in opening a pathway of energy from the center of the earth through the body out to the sky, or bringing energy through

the core of the body and legs down into the earth. The person is the conduit between earth and heaven. The channel is open and clear, like an open tube. When I do not see “Throughness of the Vertical” in normal standing, I see deviations from the vertical, a lack of Core Support, bony structures are misaligned and there is extra tension in the musculature that is blocking clear patterning. Lack of Vertical Throughness can be addressed by work with Core Support and emphasizing connectivity from the legs through the head, emphasizing clarity of Spatial Intent.

WEIGHT SENSING 

When I am sensing the weight of my bones, muscles, and fluid elements within my body (such as the weight of my organs or even the weight of the fluid within every cell), I am **Weight Sensing**. It is almost like sensing the weight of a large, soft ball containing water. This is not a passive collapse of the structure, but a sense of the contents within the container having weight.

When I am “Weight Sensing,” I have a proprioceptive awareness of the fact that each limb and the torso is in relation to gravity, that it has weight. Obviously, from a viewpoint of physics each limb *always* has weight. But as a mover one is not always moving with a sensate *experience* of this fact. “Weight Sensing” brings the mover to a weighted body attunement—being feelingfully in touch with weight, alive to body sensation. “Weight sensing” () is not the same as a total collapse heavy () or limp (), but is rather a slightly more activated weight, generally facilitated by active Flow Effort as well (). For more about the Weight Effort, see Appendix-LMA.

Weight Sensing relates to the basic principle of “Grounding.”²³ It underlies the ability to “Yield & Push.” In fact, the “Yield” might be conceived as Free Flow Weight Sensing, out-pouring into the earth. Weight Sensing provides a supportive base for training in dance, Tai Chi, and other movement forms. Even the ability to be rhythmic resides in sensing of weight and using weight for emphasis in time in relation to an ongoing pulse. Students who have rhythmic problems generally are not in touch with the weight of their bodies and therefore cannot feel it in relation to sensing the passage of time. Conversely, someone who is highly rhythmic, such as the polyrhythmic dancers and musicians in West Africa (who have influenced American popular dance) and Middle European dancers (i.e., the Balkans) have their weight easily available for expression, with an underlying “Weight Sensing” that then moves into an *active* weight assertion in either strength or lightness ( or ).

Notes

1. Learning theorists such as Marilyn Adams of The Harvard “Project Intelligence”
2. Including Pam Schick, Martha Eddy, Janice Meaden, Ed Groff, Janis Pforsich, and Carol Hutchinson.
3. Tony Buzan describes Mind-Mapping in his book, *Use Both Sides of Your Brain*.
4. These are not really true mind-maps because I have not included all my very personal associations. I have limited my words to terms from Bartenieff Fundamentals and Laban Movement Analysis.

5. In Laban Movement Analysis we might also use the term “Body Attitude” in a more general way to include what is maintained or returned to as a baseline again and again in Effort, Shape, or Space as well as Body.
6. *Folksong Style and Culture* by Lomax, Bartenieff and Paulay.
7. Class notes, 10/28/67.
8. See [Chapters 6–12](#).
9. For more on Stability/Mobility, see [Chapter 5](#).
10. Some practitioners might use the term “Countershaping” when describing Countertension, using words from the Shape category rather than using words from the Space category.
11. I am speaking here of an active relationship—sensing the weight of those fluid elements within us, almost like sensing the weight of a large, soft ball containing water. This is not a passive collapse of the structure, but a sense of the contents within the container having weight.
12. An overview of the “Basic Six” exercise frequently used by Irmgard Bartenieff is contained in the appendix to her book, *Body Movement: Coping with the Environment*, Gordon & Breach, 1980.
13. The exercise in [Chapter 7](#) entitled “Hang and Hollow” and the “Streams” image might be helpful for locating this sensation.
14. For more discussion of this concept, including movement examples, see [Chapters 10 and 11](#).
15. For instance, a chain reaction happens from the foot through to the spine as we walk. Movement sequences from the Heel through the foot to the Midtarsal to Subtalar to Ankle to Knee to Hip to Pelvis to Lumosacral to Thoracolumbar junction (and from there out to the opposite arm).
16. See [Chapter 5](#) for more information about the principle of working in whole phrases.
17. Bonnie Bainbridge Cohen locates support for this at a cellular level. She refers to “transitional fluids” which move across the cell membrane between the fluid inside the cell and the ocean of interstitial fluid outside of the cell membrane.
18. Irmgard Bartenieff, Class notes, 3/23/68.
19. Laban, *Choreutics*, MacDonal and Evans, London, 1966, p. 3.
20. The three cardinal planes are sometimes called the “dimensional planes” by Laban Movement Analysts. Movement in these “dimensional planes” (which form the internal structure of the Icosahedron) consists of moving with two unequal spatial pulls. The plane is named for the spatial pull which is emphasized. For instance, in the Icosahedron, the Vertical Plane emphasizes spatial pulls in the up-down dimension, with secondary pulls side-side. For a bit more on Space, see Appendix-LMA.
21. This ring happens in the Icosahedron. In it the mover begins by going from up-left (↖) to forward and down (↓). In this specific transversal the greatest change is in the vertical aspect, second greatest is in the sagittal, and least changing is in the horizontal element. This is called a “Steep” transversal. As the mover continues to travel to right-back (↗), the three spatial pulls are again unequal, but have changed their relationship (i.e., the greatest change is in the sagittal, the second greatest in the horizontal, and the least in the vertical—called a “Suspended” transversal). As the mover goes from right-back (↗) to up-left (↖) to complete the ring, the greatest change is in the horizontal element, the second greatest is in the vertical, and the least is in the sagittal—called a “Flat” transversal. This is yet a different proportional relationship.
22. *Webster’s*.
23. For more discussion of Grounding, see [Chapter 5](#).

