

## ACCESSING THE POWER OF THE GROUND

# ASTON- PATTERNING®

By Laura Servid, OTR/L  
Certified Aston-Patterning Practitioner

**T**here was a time when it seemed that what was really needed in my occupational therapy world was a course in "self-defense against gravity." Gravity kept clients from being able to rise easily from chairs. It made it so difficult to lift a weak arm or leg. For those clients with low back pain, lifting objects against gravity was a challenge, at best, if not out of the question. Just sitting up straight in a chair seemed to be hard work. And gravity pulls on the tissues and compresses the joints of the average-aging-body, seemingly accelerating the aging process. If we could just find a way to overcome this compressive force, all would be well.

When I mentioned the idea to Judith Aston back in 1989, her response took me completely by surprise. To speak of "self-defense against gravity," she said, sounded like gravity was the enemy. She had always considered gravity a friend. My mind was boggled. This was a 180-degree turn-about from my thinking. How could this pervasive, compressive force be considered a friend?

The extent to which gravity can be a friend, and a very powerful one, is incredible. The attraction between two masses — our bodies and the ground — is the gravitational force with which we are most familiar. The equal and opposite action, Newton's third law, the "other side" of gravity, is ground reaction force (GRF). This force is less

familiar, yet just as significant. Together, these create a wave of energy that can enhance our movement on the earth, making any function simultaneously less difficult and gentler on our bodies. It is an amazing power. Aston-Patterning teaches us how to access this power and use it easily in our everyday function.

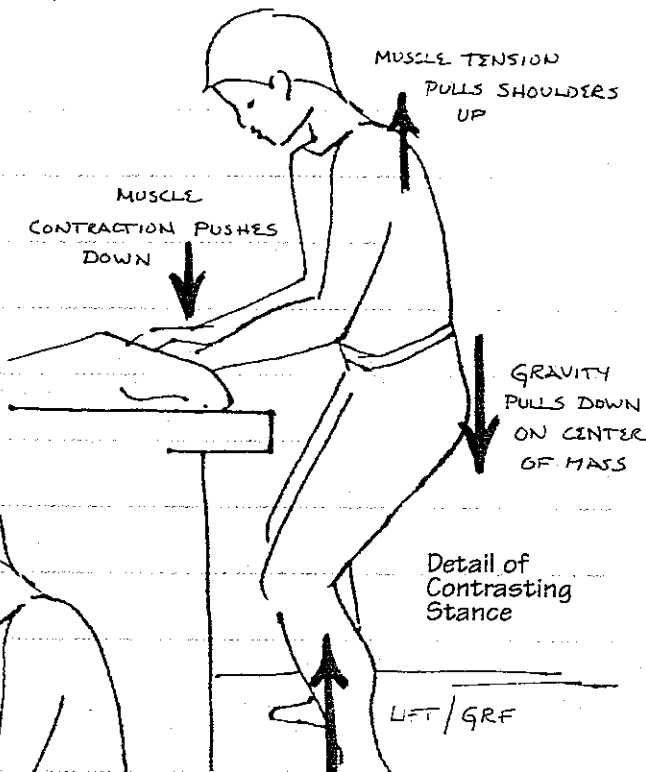
Aston-Patterning combines alignment and movement precisely and accurately, offering anybody greater ease of function. It begins with a systematic way to see the body and its segments in relation to each other and the

*Without a doubt, Aston-Patterning has given me the best array of tools to help empower people in their day-to-day function.*

