

# **Why Do We Tense Our Necks?**

Michael Protzel

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# Why Do We Tense Our Necks?

By Michael Protzel

F.M. said that he had “only scratched the surface of the egg” in his lifetime of work in this new field of investigation. It is up to us, and particularly now to new teachers, to scratch deeper. I would like to suggest that this further development — the real future of the Work — be sought first and foremost in the first person singular.

Marjory Barlow, *An Examined Life*

## INTRODUCTION

In exploring my own life-long habit patterns, more and more I noticed a force acting upon me that I now consider to be a fundamental determinant of use. I explain it in this paper, which is comprised of seven sections:

- Section 1. Cause or Symptom?
- Section 2. The Driving Force of Use
- Section 3. The Distinguished Act
- Section 4. Childhood Origins of Misuse
- Section 5. Weight Commitment and AT Lessons
- Section 6. Two Illustrations
- Section 7. Conclusion

*Section 1. Cause or Symptom?* summarizes core Alexander ideas concerning how we interfere with innate coordination — specifically with our head-neck-back relationship. A series of questions probe Alexander’s characterizations of misuse. For instance, is “pulling the head back and down” an accurate way of describing what we do when we misuse ourselves?

*Section 2. The Driving Force of Use* identifies a fundamental influence upon our use and functioning not explicitly recognized by Alexander — the force created by the gravity-compelled fall of our own body weight. We determine how the force of our falling weights impacts our general coordination by how we *commit* (steer) this weight as it moves down to earth. There is a way to commit our weight so that its force activates innate mechanisms that provide an uplift that supports optimal use. When we commit our weight otherwise, however, we not only lose some of this vital uplift, but the force of our falling weight knocks us off balance, creating a toppling that must be countered with muscle tensing.

*Section 3. The Distinguished Act* introduces the idea that Alexander’s search for a practical solution to his reciting problems led him to study activities that have a clearly defined beginning. A more fundamental ‘act’ that underlies virtually all human activity is the act of sustaining uprightness. Since this is a continual act with no clearly defined beginning, we cannot stop our reaction prior to acting. There is no ‘prior to’ moment.

We are always in the midst. What we can do is ‘get inside’ the ongoing act of sustaining uprightness to observe the fundamental forces at play — to expose how we commit our weight and how we brace to hold ourselves up.

*Section 4. Childhood Origins of Misuse* examines how we lose the capacity to commit our weight accurately, how compensatory patterns emerge, how faulty sensory appreciation keeps us unaware. Through the repetitive act of sitting back into our school chair — minute-by minute, year-after-year — we create and nurture our habitual manner of use.

*Section 5. Weight Commitment and AT Lessons* examines the Alexander concepts of “head forward and up,” “the critical moment,” “end-gaining,” “means-whereby,” “undue tension,” and the practice of hands-on teaching from a perspective that acknowledges the impact of committing body weight.

*Section 6. Two Illustrations* outlines two common weight commitment patterns, with practical instruction on how to gain greater kinesthetic awareness of weight commitment phenomena.

*Section 7. Conclusion* presents an overview of weight commitment theory.

## **SECTION 1. CAUSE OR SYMPTOM?**

### **A STIFFENED NECK**

Discussing a student whom he depicts as having grown accustomed to stiffening neck muscles in daily activities, Alexander (1923) notes (a) that the student’s “stiffened neck...is merely a symptom of general mal-coordination,” (b) that “any direct attempt to relax it means that he is dealing with it as a ‘cause’ and not as a ‘symptom,’” (c) that a direct attempt at change “will result in comparative failure unless a satisfactory co-ordinated use of the mechanism in general is restored,” and (d) with a “sensory appreciation [that] is unreliable, it is unlikely that he will be able to do anything” to change his coordination (p.65).

#### *Questions:*

If a stiffened neck is a “symptom,” what confluence of “mal-coordination” forces produces it?

Is there something not noticed underlying our muscle tensing that generally prevents a satisfactory co-ordinated use?

## PULLING THE HEAD BACK AND DOWN

In recounting his initial investigation into the cause of his voice problems, Alexander (1932) reports on the satisfactory progress he made upon observing in mirrors that he “tended to pull back the head, depress the larynx and suck in breath in through the mouth in such a way as to produce a gasping sound (p.5).” Surmising that these tendencies “must constitute a misuse of the parts concerned” (ibid), he recalls noticing that when reciting he could not directly prevent sucking breath in or depressing his larynx but he could “to some extent prevent the pulling back of the head” (pp. 5-6). Preventing the specific misuse of the pulling back of the head — to the extent that he could — tended, he writes, to reduce his hoarseness while reciting.

Alexander reports that he then determined that “the pulling of the head back and down, was not, as [he] had presumed, merely a misuse of the specific parts concerned, but one that was inseparably bound up with a misuse of other mechanisms which involved the act of shortening the stature” (p.7). For his voice to function properly, he believed he needed to lengthen, not shorten his stature. He reports, however, finding himself shortening far more than lengthening, surmising that this was due to his tendency to pull his head back and down. To lengthen, he determined at last, he “must put his head forward and up” (p.7). Upon trying this, however, he reports that his “old tendency to lift the chest increased, and that with this went a tendency to increase the arch of the spine and thus bring about a narrowing of the back” (pp. 7-8). He reports that any attempt to maintain lengthening in reciting also involved “bringing into play the use of all those parts of the organism required for the activities incident to the act of reciting, such as standing, walking, using the arms or hands for gesture, interpretation, etc.” (p. 9).

After identifying the misuse of his head and neck and, subsequently, other parts of his organism, Alexander reports that he had assumed that his intellectual grasp of the misuse would be sufficient to correct it. Instead, in reciting, he reports finding himself “doing the opposite” of what he decided he “ought to do” (p. 8). Observing that habitual use was brought into play in all activities — beyond conscious control — Alexander concluded that the “stimulus to general wrong use was far stronger than the stimulus to employ the new use of head and neck” (p. 10). Caught in habit, he functioned in a “way that felt natural.” But his feeling — “the only guide” he had to depend upon to direct his use — “was untrustworthy” (p. 11).

### *Question:*

How does untrustworthy feeling — identified as “faulty sensory appreciation” — lead specifically to pulling the head back and down, and to shortening of stature?

Our sensory appreciation, our kinesthesia, is the medium through which we recognize — or not — our muscular effort. When the medium is faulty, the recognition is faulty. We end up unaware of our habitual misuse. Lack of awareness leads to repetition of misuse patterns. Faulty recognition, however, is not the misuse. It just keeps us unaware.

*Questions:*

If faulty sensory appreciation it is not the misuse, what is?

What conditions *enable* neck free, head forward and up, back lengthening and widening?

What conditions *disable* neck free, head forward and up, back lengthening and widening?

