

Learning Conscious Weight Commitment

By Michael Protzel

This document is primarily for people who have attended one of my workshops. It summarizes the essential theory of weight commitment and reviews the kinesthetic experiments conducted at the workshop. This document may also assist website visitors seeking practical instructions. Please be advised, however, that it will not be easy to expose weight commitment habits and to re-learn innate uprighting through words and pictures alone, without direct person-to-person instruction.

Nothing in this document should be construed as medical advice. I am not a doctor. If you are concerned about a physical problem, you should consult a physician.

Part I of IV — Weight Commitment Theory

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Our falling down to earth is constant. This falling generates tremendous force (as does the falling down to earth of any object weighing 100-200 pounds). Gravity would have us fall straight down toward the center of the earth. But we can override this tendency. We can fall to earth on any trajectory we choose — through an act I call *committing body weight*.

Almost as constant as our falling, at least during our waking hours, is the act of lifting ourselves into uprightness. We upright in all sitting, standing and walking activities. We upright atop tiny balance points — the taluses in standing, the sit bones in sitting. Falling directly into these balance points allows us to fully capture the force of our falling. Doing so enables us to, in effect, ‘bounce’ ourselves upwards near-effortlessly, trampoline-like, using our deepest extensor musculature. When we mis-direct our falling, however, committing our weight *away from* our balance points, not only do we *not* use the force of our falling to our advantage, it instead works to our decided disadvantage. Our mis-directed falling drives us off balance, causing us to momentarily topple. If we want to continue to sustain uprightness, we must stop this topple, either by leaning against a secure object (a wall or a chair-back, for example) or by muscularly bracing. We must also muscularly *right* ourselves to maintain relative centered-ness as we topple.

In Western culture, beginning early in life, we all learn that it is appropriate to fall backwards. We learn this implicitly, pre-verbally, simply by watching our elders do it. We are far too young at the time to realize that what we are learning will cost us dearly. We don’t even realize *that* we are learning it. Falling backwards is not an appropriate activity for human beings. Falling backwards goes against millions of years of evolution. Yet this is exactly what we do when we lean back in a chair or sofa. We grew up doing this again and again and again, every day for years — at home, at school, in the car, everywhere — with little if any, awareness of its impact. As a result of this deeply ingrained conditioning, we have lost sensitivity to — and thus control over — the force of our falling. This affects *everything* we do. But this conditioning can be changed. We can gain a more conscious control of our weight commitment, to our great benefit.

To regain our innate ability to upright, we need to re-establish a kinesthetic connection with the force of our falling. This requires a two-pronged approach:

(1) ***We need to expose our habitual ways of mis-committing weight.*** I cannot over-state the importance of this. We have been mis-committing weight our entire lives. But we have not been aware of doing it. And we have not been aware of how it has been affecting us. We need to become aware. We need to observe ourselves in habit. We cannot command a *new* falling trajectory without becoming aware of the trajectory we are *now* commanding.



Sitting beautifully at 6 months.



Not so at 5 years.



In spite of tilted ground, one year old boy has no problem finding vertical, uprighting with ease.



At five years of age, our ability to stand innately is already dramatically compromised.

(2) ***We need to learn how our innate uprighting system works.*** Isn't it interesting that in this modern era of scientific advancement, science has been unable to clearly describe how our own innate uprighting system works, and how we interfere. Why? I believe it is because all of us — scientists included — have become profoundly, but unknowingly, disoriented by habitually falling backwards in sitting. In my view, it is this disorientation that has left us unable to feel moment-by-moment either the fundamental trajectory of our falling or the myriad uprighting reactions that are made necessary by that trajectory. Such disorientation and insensitivity has left us unable to understand even the ABCs of uprighting.

When we fall straight down through our balance points, we naturally tip *forwards* (simply because we have more weight in front of our central line than behind it). There are skeletal structures on the ground waiting for us as we tip forwards (the balls of the feet in standing — the front of the sit bones and the feet in sitting). Our sensitivity to the added pressure that our forward-tipping-weight creates upon these 'front support structures,' triggers an innate uprighting response, activating our deepest extensor musculature. Beginning with the plantar muscles on the bottom of the feet, this response rapidly 'moves up' the body segment-by-segment, uprighting us with minimal effort. (See 'Kinetic Chain' on page 4 of this document.)

In sitting *back*, however, we send our weight in the exact opposite direction it needs to go. We send it *away from* our essential ground-contact in front. This kills innate uprighting. By sitting back habitually, we lose the vital connection between how we fall and how we lift. This negatively affects our standing and walking activities as well as sitting.

Yet, in spite of a lifetime of bad uprighting habits, innate uprighting is deep within our genetic make-up. We all *do* know how to do it — and have all experienced it as infants/toddlers. We have simply superimposed on top of it a far inferior uprighting method. We can restore the innate.