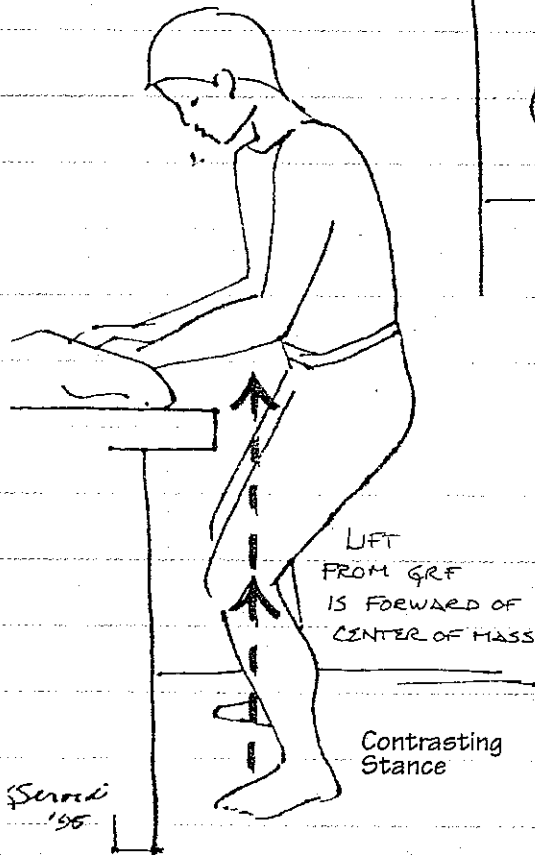
ground. This pattern of vision reveals the cause of many of the chronic aches and pains with which we are confronted as therapists. Acting as a conduit for the energies of gravity and GRF, the body requires a flow of movement through the segments, joints and tissues to sustain its dynamic state. In places where this flow is inter-

rupted by a change in angles, force vectors, or tensions counterbalancing one another, there is a disruption of the movement. This disruption often means tension, lack of movement or a kind of stillness. One of the truisms of Aston-Patterning is that, where stillness meets motion, there is a stress point. These stress points are often places of pain or discomfort. Once we learn to see the body in its stationary balance and in motion with an eye toward the shifts in its alignment and dimension, we begin to understand where the force of gravity necessitates tension to keep the upright posture, and where the ground force is blocked from effectively pushing up through its structure to unweight it.

Another component of Aston-Patterning is the unraveling of unnecessary tensions in an in-



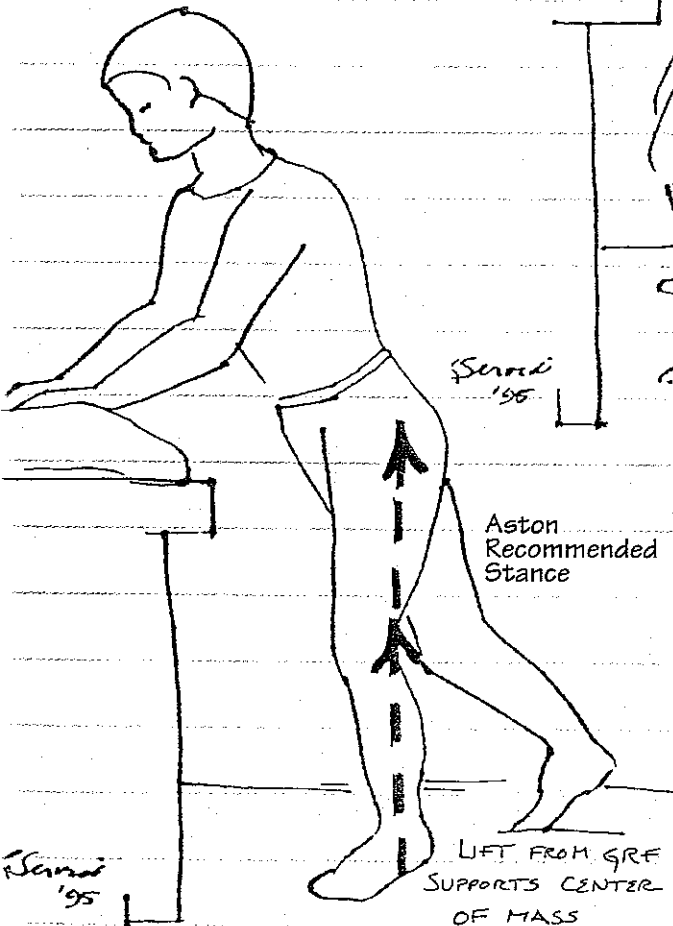
visually specific sequence so that the body is allowed to be in its best three-dimensional shape. The Aston classes teach massage and myofascial release in a form that is unique to this work. Practitioners learn to use gravity and GRF through their own bodies to make their work more effective. Once in the flow of the earth's energies, the client's body is felt more