## GENERAL TO SPECIFIC, SPECIFIC TO GENERAL

Alexander (1932) defined “use”

not in that limited sense of the use of any specific part, as, for instance, when we speak of the use of an arm or the use of a leg, but in a much wider and more comprehensive sense applying to the working of the organism in general.” (p. 2, fn)

Yet, in analyzing his use while reciting, Alexander wrote mostly of parts — the head, neck, larynx, chest, spine, legs, feet.

*Questions:*

Is it the misdirection of these parts that leads to a general shortening of our stature?

Or is it shortening of stature that causes misdirection of parts?

If so, what leads to shortening of stature?

To successfully analyze the conditions of use, we need a working understanding of the general organizing forces that shape our functioning.

## OBSERVATION AND INTERPRETATION

As Alexander explored ways to change his use while reciting, he reports repeatedly going back to square-one to learn how to more effectively inhibit unwanted habitual reactions. He never reports, however, going back to question his initial characterization of what he saw in the mirror. He evidently believed that this characterization was objective. But is it? “Pulling the head back and down” is not a mere *observation*. It includes an *interpretation* of the thing observed. “Pull” projects an active quality onto the head movement. The head did not merely *move* back. It was *pulled* back. Another observer might have simply reported that he saw the head tilt back accompanied by activity in the neck that indicated muscle tensing.

*Questions:*

Are there yet other ways to describe what Alexander reports seeing in the mirror?

What might cause the head to tilt backwards?

What might cause the apparent neck muscle tensing?

## FEAR REFLEXES

Alexander (1923) noted that

unduly excited fear reflexes, uncontrolled emotions, prejudices and fixed habits...are linked up with psycho-physical processes...[and] are a striking feature in [one's] endeavors to carry out new instructions correctly. Watch the fixed expression...jerky, uncontrolled movements...[the difficulty in] 'keep[ing] one's head' at critical moments" (pp. 86-87).

Fear reflexes are responses to fear. When we are not afraid, however, our normal, habitual manner of use is employed. To understand this habitual manner of use, we need to understand the forces that cause us to react when we are *not* afraid, forces not involving a fear response. It is unlikely, for instance, that the neck tensing that typically occurs when someone rises out of a chair is part of a fear response. There is a simpler explanation.

## A CONTRADICTION IN TERMS

In gravity, things go down of their own accord. They simply drop. No need for pulling. Pulling is needed only to lift something up. Yet, following Alexander, Alexander Technique teachers commonly use "pulling down" as shorthand to describe habitual misuse. This choice of words mis-characterizes the actual event, making it more difficult to understand what is actually happening when we tense our necks and shorten our stature.

## A FUNDAMENTAL CAUSE

Alexander (1941) asserted that "there is a factor common to...all [symptoms] which is a fundamental cause of interference with conditions of well-being" (p. 19). He represented this factor, this fundamental cause, as "a misdirection" that interferes with "the primary control" (ibid). He stated that it leads to "such harmful conditions as undue lumbar curve of the spine, undue tension of the neck, arms and legs, and overaction of muscle groups of the organism" (p. 20).

*Question:*

What is this misdirection? How does it produces such symptoms?



Alexander (1941) claimed that “a certain use of the head in relation to the neck, and of the head and neck in relation to the torso and other parts of the organism, if consciously and continuously employed... provides the best conditions for raising the standard of functioning and constitutes a primary control of the mechanisms as a whole” (p. 10).

*Questions:*

What allows for this certain use of the head in relation to the neck, and of the head and neck in relation to the torso?

What is it that we do that interferes with the employment of primary control?

The explanation cannot be merely that we react habitually. Habitual reactions can have a positive as well as a negative effect on functioning.

*Question:*

Is there an explanation as to why one way of reacting interferes with head-neck-back and another way of reacting does not?

My investigation into my own life-long habit patterns has suggested to me that there *is* a fundamental cause — a general explanation for how we interfere with our innate coordination.

## SECTION 2. THE DRIVING FORCE OF USE

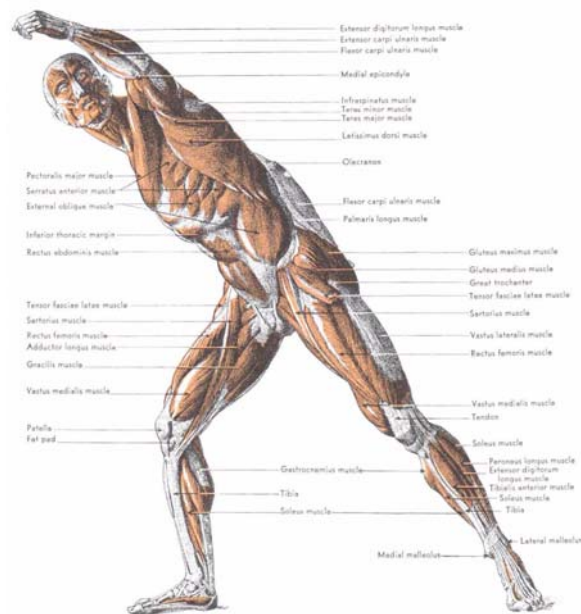
### THESIS

*Humans have a distinct, upright bi-pedal form. The force generated by our own falling body weight is the prime factor in determining how we manifest this form. The force of our weight is the overwhelming influence on our motor coordination, for good or for ill, essentially determining the quality of our head-neck-back relationship. When well-directed, falling body weight activates innate processes that jump-start our extension upwards, enabling us to attain and sustain our uprightness with minimal effort. When mis-directed, the force of our falling weight knocks us off balance, requiring us to brace to counter the destabilizing force of our toppling.*

Moment-by-moment we control the trajectory of our fall by how we *commit* body weight. To commit body weight is to actively steer it as it moves down to earth. This is a continuous act of ‘mind.’ We are always steering our falling weight — if not consciously, then subconsciously — in effect, telling it where to fall. The force created by this fall sets off a chain reaction.

### THE BOOST FROM BELOW

We learn what “weight” means by the effort required to lift something. It is in this activity of lifting that we directly — non-conceptually — discover the demand created by gravity acting upon a mass. The demand of a one ounce envelope is obvious when compared with the demand of a two pound book, a ten pound bowling ball, a thirty pound suitcase. We are much less clear, however, of the demand placed on us in the act of lifting our



MUSCLES IN POSITION OF "THE FIGHTER" BY BORGHESE

Figure 1. Muybridge photo and Borghese drawing demonstrate the power derived from the force of our falling weight.

own body weight — something we are doing virtually our entire waking lives with an object much ‘weightier’ than these external objects. Our muscular efforts in lifting ourselves have long been operating out of our awareness as a background, subconscious process. So much so that we rarely, if ever, recognize that we engage in such lifting.

