

DOWN TO EARTH

By Michael Protzel

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When I first came to the Alexander Technique twenty years ago at age thirty, I was a mess. I had endured a lifetime of knee, hip and back problems that were getting progressively worse. The Alexander Technique basically saved my life. But even so, after two years as a pupil, four years as a trainee and five years as a teacher, there was still an important piece of my misuse puzzle that was totally out of my awareness, thus out of my ability to change.

I discovered this missing link through my Qigong practice. I learned that not only did I have a near-dysfunctional left ankle, but that it had been this way since my early childhood.

More importantly, I learned that the dysfunctional ankle wasn't the core problem. The core problem was more general, organizational. It involved my subconscious interference with the gravity-compelled fall of my body weight.

I have since learned that this problem is not unique to me (though in my case it was extreme). It is a problem we all share. And it has a profound impact on our balancing and on our overall use.

MISCONCEPTION AND MISDIRECTION

It is common for us to think that we balance on the soles of our feet. This idea is a source of confusion, a source of misuse. Although we bear weight on the soles of our feet, we actually find balance on the talus, the top foot bone. Being a rather small surface area on which to balance our entire body weight, this is a precarious perch. To keep us moving *up* atop this perch, the gravity-compelled fall of our body weight must be accurate.

Accuracy — and with it, optimal balancing — requires that body mass fall straight down onto the talus (or, another way of putting it, through the center of the ankle, the tibia/talus joint) as much as is feasible given the particular upright position we are assuming in any moment (i.e. given how much of our weight is actually above either ankle joint).

What makes accuracy difficult is that our body weight does not *automatically* fall straight down through the ankle. Whereas 'dead weight' falls straight down absent impetus from outside, alive bodies always have an inside impetus — what I call our 'downward direction.' Whether conscious or subconscious, our downward direction determines the trajectory of our downward fall — and profoundly impacts how we sustain uprightness.

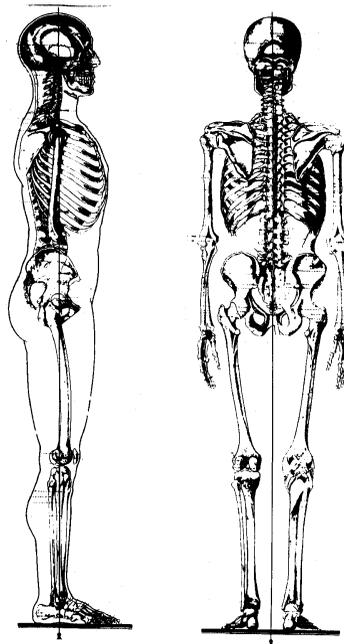
Our downward direction is within our control. But it is hard to observe in oneself. The downward direction we each are comfortable with is, by definition, habitual. As such, faulty sensory appreciation is at play. We can easily misdirect body mass off-center without being aware of it.

Although it is difficult to recognize our *habitual* downward direction, we can understand the impact of downward direction generally through the following simple exercise: stand with feet parallel, shoulder width apart; draw an imaginary circle around you with the center of the circle between your feet, and with the

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edge of the circle extending out laterally past your feet; let your weight move toward any point on the edge of the circle; really send it; then slowly send it around the full circle; notice how the support-response changes as your downward direction changes.

If our legs were stilts (i.e. with no joints), any downward misdirection would be obvious. We'd topple over in an instant. But the existence of hip, knee and ankle joints — each with related muscles and ligaments that can move us or keep us from moving to counter any downward misdirection — creates room for error; error we would just as soon recognize and avoid.



ORIGINS OF MISUSE — FAULTY SENSORY APPRECIATION

Having spent the first year or two of our young lives devoting much of our attention to our kinesthesia, we have become expert in managing motor coordination. Toddlers know about neck free, head forward and up, back lengthening and widening. Toddlers also know about allowing their body weight to fall accurately through the ankles. You never see a toddler with locked knees or with one leg supporting full body weight. Toddlers at play, squatting effortlessly, display free hip, knee and ankle joints, with foot reflexes working to the max.

As we leave our toddler years, however, we give less and less attention to our kinesthesia. Our coordination declines. We take for granted our abilities learned as toddlers, such as standing. We lose awareness of the connection between our directing down accurately and the ability to stand with minimal effort. We start to stray off center. We lose balance. But we never fall over. Other means of sustaining uprightness begin to supplant the means that we inherited, and employed as toddlers.