clearly, revealing tissue grain and direction. (Refer to illustrations of contrasting body work styles.) The careful combination of body usage and accurate touch produce a bodywork that is comfortable both for the client and practitioner, with unbelievable effectiveness in its subtlety. Over and over, clients comment that they can't believe that so little force can make so much change.

The optimal three-dimensional shape uncovered with the release of tension patterns is characterized by several factors. First, the parts are arranged so that segments are

*continued on next page*



continued from previous page

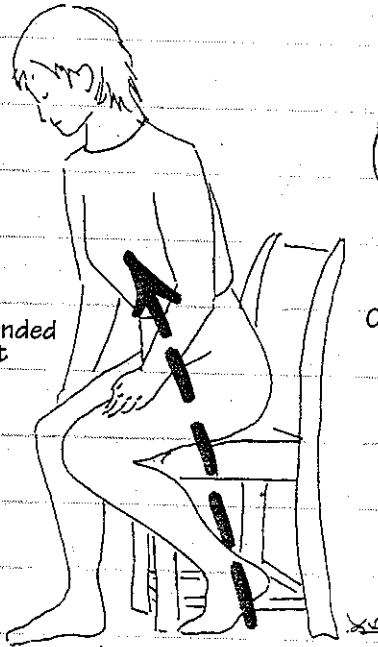
aligned well. This means the joint surfaces contact each other, fully creating an open aperture for movement to occur

push off the ground. Because of gravity's equal and opposite reaction, pushing into the ground with accurate weight bearing through the joints produces an upward energy that lifts

the body through space with minimal effort. (Refer to illustration of force direction.) It is as if we can rebound and bounce up. At the top of this "up," there is a moment of suspension, just a split second of unweight, which allows one to feel an instant of freedom and expansion prior to yielding to gravity and returning for the next push. This is the "hang time" we see in an athletic performance at the peak of a jump. This lift, this up, this energizing way of accessing ground force and experiencing the suspension, is one of the things that makes Aston-Patterning so unique and such a gift to share with clients.

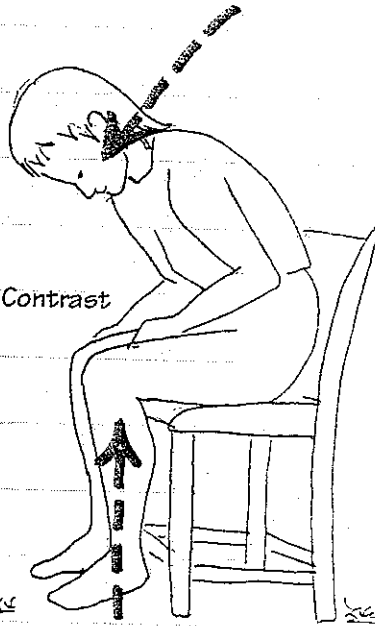
The advantages of this type of movement are fairly extensive. From the muscle spindle to the Golgi tendon organs, proprioceptive input that monitors our movement is depen-