The trajectory of our fall determines the effort required to lift our own weight. In simple standing, our entire weight rests directly atop the talus, the top foot bone that interfaces with the tibia to form the ankle joint. When our weight falls directly through the center of the talus, the force generated by the falling weight plants the foot optimally — pressing down upon foot structures, spreading the bones into a solid triangular foundation. (Figure 4)

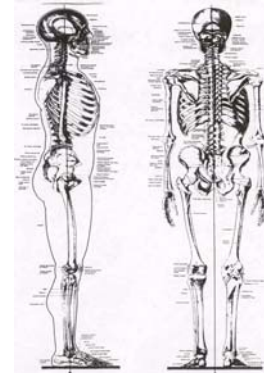


Figure 2. Atop the talus.

In so doing, the heel and toes of the feet bear weight proportionally, all points securely grounded. As foot bones spread, plantar muscles/ligaments respond with a tensing resistance that automatically arches the foot. This powerful arching uplifts the talus, in direct opposition to the force of the body falling into it. (Figure 3, Figure 7, page 10)

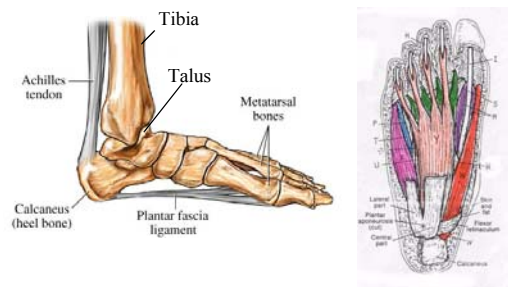


Figure 3. Ankle joint, outer layer of plantar muscles.

Our entire organism benefits from the uplifting force. We ride it upwards. When we tap into this boost from below, less effort is required all the way up the line. We are able to lift ourselves with maximum effectiveness, relying on a minimum of effort in leg and torso muscles (Figure 4). Regardless of the position of the feet and body — some positions are clearly more challenging than others — the talus is always where we begin our extending upwards. And we can always make this extending upwards easier by committing our falling body weight through the talus. Doing so optimizes innate responses in the foot and ankle, no matter the particular position of feet and body.

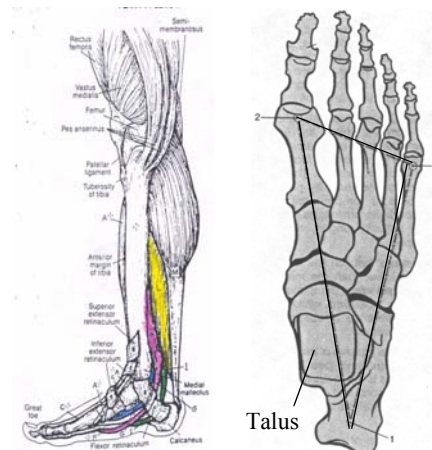


Figure 4. Tibia extension, talus from above.

Similarly, in simple sitting, when we commit body weight through the sit bones, the force of this weight spreads the ‘pelvic bowl’ optimally. Pelvic floor and pelvic wall muscles resist this spreading with a tensing that initiates an uplifting force. This uplift enables us to extend the torso, neck and head with minimal effort.

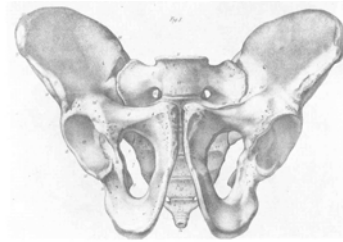
In both form and function, the feet in standing and the pelvis in sitting resemble a trampoline — a solid frame supporting a suspended elastic flooring that transforms a downward force into an upward force.

### THE POWER SOURCE

Discovered by Michael Faraday in the early 1800’s, hydro-electricity is created when a waterwheel captures the force of falling water to turn a turbine shaft, activating a generator that produces electric power. Somewhat similarly, when we accurately steer the force of our falling weight, it activates innate mechanisms that power our uprightness — transforming the downward force generated by the fall of bones and soft tissue into an upward force that supports a well-defined, high-functioning being.

Exploiting this power source requires no effort on our part. Gravity sees to it that our weight is always falling. We need only direct the force of its fall to our advantage. Doing so enables the full response of foot/ ankle processes in standing and of pelvic processes in sitting. These innate processes are essential to our achieving “neck free, head forward and up, back lengthening and widening.” We need every ounce of the boost from below to be able to act with a minimum of effort — an ability Alexander Technique teachers call “non-doing” or “leaving oneself alone.”

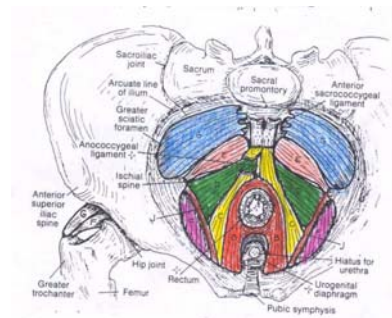
Figure 5. Pelvis, four views



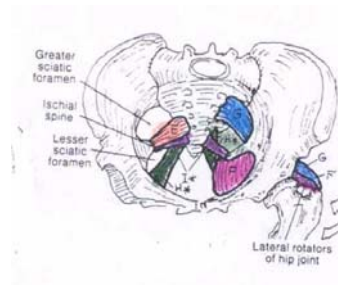
a) Pelvis drawing by Cloquet



b) The sacrum is suspended



c) Pelvic floor and wall muscles



d) Pelvic muscles lift the spine

**TIMBERRR!!!**

When we are not aware of what we do, odds are we do it poorly. This certainly applies to committing body weight.

When we are on our feet and commit weight away from the talus (Figure 6), we put disproportionate pressure on the foot. Part of the plantar surface takes too much weight, part not enough. This distorts our base structure and impairs the vital arching response of plantar muscles, ligaments, tendons. These foot response systems function optimally when foot bones spread evenly. Likewise in sitting for pelvic response systems.

Moreover, since the talus and sit bones happen to be our balance points, the force generated by committing weight away from them immediately throws us off balance. We topple. Without even recognizing this toppling, we react subconsciously. Sustaining uprightness is paramount. When jeopardized, we will do anything to preserve our upright form as best we can. This anything comes in the form of a muscle tensing that braces. We must *hold* ourselves up.

When we commit the force of our weight truly, we go squarely into an immovable object. There is no space between the bottom of the sit bones and the chair. There is no space between the talus, the other foot bones underneath, and the ground. There is nowhere to go but up.

When our commitment is anything but true, however, there *are* directions in which we can move — directions not up. When standing, for example, we can direct our downward-moving weight forward, backward, inside or outside of the talus. The surface area of the talus is tiny relative to the size and weight of a human being (Figure 7). As we commit weight away from this pedestal upon which we perch — and delicately balance — our whole organism moves in the direction of our commitment. As we are no longer moving squarely into the talus, we begin to literally slide off. To counter this fall, we automatically tense. But before our tensing reaction is complete, we've moved slightly down off our pedestal. We are no longer fully upright.

We don't notice the misdirected falling, however, or the stopping of the fall. We have been falling and stopping our entire lives. The sensations



Force →  
Counter Force ←  
Figure 6. Weight falling back and to left.