As a father of two daughters, ages 11 and 14, I've had many opportunities to

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observe children standing about before and after school. *None* of them stand with ankles, knees and hips free and with body weight supported by both legs equally. All of them are falling off balance in a big way — either with hips thrust forward and an arched back, or falling off to the side standing predominantly on one leg, or with weight way back on the backs of the heels, or leaning against a wall, or in some other subconsciously guided variant.

This is a big problem. It is a problem because these make-shift means of support manifest automatically, out of our awareness. As we unwittingly direct ourselves off balance and start to fall, we react. We tense neck muscles to keep the head straight. We lock ankle, knee and/or hip joints, to brace against the fall and to compensate for the loss of reflex power so vital to our uprightness. These responses evolve into habit patterns — our own ready answer to our downward misdirection. They become our everyday means of keeping ourselves upright and, as such, are part of what T.D. M. Roberts called “anticipatory preemptive activity.” They anticipate our downward misdirection. And they preempt to one degree or another the reflex response that would be triggered upon a more accurate downward direction. Even as our misdirection gradually gets worse over time and we need to increase our bracing, the familiarity of our compensatory habit patterns keeps us unaware.

FOOT REFLEX ACTION

Tremendous energy is created when our falling body mass meets earth. This energy provides power that we can use to our advantage. But we can also deny ourselves this power.

Just standing upright demonstrates our ability to dynamically re-direct our downward moving body weight back up again. How do we do it? Several metaphors come to mind.

A rubber ball thrown down to the ground bounces back up. Something akin to rubberness resides in our neuro-muscular-skeletal system. Gravity throws us down. Our bounce back starts at the foot. The foot responds reflexively to mass coming down into it. Powerful muscular actions arch the foot — jump starting our extensor system.

This arch rises like an ocean wave, carrying with it everything on top, through each joint in sequence.

This sequenced wave reaction is like the action of a whip. Just as snapping the wrist powers through to the tip of the whip, the energy of our falling body mass snaps into muscular action that powers up through the ankle, leg, and torso to the top of the head.

The reflex system of the ankle/foot is like a coiled spring, a narrow and powerful one. It responds when force comes into it. The strength of response depends on the strength of the force. More force coming in generates a greater reflex response. Less force coming in generates a lesser reflex response.

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DOWNWARD MISDIRECTION - A DOUBLE WHAMMY

Whammy 1. When we do not sustain accurate downward direction (when the fall of our body weight bypasses the center of the ankle, in any direction) we lose to some degree our foot reflex power that enables full upright extension with a minimum of effort.

Whammy 2. To add insult to injury, our downward misdirection literally throws us off center, off balance. As a result, we must brace at ankles, knees and/or hips to hold us up. Bracing is hard work. It consumes energy and places a tremendous strain on the joints.

MEANSWHEREBY

Our downward misdirection puts us in a bind — caught in a contradiction of intentions. On the one hand, we have our inherent will to be upright. Quite powerful. On the other, we give subconscious consent to falling off center, off our balancing point. These intentions have real consequences in the corporeal world. Bones fall, literally. But our will to be upright is dominant. Falling bones are held up by a straining muscles — muscles that are designed to be doing something else. Freedom of movement is compromised. The system is stressed. While we commonly think we are standing ‘up’, I suggest that we are actually falling ‘down’ — off the pedestal that is the talus — and that we are unwittingly covering it up.

Upon conceptually understanding the ‘double whammy’ of the downward misdirection syndrome - the loss of foot reflex power and the bracing needed to hold us up - and the fact that this syndrome is part of a habit structure established early in life and thus obscured by faulty sensory appreciation, how do we proceed?

There are three basic things to do on a regular basis to substantially reverse this downward misdirection syndrome. Obviously, the solution does not lie in muscular effort. Undue muscular effort, triggered subconsciously, is part of the problem. We are already doing this in bracing to counter our inaccurate downward fall.

1. Get To Know The Talus As Our Balancing Point. Remember, as often as possible, that we balance on the talus, not on the soles of the feet. Get to intimately know where the talus is in relation to the rest of the foot, from both the front-to-back perspective (a couple of inches in front of the heel) and the side-to-side perspective (on the medial side of the foot). The talus is not in direct contact with the floor.