Aston Recommended Movement



MOMENTUM AND GRF WORK COOPERATIVELY TO LIFT THE BODY

Contrast

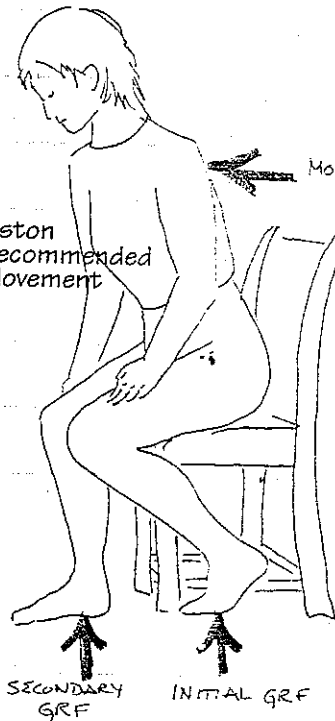


MOMENTUM AND GRF WORK IN OPPOSITION

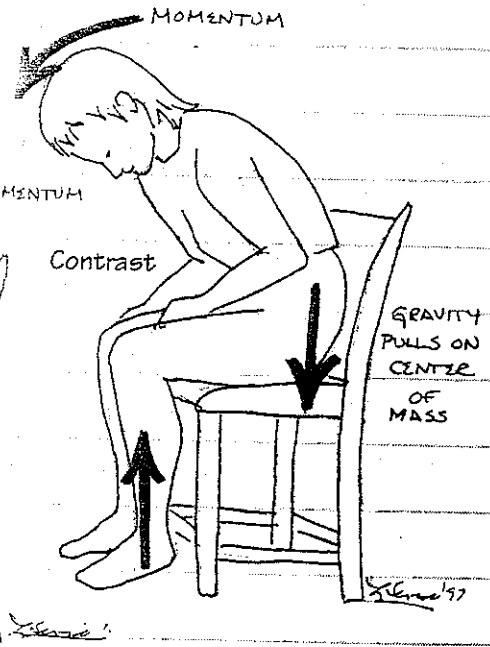
between segments. Second, the optimal shape creates a balanced structure that requires less tension to sustain its position in space. And when the tension is relatively even throughout the body, the work can be distributed and all parts can move cooperatively. The balance of our elaborate structure in an upright position is truly a work of art, one in continual progress. We are constantly in motion, be it a breath, a heartbeat, a shift in position or a run. The well-aligned body, by virtue of its decreased tension, is poised for easy movement at any moment. It is through refining alignment, balancing tensions, and step-by-step movement education that the Aston work sets the stage for the body to take advantage of the flow of forces using gravity and GRF.

Allowing the balanced structure to settle into the ground with the assistance of gravity creates the opportunity to