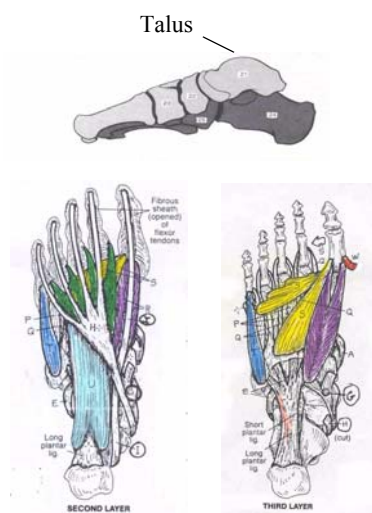


Figure 7. Talus perch; middle, deep layers of plantar muscles.

are utterly familiar. Even with the sophisticated skills developed through Alexander Technique training, we lack awareness of these events. We treat our compensatory tensings as if they were the problem, instead of merely a reaction. Our Alexander Technique skills do enable us to make the best of the destabilizing conditions. But by focusing so much of our attention up top, we do not notice the toppling that is going on down below.

This toppling thrusts us into an emergency mode that operates subconsciously. Without attending to our fall and stopping it, we would not be in a position to do anything else. Muscles occupied in damage control are not fully available for other activities. We move less freely. Performance suffers.

### BEARING WEIGHT VS. COMMITTING WEIGHT

In free standing (when we are not leaning a shoulder against a wall, or a hand or elbow on a table), our weight bearing points can only be somewhere on the bottom of our feet. We have far greater latitude, however, with respect to where we can commit weight. In instances of misuse, the point on the ground toward which we commit our weight is always farther away from the talus than where we bear the weight. For example, in a simple standing position, with feet directly under the hip joints, the heel ideally bears about half our weight. Yet we often stand with much more weight borne by the heel. When our heel is bearing excessive weight, it is because we are committing our weight down to the ground behind us, not to the heel directly (Figure 8). This backwards commitment does not describe a horizontal movement, as if parallel to the ground. Our weight is always moving *down* to earth.

Similarly, when our toes are bearing excessive weight, we are committing weight toward a spot on the ground forward of the feet. When the outside of the foot is bearing excessive weight, we are committing weight laterally, to a spot well beyond our footprint. Excessive medial commitment (less common than a lateral commitment) involves committing weight straight down while our feet are spread apart, resulting in weight being borne excessively on the inside of the foot. In all cases of mis-commitment of body weight while standing, we impede up-lifting, foot-arching processes.



Force →  
Counter Force →

Figure 8. Weight commitment to the back

## FLEXIBILITY

We are born capable of bending in all directions, of assuming a wondrous variety of shapes (Figure 9). To the degree that we mis-commit body weight, however — away from the talus in standing, the sit bones in sitting — we strain the system. More effort is required to sustain any particular position. Clearly, we want to maintain the ability to move in all directions, through the full range of all possible movements. We jeopardize this flexibility, however, when we commit our weight the same way, day after day for years, without conscious recognition of either the weight commitment or the reactions it engenders.

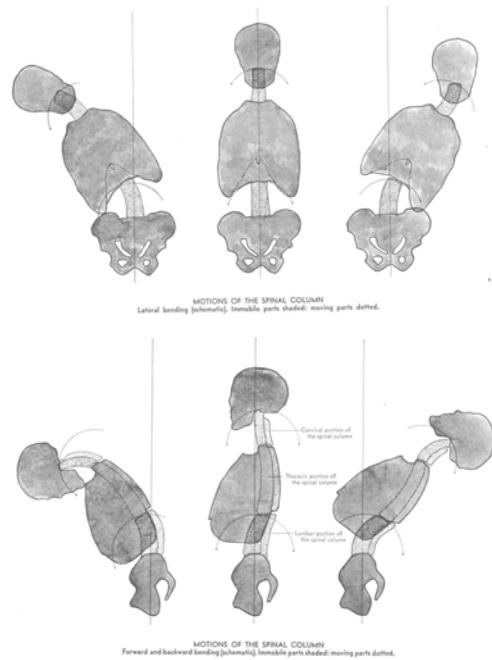


Figure 9. Spinal flexibility

## SECTION 3. THE DISTINGUISHED ACT

Alexander (1941) emphasized that the “constant influence” that use exerts upon functioning tends to raise our standard of general functioning when it is a constant influence for good but tends to lower it when it is a constant influence for ill (pp. 9-10). “Habit,” he wrote, “indeed may be defined as the manifestation of a constant” (ibid).

No influence upon use and functioning is more constant than our *will to be upright*, a product of millions of years of evolution. We act on this stimulus from the time we get up until we go to bed. Not recognizing our will to be upright, and the reactions this ongoing stimulus generates, renders us much less able to take conscious control of the means for sustaining uprightness.

### WITHOUT A CLEARLY DEFINED BEGINNING

With a recurring voice loss threatening his career, Alexander reports examining what he was doing as he began the act of reciting. This context led him to conceptualize an act as an event with a clearly defined beginning. Many of the acts that Alexander addressed fit this description: speaking, rising to stand, lowering to sit, walking, hitting a golf ball.

Sustaining uprightness is different. We do it continually; there is no clearly defined onset. It is a constant underlying all particular acts. When responding to any stimuli to

speak, sit, stand, we are already in the midst of responding to our will to be upright. It is always present — a deeply ingrained survival mechanism.

Achieving uprightness is such a constant, we typically don't even regard it as an activity. We tend to view simple standing or simple sitting as 'doing nothing.' This is hardly the case. However astonishing playing a violin with virtuosity or making prodigious leaps in dancing may appear, these acts are the figurative icing on the cake. Sustaining uprightness is the cake.

We know very little, however, about how we accomplish this incredible feat. We take it absolutely for granted. This confidence is misplaced. We have long been interfering with our innate abilities, thereby making the act of sustaining uprightness, and everything else we do, more difficult. By recognizing the act of sustaining uprightness as the keystone of motor coordination, we gain an opportunity to better understand how our habitual manner of use actually becomes our habitual manner of use. Without recognizing this ongoing activity as the constant we need to address, we are less likely to devote the time and energy needed to explore the forces at play, and how they affect the quality of our general functioning.

## INHIBITION

My technique is based on inhibition, the inhibition of undesirable, unwanted responses to stimuli, and hence it is primarily a technique for the development of the control of human reaction. (Alexander 1941, p 114)

Conscious inhibition, for the Alexander Technique teacher, is the essential skill. It is said to empower an individual to gain an indirect control over otherwise automatic processes. Without saying "no" to a stimulus to act, we invariably respond according to habit. Moreover, sensory feedback mechanisms inured to habit render us unable to accurately assess the quality of our response. According to Alexander Technique theory, when we inhibit our habitual reaction, this clears the way for a more spontaneous, integrated response of the whole organism.

How might this apply to our reaction to the stimulus to sustain uprightness?