2. Ask That Our Body Weight Fall Into Each Talus. Walter Carrington has referred to giving direction as a kind of “wishing.” It is very important to wish that

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our body weight ‘feed’ the talus, where we have the means of extension. It is specifically there that we trigger foot/ankle ligaments and muscles which start our ascent upwards. If we are subconsciously sending our weight downward to some other point, we are sending it to a place where there are no means of extension (thus necessitating the extra work of leg and hip muscles both to pull us back to center and to lever us upwards.)

3. Notice The Bracing. Locked ankles and knees are the most obvious signs of downward misdirection. We lock the ankles, knees and/or hips (harder to see) to provide stability. We would not be concerned with stability if we were shooting up off the talus like Jack’s beanstalk. We lock our joints because we are not *going up*. We are being *held up*.

Just as bracing head/neck by overworking certain neck muscles takes away the opportunity for a dynamic balancing of the head by the suboccipitals, bracing the hips, knees or ankles by overworking certain leg muscles takes away the opportunity for a more dynamic balancing achieved through maximizing the reflex activity of the deep muscles and ligaments of the foot/ankle. With joints free, and with accurate downward directing, we get maximum foot reflex action which most efficiently supports our uprightness — leaving ankle, knee, and hip joints fully available for movement.

A Familiar Instance of Downward Misdirection

Imagine a person with feet comfortably apart on a flat surface such that the ankle joints are directly below (i.e. in the same sagittal plane) as the hip joint. Now imagine the very common, habitual practice that we all share of standing with one of our legs bearing virtually all of our weight (say the left leg in this example). If you could observe the actual movement from two-legged support to this one-legged support, you would clearly notice that the vertical line between the ankle and the hip joint (which was originally 90 degrees in relation to the ground) has now become roughly 75 degrees. What do you think kept this angle from being 45 degrees? Or kept the person from continuing the fall all the way down on the ground? Of course, it was the bracing in the left leg. If the bracing is at the ankle joint, the misdirection is caught sooner and there is less apparent movement. If the ankle is not braced, the knee is called on next to brace, then the hip.

The important point here is that the misdirection is largely obscured by the bracing which holds us up and which pretty much keeps us over our feet. If you can approximate where the left hip joint would hit the ground if there was no bracing and the fall was allowed to proceed, you have an idea of what I mean by *downward misdirection*. Try it out on yourself.

‘Oscillating Around A Central Point’

I have often heard the act of balancing described as ‘oscillating around a central point’ or involving a gentle ‘sway.’ From my perspective, although oscillating may be a means of *establishing equilibrium*, it is not a means of efficient *balancing*. There is a difference.

Imagine a brand new yellow pencil standing on its eraser, balanced independently on its central point. We tie a string to the top. Holding the string a few inches above the top of the pencil, we move our hand in a circular motion so that the pencil is no longer resting squarely on its eraser but is slightly on edge, moving ‘around’ its central point. In doing this, it is the effort of the fingers and

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wrist that moves the pencil and keeps it from falling. If, at any moment, as we are moving the pencil around its central point, we were to let go of the string (i.e. of the tension we are using to hold the string and support the pencil), the pencil would fall over.

Likewise, it requires undue tension to support ourselves via oscillating around a central point. We must brace at ankles, knees and/or hips to regulate the movement so as to ensure we do not go too far off center in any one direction. This effort is not necessary, and thus constitutes a misuse.

I am in no way suggesting that we need to remain in a centered, vertical position all the time. My ideas about balance speak more to the issue of habituality than to the issue of position. Any position is OK. Walking in the woods on uneven terrain will naturally throw us off center, as will standing on a moving subway car. In these situations, the ability to adjust our balance through bracing is adaptive. Expressing oneself through dance can take us into an infinite variety of shapes. This is fine. The fact is, some positions simply demand more muscular effort to sustain than other positions. The important thing is to be conscious of what we are doing and of the demands we are placing on our bodies. If we are standing in an elevator, on a firm, flat surface, where artistic expression is not an issue, we'd like to expend the least amount of effort. Our subconscious habits interfere.

Even downward misdirection is OK. It is not *wrong*. It simply establishes a condition of imbalance that requires additional muscular activity in order to sustain equilibrium.

Regardless of position, our ankles are where our base support is. If we unknowingly direct body weight away from them, we diminish the quality of our base support and must compensate somehow. Invariably, this will be less efficient.

A Whole Lotta Shakin' Goin' On

In my work on myself, I have recently discovered that when I give up reliance on my habitual means of bracing for support, and direct down accurately, I allow for the emergence of a new means whereby of sustaining uprightness. Interestingly, this new means includes, at least for now, a marked Parkinsons-like trembling of my legs.