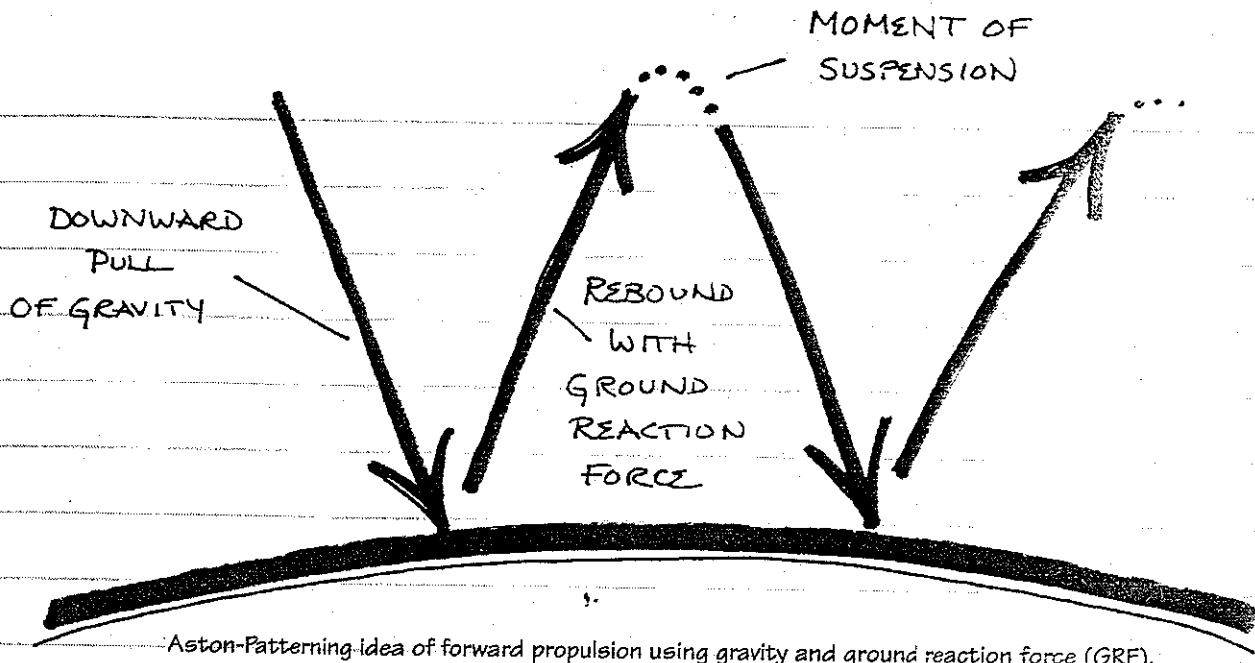
Aston Recommended Movement



Contrast



depend on the degree of tension. Muscles and tendons that are neither shortened nor overstretched can operate with optimal resilience. Joints that are accurately aligned prevent



Aston-Patterning-idea of forward propulsion using gravity and ground reaction force (GRF).

uneven wear and tear over their surfaces. The gravitational force can be used to set the body in motion with minimal effort. GRF assists the push off and propulsion through space. In addition, that moment of suspension allows momentary expansion. These actions combine to set up a resilient pumping action through the tissues, which facilitates fluid exchange necessary to keep the whole system healthy. The bottom line function is enhanced and more efficient.

One of my clients has a congenital anomaly that left her without a hip socket on one side and a small hemipelvis. She had to have a chair with arms because otherwise she couldn't stand up. She had numerous surgeries, the latest of which was a total hip replacement. However, one leg remains shorter than the other. She has severe pain in her thoracic spine, and her job

**The extent to which gravity can be a friend, and a very powerful one, is incredible.**

requires sitting bent forward at a desk. A thin pad placed under the smaller hip allowed her to bear her weight more equally. She then learned to find a neutral sitting posture, pushing off the seat through both ischial tuberosities and supporting her spine in a more comfortable way of sitting. Using this new alignment and hinging from the hip joint rather than bending at the waist, she could get her center of gravity over her feet. She was then ready to switch from the "nose over toes" method of getting up to one in which gravity and GRF assisted her. Using her

stronger leg to push into the ground, she rose without using her hands at all, and with so little effort that she surprised herself. Not only that, she felt graceful. A seemingly small change in movement made a large difference in function.

Another client with continuous back pain from a motor vehicle accident despite a year of therapy also found Aston-Patterning extremely useful. Through seeing and palpation, it was clear that her spine had tension to compensate for the

obliquity of her pelvis, and that the position of the pelvis was largely controlled by the tension of her right hip. These relationships matched the forces incurred in the accident, in which her right foot was on the brake when she was rear-ended and pushed into the car in front of her. The leg extended against the pedal, and the pelvis, secured by the seat belt during impact, created a

strong compression through the hip joint, which was held in the tissue. Restoring more balanced tension through the hips and legs allowed mobility of the spine and a release of stored tensions. Using the more accurate alignment with a push off the ground, she has regained a fluidity in her movement that is less painful and allows her to resume her artistic endeavors with an energy and enthusiasm previously diminished by pain.

Perhaps most exciting in my experience with this work is

*continued on page 28*

## ASTON

*continued from page 21*

its connection with neurology. Years of rehabilitation experience using traditional techniques offered fair success, limited by spasticity and abnormal movement patterns. From a neurological standpoint, our bodies seem to respond extremely well to the Aston work.