The Three Phenomena of Weight Commitment

In the instructional Sitting, Standing and Walking articles (Parts II thru IV of Learning Conscious Weight Commitment), you will find experiments suggested to help you explore the act of uprighting. These experiments will be most successful when conducted *playfully*. In 16 years of conducting these experiments on myself and with my students, I have identified three phenomena associated with weight commitment. When we are uprighting, all three are *always* present. They are:

- (1) the trajectory of our falling
- (2) the neuro-muscular activity that keep us upright — I call them our 'uprighting reactions'
- (3) our weight bearing sensations

It is the trajectory of our falling that determines both our uprighting reactions and our weight bearing sensations. The more accurately we commit our weight — in simple sitting and standing, this means falling straight down — the more efficient, and closer to innate, is our uprighting. In innate uprighting, the force of our falling bears down upon the base of our skeleton in a manner that creates an optimally grounded frame, with optimal spacing. Our rubber-like muscles attach to this frame. An optimally-spaced skeletal structure produces an optimal muscular response. A poorly grounded, poorly spaced skeletal structure, on the other hand, interferes with our muscular lifting activity, making it more strenuous, less efficient. It is our weight bearing sensations that 'tell' us what kind of frame we are creating.

An accurate weight commitment allows us to dedicate *all* of our energy and muscular resources to the task of lifting/uprighting ourselves. Falling directly through our balance points enables optimal uprighting reactions. When we mis-direct our falling, however, we must dedicate resources first and foremost to stop our momentary topple. These bracing reactions consume a lot of our energy. Trouble is, our bracing is absolutely necessary so long as we are mis-directing our falling.

Our moment-by-moment uprighting reactions and weight bearing sensations provide us with valuable kinesthetic 'information' about our falling trajectory. Thus, becoming aware of them is essential to our re-learning innate uprighting. (In this regard, it is important to gradually be able to distinguish weight bearing

sensations that are created by the trajectory of our falling alone, from weight bearing sensations that are created by the combination of our falling trajectory and our compensatory reactions that pull us back to a more centered position as we are toppling.)

The Innate Uprighting Cycle

The energy generated by our falling activates and empowers our deepest musculature running the entire length of the body to lift our skeleton with optimal efficiency, segment-by-segment. I call this powerful chain reaction, *innate uprighting* — a uniquely human capability that has evolved over millions of years.

There is a dynamic work/rest, lift/descend, extend/flex cycle at play in innate uprighting.

In innate standing, the work/lift/extend part of this cycle begins with the tensing of plantar muscles on the bottom of the feet. This tensing occurs after our weight has passed through the talus and tips forward, pressuring our frontal ground contact points on the ball of the big toe. The power generated through the tensing of plantar muscles then passes to deep, posterior lower leg muscles that lift into verticality the lower legs; then to deep, anterior thigh muscles that lift into verticality the upper legs; then to deep posterior thigh muscles connecting thigh bone and pelvis that rock back the pelvis into verticality.

In innate sitting, far less weight goes into the feet. When we tip forwards, most of the force of our falling is captured at the front of the sit bones. But the falling force of body weight that is forward in relation to the sit bones (the front of the rib cage and the front of the abdomen, for example) hits the ground forward of the sit bones (going into the feet in stool sitting, the area around the knees in cross-legged floor sitting, for example). These ‘far forward’ ground contact points enable us to ‘bounce back’ even the most far forward parts of our head and torso.

Since in sitting the legs don’t need lifting, the active part of the uprighting cycle begins with the tilting back into verticality of the pelvis. This is accomplished by the tensing of the deep muscles around the hip joints (commonly referred to as “hip rotators” — but, in innate uprighting there is no rotation because both left and right sides are working together to lift up-and-back the slightly forward-tipping pelvis).

In both sitting and standing, the deep muscles connecting each vertebra, lift the spine bit by bit. Finally, the sub-occipital muscles lift the head.

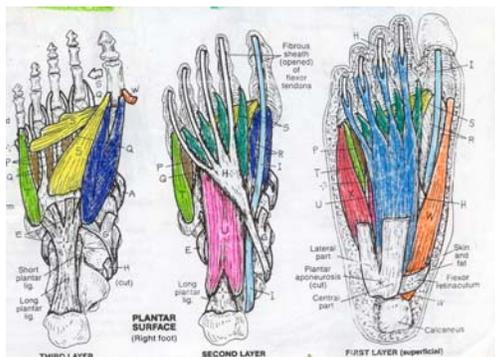
When the head reaches its peak, it descends again, beginning our forward tipping. For a split-second our *whole self* descends and tips forward. Spinal joints, hip joints, knee joints and ankle joints all flex a little bit. This creates additional pressure on our ‘front support points’ (the balls of the feet in standing, the front of the sit bones as well as the feet in chair sitting). This pressure on the front support points activates once again our ready, willing, able and well-rested plantar muscles.