I can consciously stop this trembling in an instant. I simply go back to my very familiar way of locking myself in place. But when I inhibit the locking, I circumvent habit. Something in the system then goes haywire. Either the muscles that are used to bracing but are now getting a new message to not-brace, are, in their confusion, firing and then stopping and then firing and then stopping, ad infinitum; or maybe foot/ankle muscles, that are not used to working but are now compelled to do so, are struggling to get the hang of it. Maybe a bit of both. I am not sure.

This new means whereby is not about taking direct action to make certain muscles work in a certain way. Change happens indirectly, through inhibition and direction. What I am consciously doing is to remove the conditions of downward misdirecting and of bracing that have allowed important foot/ankle muscles and ligaments to atrophy. This creates a new condition that more fully activates foot/ankle reflex action which in turn produces more efficient and effective extension of the whole body beginning at the ankle.

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I should mention that the shaking happens in *both* legs — in what I think of as my ‘strong’ right leg as well as the ‘weak’ left one. This indicates to me that what I had labelled as ‘strength’ in my right leg was nothing of the sort. Muscular development that is the result of chronic, subconsciously-controlled bracing at ankle, knee and/or hip joints should not be confused with strength. I have discovered that underneath the bracing, the muscles and ligaments that are part of the foot reflex response have been as under-engaged in my supposedly strong right ankle (and actually harder to get working again) as in my supposedly weak left ankle.

Right/Left Flexion/Extension Cycle

Balance is not still. Our ankles need to be alive with movement all the time, even when we are seemingly standing still. While it may be theoretically possible for the ankles to be absolutely still and yet be free, my experience tells me otherwise — that still ankles are braced ankles, and indicate that we achieve uprightness at least in part by locking ourselves in place, which keeps us from straying too far off center.

We'd like to eliminate the subconscious meanswhereby of locking ourselves in place, and restore our inherent meanswhereby of buoyancy. This buoyancy involves the feet - with their powerful arching capacity - functioning as little trampolines, providing a small bounce that lifts (extends) the whole body from the ankle. When we come down again (flexion), the trampoline is waiting to bounce us back up.

Flexing and extending are what ankles do. Continuous flexing and extending is vital to efficient uprightness. If ankles are not in the process of either extending or flexing (and just a tiny bit is needed), they are mis-functioning. Just as holding the breath interferes with the inspiration/expiration cycle, weakens the diaphragm and limits the amount of oxygen in the bloodstream, still ankles interfere with the flexion/extension cycle, stifle foot reflex activity and limit the energy that these reflexes create and transmit. (Flexion/extension of the ankle is not to be confused with the foot movement that occurs in ‘oscillating around a central point,’ where the movement happens at the joints of the smaller foot bones beneath the talus which shift to accommodate our oscillating body mass. In oscillating, there is no flexion/extension of the ankle, the tibia-talus joint.)

Position of Mechanical Advantage - aka Monkey

Becoming aware over the past several years of my downward misdirection and its impact on my foot reflexes and balance, has given me a new perspective on Monkey and what makes it so effective. First and foremost, it takes us out of our habitual way of standing. Since our habit invariably involves some degree of misdirection and of bracing to prevent a fall, being taken out of it is no small thing.

In Monkey, we free our ankle joints (knees and hips too) to allow movement. This is key. Freeing the ankle allows a greater reflex response in the deep ligaments and muscles of the foot and ankle — especially so in Monkey where lowering our center of gravity tends to reduce our downward misdirection. In normal, upright standing, we have a harder time allowing free ankle joints. What makes it easier in Monkey is that we consciously give our consent to a lowering of ourselves in space. This lowering *requires* a release of the ankle joints. But since normal, upright standing does not involve a descent in space, we are subconsciously resistant to freeing our ankles, fearful that it will result in falling

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off balance. But falling off balance would be the result of freeing the ankles only if we are downwardly misdirected. Were we able to free the ankles (as in moving into Monkey) while sustaining the intention of remaining upright, and at the same time giving *accurate* downward direction, the reflex activity of foot ligaments and muscles would be enhanced and provide a greater initial upthrust so vital to efficient standing.