One example is a 33-year-old woman with spastic diplegia and degenerative disk disease in the lumbar spine, who walked short distances (about a block) with the assistance of two Loftstrand crutches. She spent about one day a week in bed with pain so severe that it made weight bearing impossible. Her life was controlled by spasticity and pain. Working to unwind her tension patterns slowly was very helpful, but her success came from learning to unweight her spine and change the spasticity in her legs by pushing off the ground with more accurate alignment. She first learned alignment in sitting, again pushing into the seat with the ischial tuberosities and into the floor with her feet to ease the compression in her low back. The lengthening through the spine using GRF offered great relief from back pain. She gradually came to have this ability in standing, first with more control on one leg, then the other, and then learning to bridge between her alignment on her left and right sides. She transitioned through a series of orthotics that had to be changed as she changed, but were very helpful. She now uses just one crutch for balance, walking up to 10 city blocks without a problem. Her back pain is minimal.

And perhaps more promising in terms of her long-term function is the improvement in her proprioceptive and kinesthetic senses, which resulted in more feeling

and control of her legs than she has ever had in her life. Getting in touch with the ground has allowed both neurological and musculoskeletal gains, not only greatly increasing her function, but offering an unexpected hopefulness to her life.

Twenty-one years in the OT field has allowed me the opportunity to work with a wide range of clientele and problems. We are always working together to improve function and make their daily living experiences as accessible and fulfilling as possible. Without a doubt, Aston-Patterning has given me the best array of tools to help empower people in their day-to-day function, regardless of what it is they want to do. Its fundamental concepts allow an extraordinary scope of application to improve functional performance on all levels. In my experience, the training surpasses any other method in its comprehensive understanding of each person as a whole entity of body, mind and life expression. The bodywork and movement education combine to create the true gift, accessing the power of the ground that is there for all of us, all the time.

— *Laura Servid, OTR/L, has worked as an occupational therapist in inpatient and outpatient hospital settings. She has extensive experience in stroke rehab and hand therapy. She developed a functional movement training program for back pain clients, and more recently is co-teaching a treatment program for repetitive strain injuries. She began taking classes in Aston-Patterning in 1989 and completed the certification program in January 1995. She has done consulting work in office ergonomics and in industry with product development. Currently, she has a private practice using the Aston work.*

For more information contact The Upledger Institute, 1121 Prosperity Farms Road, Suite D-325, Palm Beach Gardens, FL 33410, 1-800-233-5880, ext. 9392.

## Your Swing

*continued from page 27*

and NovaCare clinical operations director, who is responsible for bringing BACKtoGOLF to Columbus, Ohio. Dipman also organizes the certification and training sessions for therapists interested in being part of the BACKtoGOLF program.

Some of the highlights of the clinic include: a biomechanical golf evaluation; treatment, prevention and rehabilitation program management; golf-specific exercises; golf swing analysis; and golf swing enhancement with instruction and coaching.

BACKtoGOLF clinics use The Coach™, a David Leadbetter product, to achieve a "stabilized spine golf swing." The Coach helps strengthen golf-specific muscles. "We can tell which tissues or muscles are restricting [clients] in their golf swing, or if they are actually doing something biomechanically wrong," Dipman said. "Golf can be pretty stressful to the back if you don't have the right type of swing."

Following one to two treatment sessions with a physical therapist and a PGA/LPGA professional, a golfer can anticipate a significant change, depending on his or her swing and the condition of the golfer.

The clinics are individualized. "It's a hands-on approach," Dipman said. "We don't just give [clients] exercises...to do at home or in a clinic. If we pick up that they have tightness or restriction, we do joint mobilization and soft tissue work to speed up getting flexibility, which gives them the ability to really turn and have more power."

There are 60 BACKtoGOLF clinics nationwide that treat 75 to 100 patients annually. "It's grown across the country," Dipman said.

— *Physical therapists interested in certification and training sessions can call BACKtoGOLF toll free at 888-228-6453.*

S P O R T S I S S U E

July 21, 1997

Vol. 5, No. 29

# PT & OT

t o d a y

*the nation's contemporary newsmagazine for physical and occupational therapy*



## Overcoming Disabilities

Using Gravity's Pull