To inhibit an habitual response to a particular stimulus to act, "consent to perform the act must be withheld not given" (Alexander 1941, p 32). Upon the stimulus to speak, or to sit into a chair, however, we are *already* responding to the stimulus to sustain uprightness. It is too late to withhold consent. Consent is a done deal — as are the reactions that have flowed from this consent.

Applying conscious inhibition upon the stimulus to speak, upon the stimulus to move from sit to stand, is indeed very useful to help us become more attentive to what it is we are doing and how it is we are doing it. As such, conscious inhibition is a wonderfully useful tool for self observation. It cannot, however, be "a technique for the development



of the control of human reaction” — at least not in relation to the ever-present stimulus to be upright. Since it is continual, there is no way to inhibit prior to acting. There is no “prior to” moment. We are always in the midst. When the force of our body weight knocks us off balance, we have no choice but to react by tensing. Had we the ability to exercise inhibition of our bracing reactions, we would topple. Our innate will to be upright will not allow it. It is a matter of survival.

Our reactions are not the problem anyway. The problem is our creating a condition of toppling. It is this toppling that necessitates our “unwanted” reactions in the first place. We can most effectively control our reactions by changing this condition. We do so by changing how we commit body weight.

### ‘GETTING INSIDE’ AN ACT

[T]his instinctive misdirection leading to a wrong habitual use of myself, including most notably the wrong use of my head and neck, *came into play as the result of a decision to use my voice; this misdirection, in other words, was my instinctive response (reaction) to the stimulus to use my voice.* (Alexander’s italics, 1932, p 13)

Our habitual use manifests not only upon a decision to act, but constantly — before, during and after any particular decision to act in any particular way. This is what makes it habitual. It might manifest differently in different activities; but it is always there, even standing ‘still’ doing ‘nothing.’ We are constantly striving to be upright, constantly committing our weight. These are inescapable, as are our reactions.

To gain control over our manner of sustaining uprightness, we need to recognize the forces at play in this act. We need to *get inside* our routine behavior. It is in our most simple, oft-repeated activities — practiced since early childhood — that our habitual manner of use is most deeply entrenched, out of reach of conscious awareness. Until we identify the keystone upon which our most common activities are based — our will to be upright and our commitment of body weight — we cannot begin to explore their influence on functioning. Once we do recognize the existence of these basic influences, we can begin to ask:

- How do I commit my weight in my usual activities?
- In standing?
- In sitting?
- At work?
- In social situations?
- Where is this commitment of weight in relation to the talus or sit bones?
- Can I notice the connection between a particular commitment of weight and a particular muscular reaction?
- Can I use my thinking to change my commitment of weight?
- Do I notice a different response when I change how I commit my weight?

## SECTION 4. CHILDHOOD ORIGINS OF MISUSE

### THE TODDLER/YOUNG CHILD TRANSITION

In the very early stages of life — through our will to be upright, through persistent attention to our kinesthesia, through trial and error — we master the force of our weight. When we do, we are able to stand without falling — precariously balanced yet firmly grounded. We simply cannot brace. Our muscles lack the strength to support bad coordination. The result is that we achieve uprightness with a natural grace and power (Figure 10).

As we leave our toddler years, however, our attention to kinesthesia wanes. We begin to mis-commit our weight. As we do, we lose some of the innate bounce we so deftly generated as toddlers. At the same time, we knock ourselves off balance. Yet we do not recognize this. There are no apparent consequences. We do not fall down. When we were

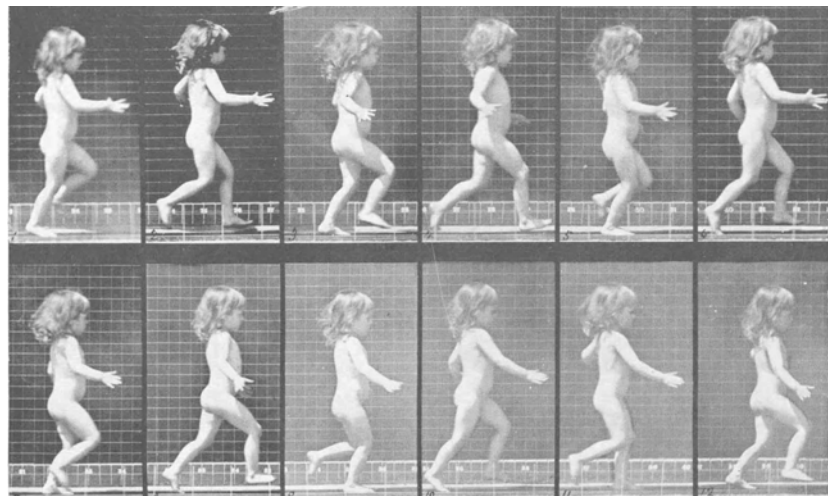


Figure 10. Muybridge photo of child running. Notice weight commitment is into the talus with each step.

first learning to stand, a mis-commitment of our body weight would immediately result in our bottoms hitting the ground. We had not yet developed adequate strength in the large, surface leg muscles that could brace ankle, knee and/or hip joints, and keep us from falling. As these muscles develop, our margin for error dramatically increases.

When we commit body weight away from the talus, we start ourselves toppling. We subconsciously recognize this as a dire predicament. A compensatory reaction becomes essential to preserve our upright stature. No problem, says our auto-pilot brain. A little tension here, a little more over there, presto-chango, emergency over! We remain standing as if nothing had happened. Our ends are achieved without any conscious recognition of the means that we are using to achieve these ends.

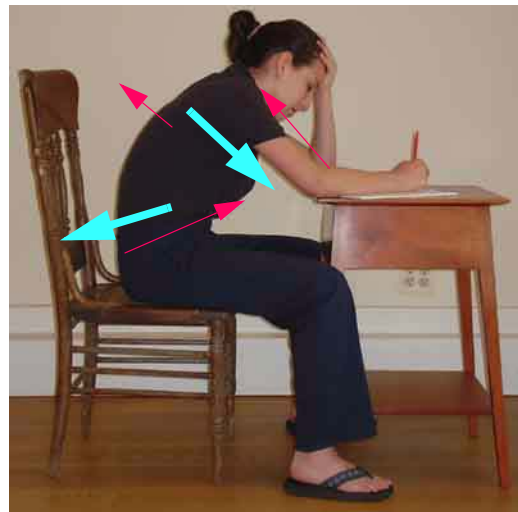
There is subconscious recognition, however — recognition that we do not need to be as attentive to how we commit body weight as we had to be when we were first learning to stand. We have other options now. We have learned that even when we mismanage the


fall of our body weight, and the force starts to knock us over, we will summon a neutralizing muscular counter-force to keep us standing.

With our attention more and more on the outside world, and on new skills we are learning, we lose interest in basic motor coordination. Kinesthetic awareness declines, as does the quality of our functioning. How we commit weight, how we bear weight, how we brace to hold ourselves up, all become part of our background sense of self. We are starting to build our habitual manner of use. We do it without knowing how we are doing it, without even knowing *that* we are doing it.