I call this “dropping to go up.” Bracing knees and ankles keeps us fixed in an extended position. This manner of extending comes at what we Alexander people consider to be high price - undue effort. Optimal extending requires a complementary flexing, a dropping. Just as dropping a ping-pong ball into the center of an upwardly moving stream of air sends the ball back up again (obviating the need for holding it up), dropping our body weight into the center of the ankle as we undo our braced extension (the tibia will move slightly forward as the ankles and knees slightly flex), triggers the reflex action that will send the body back up again (the tibia will move slightly back as the ankles and knees slightly extend.)

(Ironically, with accurate downward direction there is really nowhere to fall down to — and nowhere to go but up. The tibia sits right atop the talus, which sits atop the other foot bones, which contact the ground. Only with misdirection is there ‘open’ space to fall down toward.)

There is no reason why standing upright cannot be a position of mechanical advantage. What makes it more difficult than Monkey is the habitual baggage we bring to the act, and our lack of awareness of it.

Two Exercises

I have adapted several exercises from my Alexander/Qigong background to serve as a framework within which to explore — both experientially and intellectually — the fundamentals aspects of upright balancing discussed in this article.

These exercises do not constitute a *doing*, just as letting the neck be free is not a doing. Our downward misdirection and braced joints — *these* are the doings, part of our learned pattern of standing. With this habitual interference, we need an *undoing* — through awareness of habit and through inhibition. Consciously observing and directing through these exercises keeps the system alive and helps us to recognize and value the flexion/extension cycle of the ankle.

Slow Movement in a Modified Lunge

Stand with feet slightly less than shoulder width apart, with one foot in front of the other, in a normal walking stride. Begin with your body weight coming down onto the back foot. Remember to direct it into the talus (look at a picture to reinforce where the talus is). Having your weight supported by your back leg, allows you to leave the front leg free of muscular effort since there is virtually no weight coming down through it. The ankle joint and knee joint in this front leg should be very free.

Then, *very slowly*, bring your whole skeleton forward (as if you were walking) so that more and more of your body weight gradually comes over the talus on the front leg. The trick is to give up any attempt to be stable. Habitual bracing, in anticipation of our habitual misdirection, is the problem. This is what we need to inhibit. Faulty sensory appreciation obscures both the bracing and the misdirection. In this exercise, consciously give up the wish for stability. As you move forward, less and less body weight will be over the back talus, and

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eventually your back heel will come off the floor. If you move so far that all of your body weight is directly above the front talus, the tip of the big toe on the back foot should be lightly touching the ground. Remember, the point of this is not to show that we can move forward onto one leg and balance there. It is about *how* we do it. It is about means and process, not end gaining. Keep remembering the talus as the balancing point. Send your body weight there. Give up stability as a goal. Don't brace ankles or knees. If, in coming forward, you notice some bracing at ankle or knee, go back a little, sending your weight a bit more onto the back foot. Then before coming forward again, reinforce the wish to not-brace those joints.

In doing this exercise, your leg might start to shake, you might notice some muscle or ligament twitching around the ankle. To me, these are positive signs that something different is being allowed.

Side-to-Side Direction

Stand with feet parallel, shoulder width apart. We want to shift weight side to side, initiating the movement by a slight voluntary extension of the ankle on the side you are moving away from. To do this the ankle needs to be a little bit flexed to begin with. If it is locked in an extended position, further extension will be difficult if not impossible. The voluntary extension will slightly lift the whole body which then can be directed over to the other side. (Weight can be shifted side-to-side simply by thinking. But here I advocate a slight voluntary extension of the ankle to make sure that flexion/extension of the ankle is being allowed.)

There are two counter-productive tendencies to watch for: (1) One is the tendency to direct body weight too far out to the side we are moving toward, past where our ankle support is. This results in the outside of the foot bearing extra weight and is an indication that we have fallen off center and are bracing so that we don't fall further. This bracing is executed quickly and subtly. (2) The second tendency is to brace the ankle and knee *in anticipation* of body weight coming over to that side. If we can inhibit this "preemptive anticipatory activity", we allow for more effective and efficient muscular action to occur reflexively when weight *actually does* come over the ankle. When we direct down accurately, through a free knee and ankle, the ankle will automatically strengthen its reflex response.

MY HISTORY IN BRIEF

I'm told I was born extremely pigeon-toed. Whether this means there was inherent ligament or muscle weakness in my foot or ankle, I do not know. Looking back, it is clear that being upright posed problems for me early on. Although I was not aware of it in my childhood (or for many years afterward), my body mass fell off my left ankle at roughly 225 degrees (zero degrees being flush right, 90 degrees straight ahead, 180 to the left, 270 directly behind).