REFERENCES and RELATED MATERIALS

- Bartenieff, Irmgard, *Body/Space/Effort: The Art of Body Movement as a Key to Perception*, unpublished manuscript, 1979.
- Bartenieff, Irmgard, with Dori Lewis, *Body Movement: Coping with the Environment*, Gordon and Breach Science Publishers, New York, 1980.
- Buzan, Tony, *Use Both Sides of Your Brain*, E.P.Dutton, New York, 1983.
- Berman, Morris, *The Reenchantment of the World*, Cornell University Press, Ithaca, 1981.
- Berman, Morris, *Coming To Our Senses: Body and Spirit in the Hidden History of the West*, Simon and Schuster, N.Y., 1989.
- Cohen, Bonnie Bainbridge, *Sensing, Feeling, and Action*, Contact Editions, Northampton, MA, 1993.
- Cohen, Bonnie Bainbridge, *The Evolutionary Origins of Movement*, unpublished manuscript, 1991.
- Hackney, Peggy, *SHAPE: What's Shaping Up?* a paper presented at the 1993 Eurolab Conference, Berlin, Germany, available from the author.
- Hartley, Linda, *Wisdom of the Body Moving: An Introduction to Body-Mind Centering*, North Atlantic Books, Berkeley, 1995.
- Johnston, Charles M., *The Creative Imperative: A Four-Dimensional Theory of Human Growth and Planetary Evolution*, Celestial Arts, Berkeley, 1984,
- Johnston, Charles M., *Necessary Wisdom: Meeting the Challenge of a New Cultural Maturity*, ICD Press, Seattle, in association with Celestial Arts, Berkeley, 1991.
- Johnston, Charles, M., *Pattern & Reality: A Brief Introduction to Creative Systems Theory*, ICD Press, Seattle, 1994.
- Kapandji, I.A., *The Physiology of the Joints*, Churchill Livingstone, Edinburgh, London and New York, 1974.
- Knott, Margaret and Voss, Dorothy E., *Proprioceptive Neuromuscular Facilitation: Patterns and Techniques*, Hoeber Medical Division, Harper & Row, N.Y., 1968.
- Laban, Rudolf, *A Vision of Dynamic Space*, The Falmer Press, Philadelphia, PA, 1984.
- Laban, Rudolf, *Choreutics*, MacDonald and Evans, London, 1966. This book is also called *The Language of Movement: A Guidebook to Choreutics*, Annotated and edited by Lisa Ullmann, Plays, Inc., Boston, 1976.
- Laban, Rudolf, *The Mastery of Movement*, MacDonald and Evans Limited, 1975 edition.
- McMinn and Hutchings, *A Color Atlas of Human Anatomy*, Wolfe Medical Publications, Ltd., London, 1977.
- Muybridge, *The Human Figure in Motion*, Bonanza Books, New York, 1989.
- Pansky and House, *Review of Gross Anatomy*, Macmillan Publishing Co., Inc., New York, 1975.
- Random House College Dictionary*, Random House, N.Y., 1988.
- Rolf, Ida, *Rolfing: The Integration of Human Structures*, Dennis-Landman, Santa Monica, CA, 1977.
- Todd, Mable Elsworth, *The Balancing of Forces in the Human Being: Its Application to Postural Patterns*, printed privately by the author, New York, 1929.
- Todd, Mable Elsworth, *The Thinking Body: A Study of the Balancing Forces of Dynamic Man*, Dance Horizons, Brooklyn, 1968.
- Webster's New World Dictionary of the American Language*, Warner Books, New York, 1984.

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