## SCHOOL DAZE

Sitting in a school chair five or more hours a day, five days a week, forty weeks a year, year after year, makes an impression. Whatever we learn through the curriculum and through our social interactions, the process of school-room sitting is itself a significant learning process — reinforced through staggering repetition. Estimated conservatively, we adjust ourselves in our school chair at least five times a minute, hundreds of times an hour, near a thousand times a day, thousands of times a week, hundreds of thousands of times a year, millions of times before we become adults. Motor habits develop, out of our awareness. Bit by bit, habits become intractable.



Force   
Counter Force   
Figure 11. Doing homework.

## The Real ‘Back and Down’

When we lean back into a chair support, we are committing our weight down well behind us (Figure 12). That the back of the chair happens to intervene does not change the reality of our weight commitment. We are, in actuality, giving ourselves the command to fall down backwards.

We are five years old or younger. We see everybody leaning into the backs of chairs. It seems most normal. We don't question this act. We simply do it. When we do, our weight is not going through the sit bones. Pelvic floor and pelvic wall muscles (Figure 5, page 9), vital to upward extending, go unstimulated. Deep, lower back muscles — from the base of the spine up to our point of contact with the chair back — lose some of their capacity to function. The chair support is doing the work. As we commit our weight backwards again and again, these muscles get weaker and weaker, becoming less capable of doing their job.

After a time at school, we become sitting-back experts. Our auto-pilot brain knows what forces to expect and what to do with them. We soon learn to regulate our fall, maintaining some tension in hip flexors to make our falling back gradual and smooth until we hit the chair back. We develop such control of this movement that we can easily stop ourselves on a dime at any point before hitting the back support (Figure 13). Test it out.

As we fall backwards, the pelvis and sacrum drop back and down, creating the bottom of the infamous "C" curve. Eventually we hit the back support, somewhere in the thoracic region of the torso. Depending on how close our hip joints are to the chair back, the angle formed by (1) a line drawn from the hip joint forwards, parallel to the floor, and (2) a diagonal line drawn from the hip joint backwards, through the point where the torso contacts the chair back, is anywhere between 105 degrees and 135 degrees. The upper torso, however, above our contact with the chair support, is drawn towards (and often goes beyond) a 90 degree angle with the floor to counter the backwards fall of the lower torso. This bends the torso between 15 and 45 degrees at the point of contact with the back of the chair. Bending the torso like this is shortening it. It is impossible to commit weight into the back of a chair without creating such a shortening. This is where we do our pulling. And it is a pull *up*, not down. (Figure 12)

Upper torso flexing begins the moment we start committing our weight backwards, away from the sit bones. The split second we lose our balance, we begin to tense the neck in order to keep a level head. Keeping a level head is part of our will to be upright. If we did not tense in this manner, our heads would fall down backwards with the rest of us,

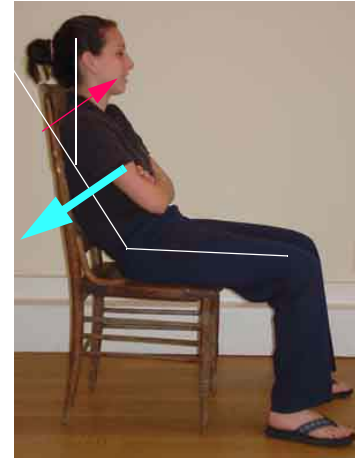


Figure 12. Shortening stature.

Force →  
Counter Force →

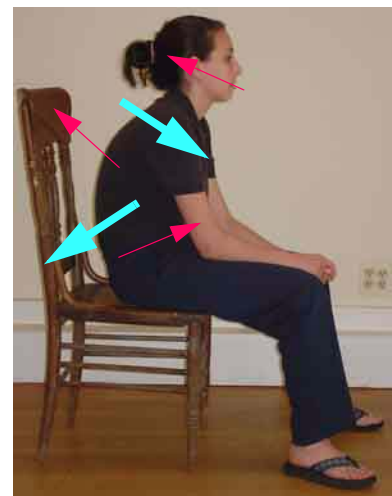


Figure 13. The "C" curve.

Force →  
Counter Force →

and would not be able to attend to business. Committing weight backwards into a chair support leaves us no choice but to tense (Figure 12, page 17).

To understand why virtually everyone in our society displaces their head and neck forward, we need look no further. In sitting back into a chair support, we establish a forward relationship of upper to lower torso. We don't notice doing so. In standing, or unsupported sitting, the forward displacement of neck and head becomes more obvious — but its source remains obscured. Its source is our committing body weight backwards as we sit into our school chair — an act reinforced through countless repetition.

### Anchor's Away

At last, we are 'comfortably' settled back in our chair. Soon, the moment comes when we need to draw or write or otherwise address something on the top of our desk. Our weight is fully committed back, basically anchored to the chair support. How do we come up off it? With a big pull up, of course. Not to worry. Our young muscles are strong and flexible. One common strategy we employ is to tighten the hip flexors to pull the pelvis forward. This produces the classic arching of the lower back (Figure 14). A second option is to leave the pelvis and lower torso back and down where they have fallen, and use the abdominals and upper torso flexors to pull the mid and upper torso forward toward the desk top (Figure 13, page 17). Either way, we need substantial muscular effort, or else we could never counter the force of our weight falling backwards.

We pull ourselves off the back of the chair without having ever recognized our backward weight commitment. As such, we cannot change it. It continues even as we muscularly counter it. Therein lies the problem. A destabilizing weight commitment, and the muscular response summoned to counter it, go together. When repeated habitually, they become part of our background functioning, out of our awareness. The muscular effort that has pulled us up off the chair-back continues as we sustain our upright position. Without such effort, we would just fall back down again — which we do when these muscles soon fatigue.

### Hinging the Torso

Hinging, flexing, the torso is integral to habitual sitting. As discussed above, this hinging pulls head, neck and upper torso forward and up toward the upright as the pelvis and lower torso fall down backwards toward the chair-back (Figure 12, page 17).

When we pull ourselves off the chair-back to work at our desk, we eventually reach the *tipping point* — where our center of gravity is directly over our weight bearing structure. Ideally, this structure would be the ends of the sit bones; unfortunately, for most

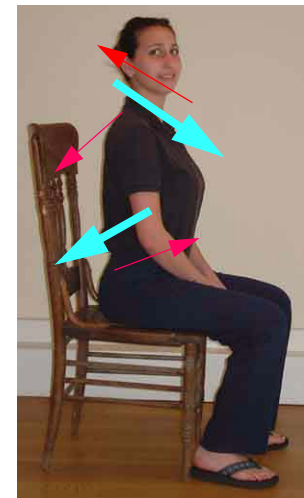


Figure 14. "Pulling up," masking the hinge.



children it is likely the sacrum. At this point, our familiarity with flexing the thoracic spine comes in to play, with major consequences. (Figure 11, page 16)

### Elbows Off the Table

Having pulled ourselves out of our backwards fall to work at our desk, our habit of flexing the torso — in combination with the fact that the focus of our attention is now down on the desk in front of us, in combination with the force of gravity — results in our committing our head and upper body weight forward toward the desk.