Despite this, I loved and excelled at sports. I played incessantly. But my left ankle was not functioning well. At age nine, my left knee had to be drained of excess fluid — an extreme symptom for a nine-year old. It is clear to me now that this knee was the first line of defense against my falling off my ankle. The medial collateral ligament was doing all it possibly could to keep me from falling. (At age 20, that ligament would totally tear.)

My left knee could not, by itself, compensate for my collapsing left ankle. To assist in the job of holding me up, I subconsciously recruited the additional support of right leg and hip muscles which were constantly overworked.

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Amazingly, I had no conscious awareness of my misdirection or of the compensatory muscular effort. But they wore me down.

At age 17, I spent a week in traction with what my doctor called “synovitis” (inflammation of the right hip joint). Beginning in high school, I began experiencing sporadic back spasms after basketball. These worsened gradually through college and throughout my 20s. At age 28, I had to give up sports entirely. My back ‘went out’ every time I played. By age 30, my back went out regularly, even without sports. This is when I found the Alexander Technique and began to reverse the process.

QIGONG

I began my Tai Chi/Qigong studies only a few months after having begun Alexander lessons. It was my Alexander teacher that referred me to my Tai Chi teacher, an 80 year old Chinese master who said often that for the first ten years you are a beginner. For me, it was in my 12th year that my learning accelerated.

My breakthrough came doing Head Circles, a “simple” Qigong exercise — among the very first I was taught — where you move your head, eyes leading, in a mixed coronal/sagittal plane. Imagine a clock on the wall. 12 o'clock is eyes/head up, 9 is eyes/head left, 6 is eyes/head down, 3 is eyes/head right. I would do a set in one direction, then reverse it. One lesson, I was doing it just as I always had. At this point, I was with my second teacher — a senior student of the first, with some Alexander experience. Looking at me doing the exercise, he said mockingly, “And you're an Alexander Teacher?” He mimicked me tightening my neck to pull my head around. I snapped back, “Then how are you supposed to do it?”

“You've got to use your feet.”

Now I had been doing this exercise for 12 years and not once did I think of using the feet — nor was I told to use them. It was *head* circles, after all. So I was surprised upon hearing this. But I was excited at prospect of this exploration. I was entering what I intuitively felt was important new territory for me. This was eight years ago. I have gone through a lot of changes doing this exercise over that time.

Initial Phase — Getting My Feet Active

The first step in the process was simply to observe how little my left foot was actually functioning. My ankle was very collapsed. My foot's contact with the floor was through the far outside of the foot and the very back of the heel. There was just no power in this foot. To do Head Circles correctly requires me to generate power at my foot and ankle in order to move my head. As I was learning to do this, I would often free associate to the old Ed Sullivan show and the famous 'plate spinning' act — the vaudeville act where a guy kept six or seven plates spinning simultaneously, each one on top of a thin five-foot stick that was balanced on a table. He rushed from stick to stick, manipulating the stick at its base. This is how I felt moving my head in a circle from my feet. Gradually, I got my left foot and ankle more actively involved.

In moving my head clockwise from approximately 5 o'clock to 9, I used my right foot (to lessen the effort required of neck muscles). At first, my awareness was of working the foot generally. I had little ability to differentiate parts of the foot. Eventually I came to know the line between the heel and the ball (the longitudinal arch) and I attempted to push off from the center of that line. At 9 o'clock my left foot needed to get involved. This was the big push, up to 12

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o'clock. From 12 down to 5 required no effort, of course, but 'simply' a gradual releasing to let the head go down smoothly. Doing this exercise took a lot of discipline to avoid spacing out and going back into the habit of moving my head through neck muscle effort rather than through foot action. My goal was to always stay alert to the connection between the feet working to provide the power and the ripple effect of that power moving up the body to eventually move the head.

Although actively and directly working my foot was providing new strength, there was a drawback. It was impossible for me to confine the effort I was making to just the foot and ankle. The effort was spilling over to unintended areas throughout the leg. I needed to make an adjustment.

Next Phase — Awareness of Foot Reflex

I gradually came to understand that my collapsed ankle — and my falling and twisted body — were symptoms of my downward misdirection. This misdirection was, in effect, giving consent to the collapsing and the falling. So I worked to stay conscious and inhibit my tendency to fall off center. When I was successful, I learned a good lesson about doing and non-doing. I learned that I didn't need to *actively* work my foot. I just needed to direct accurately and then the foot would work automatically. Because my left foot/ankle had been off duty for so long and was quite weak as a result, directing body mass straight through the ankle into the foot stimulated a whole new level of deep muscle/ligament activity. I was experiencing my foot reflexes coming to life.