I liken this chain reaction to a ‘relay race’ at a track meet. When one runner passes the baton to a teammate, his or her job is over. Likewise, at each stage in this rapidly moving uprighting cycle, the muscles ‘below’, once they have completed their work, gain important rest until their turn in the cycle comes around again.

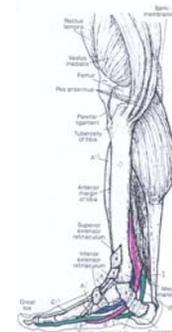
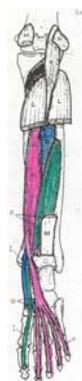
Innate uprighting depends upon our capturing the *full* force of our falling. To the extent that we misdirect this force, our uprighting response degrades. Unfortunately, we are conditioned by years of bad habits. Our poor weight commitment is well established — society-wide. The effects are apparent, for all to see. Yet we don’t notice. Through falling backwards repetitively, we have created alternative means of uprighting that feel ‘right’ to us. But, in fact, they are a poor substitute for the innate — causing significant muscular strain and skeletal distortion.

Fortunately, we can re-learn the innate.

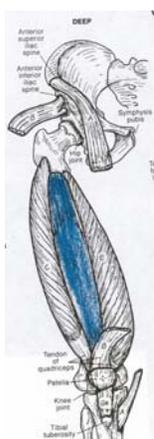
Deep Musculature of the Innate Uprighting System



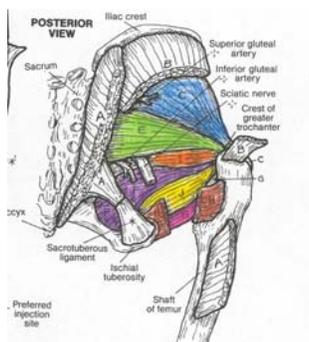
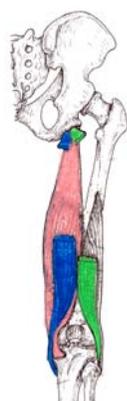
The force of well-directed falling spreads the foot bones, activating powerful plantar muscles that ignite our uprighting response.



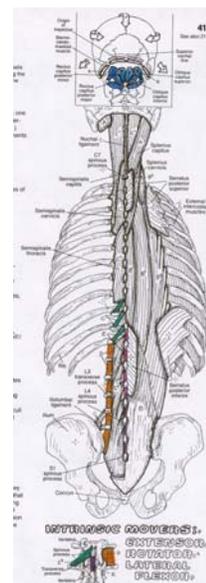
Deep-seated lower leg muscles that pass through the arch of the foot respond to the tensing of the plantar muscles by tensing to lift/extend the lower leg.



Deep thigh muscles tense to lift/extend the thigh in standing; not needed in sitting because we don't lift/extend the thigh.



Due to our natural tendency to tip forward, the pelvis needs to be stabilized so that the deep spinal muscles can lift/extend the spine. The deep lateral hip rotators, both sides working together, serve this function in sitting, the hamstrings in standing.



With the force of our falling well-directed, and with this force captured such that the legs and pelvis are lifted/extended optimally, the deepest of our spinal muscles will have no trouble lifting/extending the spine, and the sub-occipitals the head, lessening the burden on our habitually over-worked erector spinae and neck muscles.

Sitting, Standing & Walking

I have written three separate documents that provide instructions on sitting, standing and walking. They are parts II thru IV of *Learning Conscious Weight Commitment*.

Part II — Weight Commitment & Sitting

Part III — Weight Commitment & Standing

Part IV — Weight Commitment & Walking

Michael Protzel came to the Alexander Technique at age 30 with chronic ankle, knee, hip, back and neck injuries that were getting progressively worse. The AT basically saved his life. After two years of private lessons, he trained to teach with Tom Lemens. He was certified to teach the Alexander Technique in 1987, but did not first notice himself mis-committing his body weight until 1992. He has been exploring his falling ever since. Michael maintains a private practice in NYC and northern New Jersey.

Michael was NASTAT News Editor from 1989-1995 and was recipient of NASTAT's first Distinguished Service Award in 1995. He is currently Chair of AmSAT's Professional Conduct Committee, a position he has held since 2001. Michael is involved with other long-term self-observation processes, including psychoanalysis, Tai Chi/Qigong, Carl Stough's Breathing Coordination, Peter Grunwald's vision work and the study of jazz guitar. Michael is also President and CEO of Gann Law Books, one of the few remaining small, independent law publishers in the United States. Gann specializes in state-of-the art legal analysis, both in print and online.

*Michael gratefully acknowledges the contribution of **Maggy Breuer**, who assists Michael at workshops and has helped in developing www.uprighting.com, and in writing papers on weight commitment. She too is a certified teacher of the Alexander Technique, a member of GLAT (the German society). She teaches privately and in small groups in and around Mainz, Germany, and is an avid tango Argentino dancer and teacher. Her website is www.alexandertechnik-mainz.de.*

For more on Weight Commitment and for access to all written articles, go to www.uprighting.com.

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