This is the classic slump, the top of the “C” curve. Our upper torso bends toward the desk. Yet there is no pulling involved, just a forward dropping of our body weight. To cope with this, we either stay slumped, straining back muscles and ligaments (Figure 13, page 17), pull up the chest by arching the back, which is not sustainable for too long (Figure 14, page 18), or use our arms to support this forward falling weight (Figure 11, page 16).

### Caught Between a Rock and a Hard Place

Repetition makes leaning into a chair-back truly damaging. We are programming ourselves to regard as normal the muscular effort and weight-bearing sensations attendant to committing weight backwards. Minute after minute, hour after hour, day after day, year after year, we steer our weight away from mechanisms that need this weight in order to do their job — a job that is vital to the uplifting process. Pelvic and lower torso mechanisms weaken; upper torso mechanisms strain to pull head and neck toward the upright. We gradually lose the ability to self-support. As we are children, and see that everyone else is sitting back into chairs, grown ups too, we never give it a second thought.

Once we are anchored into the back of a chair, coming forward to do work at the desk requires significant effort. Once we get to a roughly upright position, our well-developed habit of hinging the upper torso results in a slump — a forward commitment of our upper-body weight toward the desk in front of us. Back and forth between two extremes, all day, every day, for years. A formative experience.

### From Sit to Stand

As committing the weight of our torso back and down becomes habitual through repetitive sitting, we do it not just in sitting, but in standing as well (Figure 8, page 11). In standing, of course, there is no chair back waiting to support our falling weight. We need to supply this support ourselves, internally. No problem. Our hip flexors and leg muscles can do the job — but not without an effort that strains these muscles and limits our freedom of movement. And as in sitting, when the torso is leaning back and down, the head and neck need to be pulled forward and up toward the upright.

### The Feet in Sitting

In optimal sitting, we do not balance on the sit bones alone. The weight of head and torso is, by nature, slightly destabilized forward. Ideally, we commit this ‘excess’ weight through the talus (or, when sitting cross-legged, or otherwise, through a comparable mechanism). The point is to fully exploit our muscular-skeletal bounce-back potential. When we do, our excess weight is easily uplifted.

## **SECTION 5. WEIGHT COMMITMENT AND AT LESSONS**

### **HEAD FORWARD AND UP**

Alexander (1941) observed that a certain use of the head in relation to the neck, and a certain use of the head and neck in relation to the torso facilitated an integration of the self as a whole, an optimal use (p. 10). Attention to the use of the head, in particular, is a defining aspect of the Alexander Technique. Viewed from a weight commitment perspective, however, in order for our heads to be poised atop the spine, our whole spine needs to be going up. When our head is not going up, it is not a sign that we are “pulling” it down by tensing the neck. It is a sign that the pole on which our head rests is toppling.

When our torso is falling off center, our head goes too. Something in the inner ear rapidly signals an alarm. The response is immediate. Neck muscles tense to keep the head as straight and level as possible under the unsettling circumstances. This muscle tensing is part of our subconscious struggle to recover equilibrium after losing it by leaning one way or another. It is not a tensing we needlessly impose on an otherwise graceful organism. It is a necessary reaction to our using our own weight against ourselves.

### **THE CRITICAL MOMENT**

Alexander (1932) noted that “at the critical moment when the giving of directions merged into ‘doing’ for the gaining of the end [he] reverted to instinctive misdirection and [his] wrong habitual use” (pp. 18-19).

When we inquire into what is happening, we observe that this critical moment involves making a transition — from having an idea to actually acting upon it. In an activity with a clearly defined beginning, this means transitioning from stillness to movement. Viewed from a weight commitment perspective, however, this stillness has been concocted, imposed through muscle tensing to keep us from falling over. At the onset of an activity, we stir things up. To facilitate our moving, we let go of the bracing that has been holding us in place — for example, the posterior tensing that counters the forward mis-commitment of upper torso, neck and head.

Letting go of this bracing exposes our underlying weight commitment, and results in the movement pattern Alexander Technique teachers have come to characterize as “pulling down.” It is not tensing, however, that creates this movement. It is tensing that has been preventing the movement. And it is tensing that will stop it once again.

As our upper torso falls forward, slumps, our sight line moves as well. We tilt our head back to keep our eyes on whatever object we were focussing prior to our moving. To do this we tense the neck. This tensing is not pulling anything down. Gravity sees to it that a downward fall is *always* happening. The destabilizing force here is forward. This forward fall happens a split second prior to any adjustment of the head, prior to any neck tensing. Neck tensing is a *reaction* — to stabilize a head that sits atop a pole that is toppling forward, and to tilt the head to adjust the sight line. This also puts into context the tendency to lift the chest. Lifting the chest, by arching the back, is a common response to a slump, to the forward commitment of upper body weight. It is something we have done many times in our lives, often after being told, “Sit up straight!”

#### END-GAINING VS. MEANSWHEREBY

Alexander (1923) introduced certain preventive orders — e.g., “relax the neck,” “the head forward and up,” “lengthen the spine” (pp. 71-74) — for a student to repeat silently while the teacher moves the student with his hands. The orders are designed, he stated, to help the student focus attention on the step-by-step “means whereby” of the process rather than attempting to attain an end without consideration of the means.

Viewed from a weight commitment perspective, however, we are always end-gaining our uprightness. It is unavoidable. Motivated by our will to be upright, moment-by-moment we lift our weight, lengthening our stature as best as our use will allow. Since our will to be upright is basically hard-wired, what purpose does it serve to instruct ourselves (and our students) to lengthen the stature? It is implausible that we lack this intention.

It is not a failure to think-up that leads to the tensing connected with a shortened torso. Quite the contrary. Thinking up inspires the tensing. Were we willing to simply fall to the ground when the force of our own body weight knocks us off balance, there would be no need to tense. Tensing is a direct result of our intention to be upright. We tense for the explicit purpose of holding ourselves up. Tensing in this fashion is the best we can do to maintain uprightness given the circumstances. What we need to do is to change the circumstances.

Directing “neck free, head forward and up, back lengthening and widening” implies that somehow such thinking will actualize the words. As soon as we articulate the words, even silently, we insinuate that we can free the neck, lengthen and widen directly — that we can indeed *do* it, even though we are supposed to only *think* it. What would be the point of thinking it if thinking did nothing? Giving ‘think up’ instructions encourages



end-gaining by focusing our attention, no matter how subtly, on achieving the end, 'up'. It does not help us understand how we disable our length in the first place.