I understand now that it was not simply that I had bad balance because of a dysfunctional ankle. I was compounding whatever inherent weakness there was in my ankle (if any) by the subconscious direction I was giving for my balancing. The conditions imposed on my body by that misdirection made it impossible for my left ankle to function properly. By consciously directing more body mass to fall through the ankle, I not only stimulate greater foot reflex action but I also reduce the effort required in voluntary acts employing the extensor system.

Coming to understand this affected my work with Head Circles. With better direction, I was staying centered more often. In my centered moments I could shed habits of bracing. I could better free my joints. This is when I really began to notice how body mass impacts the foot reflex. With my joints free and my body mass accurately directed straight through the ankles, as my head/eyes moved from 12 o'clock down toward 6, I would notice that my right foot reflex would kick in. This was because of the additional body mass that was now on the right side of my body. With the added force of the downward movement of the head, the reflex activity increased until the head got to about 5 o'clock. At that point, as the head started to move left toward 7 o'clock, the right foot activity would decrease and the left foot reflex would kick in. Also, somewhere along the way I realized that I did not need to actively push the right foot to move the head from 5 o'clock to 8. There was enough momentum from the fall from 12 o'clock to carry the head to around 8 o'clock without any active pushing. And although foot reflex activity in the left foot started kicking in just as the head moved passed 6 o'clock, I needed to continue to free that left ankle (even as it was reflexively extending) so that I would not subconsciously brace for support. If I were to brace the ankle for support, I would not be able to voluntarily extend the ankle, which was needed to provide the power to get the head up from 8 o'clock to 12.

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CONCLUSION

This article identifies a subconscious, habitual pattern of misuse that I believe is universal. My recognition of this pattern emerged out of practical work that I have been engaged in over the past nine years — integrating my Alexander and Qigong studies in an attempt to solve a personal problem. To summarize the basic ideas:

- (1) Gravity compels us down to earth. Yet we have the innate ability to extend our organism upwards.
- (2) How we direct ourselves downward affects how we go up and how we balance, and is a determinant of our overall use.
- (3) The idea that we balance on the soles of the feet is a common misconception. Although we bear weight on the soles of the feet, we actually balance atop the talus (the top foot bone that interfaces with the tibia).
- (4) We best stimulate the innate reflex action of foot/ankle muscles and ligaments — essential to efficient uprightness/optimal balancing — when our body weight falls straight down through the center of the ankle joint (tibia-talus) as much as is feasible given the particular upright position we are assuming in any moment (i.e. given how much of our weight is actually above either ankle joint).
- (5) Whereas dead weight falls straight down absent impetus from outside, the fall of our body weight depends on our inner impetus (our downward direction), whether conscious or subconscious.
- (6) It is easy to misdirect our downward fall and not be aware of the misdirection.
- (7) When we direct ourselves off center, in any direction, we fall off balance and must brace to sustain uprightness. Instead of *going* up, we must *hold* ourselves up.
- (8) Bracing for support — at ankles, knees, hips, head/neck — limits mobility, consumes energy and supplants to some degree the reflex action of deep muscles and ligaments in the foot/ankle (and throughout the body).
- (9) Our misdirection, falling and bracing are part of habit patterns established early in life. As children, when we misdirect ourselves downward, this misdirection has no consequences that are apparent to us in the moment - after all, we never fall over, we remain standing. So long as this *end* is achieved and so long as the *means* for achieving this end don't really matter to us (which as children, they usually don't), these means go unnoticed. Soon enough, the misdirection, falling and bracing become habitual.
- (10) As with all habits, faulty sensory appreciation is at play and, with it, an ongoing lack of recognition of the habitual syndrome and its details.
- (11) What we don't recognize, we can't change.
- (12) Working to re-think the optimal means-whereby of standing, to inhibit downward misdirection and to thus undo the need for bracing, helps to improve awareness and reverse habitual patterns. This brings innate foot/ankle reflex action more into play, which enhances our ability to sustain uprightness with less effort, which improves use generally.

Although this article focuses on upright balancing while standing, downward misdirection and its consequences manifest in upright balancing while sitting as well.