A genuine means-whereby approach requires that we develop such an understanding, both intellectually and experientially. This involves exposing our habitual ways of committing weight and the reactions that flow from such commitments. This is no easy task. For so, so many years, we have been mis-committing weight while masking the ensuing imbalance with a tensing that we also have not noticed. To undo, we must expose not mask. Unmasking will enable us to access innate response systems which, when functioning fully, allow us to lift our selves with a minimum of effort — to, in effect, “leave ourselves alone.” Not exposing these habitual tendencies makes “non-doing” impossible.

When we catch a glimpse of one of our pet weight commitments, we have the raw material to work with. We can begin to playfully experiment. Here we meet up with our primary obstacle: faulty kinesthetic awareness. This has left us quite comfortable with our habitual manner of committing weight, and with our well-established work-arounds that hold us upright.

To overcome the deceptiveness of these familiar work-arounds, we can begin by exploring an activity to identify key dynamics. For example, we may bring into awareness how we stand. We may notice a tendency to stand with virtually all of our weight supported by one leg. This mis-committing of our weight laterally is a common act, something we have been doing since childhood. Merely catching an initial glimpse of ourselves standing on one leg, however, does not identify it as mis-committing weight nor does it make the act feel any less comfortable. This is key.

What we can do, at first, is to understand intellectually that when we move off center (say, to the left) by taking weight off of the right foot, unless we do this by consciously committing all of our weight into the left talus directly, then we are going to be doing our habitual thing. This habitual thing is to mis-commit our weight laterally — to steer it to a spot on the ground out to the side where nothing exists to re-direct this weight upwards. With this mis-commitment of weight, we start to fall off the top of the talus. This fall needs to be stopped by bracing.

To gain a kinesthetic, non-conceptual awareness of this, we need to make this habitual act feel less comfortable. One strategy is to purposely increase the mis-commitment. By steering our weight even further away from the talus, we create the need for a more vigorous bracing to counter the increased instability. This extra effort, being out of the ordinary, has a greater chance of being noticed.

We are now *getting inside* the act of standing. We are beginning to understand that our leaning is mis-committing weight. We attempt to exaggerate the mis-commitment. We watch our reaction. We can now attempt to exaggerate the mis-commitment further;

or we can attempt to lessen it (by committing weight to a spot closer to the talus). Only by learning to recognize where in fact we are commanding our weight to fall do we become able to command it to fall somewhere else. Ideally, we want to commit the force of our weight directly through the talus. Doing so makes a demand on deep foot muscles. These muscles are weak, out of shape. By persistently making a demand on them, foot muscles get the message that they have no choice but to perform. Without the demand of our weight, however, they will not perform. And without the ability to consciously commit weight, we cannot create this demand.

Our tendency is to do what feels right. When we commit weight laterally — as we all have done for many years — we bear more weight on the outside of the foot. Compared to this sensation, committing weight through the talus feels odd. We are not used to the proportionate planting of foot bones, nor to full engagement of deep foot muscles. We are used to the muscle tensing that comes with our habitual weight commitments. We gravitate towards these habits. We need to get to know them. Noticing ourselves doing ‘wrong’ is vital to learning how to do ‘right.’ Our entire lives, we have been doing wrong while not noticing. In spite of this, we have always been successful at gaining the end of remaining upright. Yet, by not giving a second thought to how we are committing our weight, we have been missing a vital link in the process. By not noticing, we have been training our auto-pilot brain to consider acceptable, no matter how stressful, all of our habitual ways of committing weight. We need to re-instruct our auto-pilot brain that all weight commitments are not the same. We do this by conclusively demonstrating to our self, rationally and experientially, that different weight commitments do indeed engender different responses. Although we can compensate for a poor weight commitment, doing so comes at a steep price.

Over time, by repeatedly getting-inside our activities, we develop a capacity to distinguish committing weight in one direction from committing it in another. We contrast the respective muscular responses. When we notice the freedom and ease of movement that comes from committing weight into the talus or sit bones, it whets our appetite. We are inspired to pay more attention, to experiment further. The more we notice about how we commit weight — regardless of whether we notice a true commitment generating an innate, constructive response or an habitual, destabilizing commitment generating a bracing response — the more control we gain. It is all grist for the mill. Gradually, experimenting leads to insight:

*This whole ‘up’ business is powered by gravity taking my body down to earth. I control this force by how I commit, or steer, my falling weight. Dropping my weight down is a lot easier than trying to lift it up. It takes no effort — only an act of consciousness. I am already steering my weight, have been doing it my whole life, but subconsciously. Now that I observe myself in the process of committing weight, I understand that if I*

*can steer it in one direction, I can steer it in any direction. When I steer it off center, I need to brace to keep from falling. When I steer it into my balancing points, upwards extension happens by itself. The end of lifting myself up is achieved, ironically, through the means of dropping down accurately — into innate structures capable of transforming a downward force into an upwards force.*

## HANDS-ON TEACHING

Alexander (1923) observed that we work “subconsciously to reproduce certain feelings that [we have] grown used to and like” (p. 56) and that to escape from this conundrum our “preconceptions and habits of thought...must be broken down” (Alexander, 1910, p 83). A way for an Alexander Technique teacher to help a student accomplish this “breaking down”, he taught, is for the teacher to “perform muscular acts vicariously” by moving the student’s body while instructing the student to attend to “the inhibition of all muscular movement” (ibid). This pedagogical approach suggests that providing the student with a precedent-setting bodily experience of improved coordination will facilitate deconstruction of preconceptions and habits (Alexander, 1923, p 51). New conceptualizations will emerge from the new sensory experience.

From a weight-commitment point of view, we reproduce a muscular pattern not because we like the feelings it engenders, but because we have thrown ourselves off balance by mis-directing the force of our body weight. Muscle tensing is part of the recovery process. Weight commitment theory suggests that traditional hands-on teaching produces a new experience for the student by fundamentally changing the weight-commitment conditions that were creating the need for our tensing in the first place. In standing, for instance, we maintain uprightness, however well, while supported on two feet. When an Alexander Technique teacher puts hands on us, all of a sudden we have a base of two more feet. Four feet offers far more stability than two. As we learn to trust our teacher, and let go of our resistance to change, we begin to experience the invigorating energy that is the product of a more accurate weight commitment.

That is, even when our Alexander Technique teacher is not consciously aware that we are mis-committing our weight, her hands-on contact makes her a ‘player’ in this process. Our Alexander Technique teacher does not need to have a conscious intention to alter our weight commitment. Her hands-on contact alone can fundamentally change it. With two extra feet expanding our base of support — and with two hands gently providing additional guidance without imposing restrictive tension — our destabilizing weight commitment is easily countered.

It is far easier for a teacher to provide the counter-force from outside than it is for us to change from within. To change from within requires that we become aware of our typical ways of committing weight and the reactions they provoke. After not noticing

these patterns for so many years, becoming aware is no easy task. When a teacher provides a counter-force, we can indeed free up. The conditions that brought about our tensings are changing. For the moment at least, we have no need to tense. We are balanced, no longer toppling. There is a profound joy in that.

Whatever experience is conveyed to us in hands-on teaching, however, it is not the experience of being an autonomous self-mover. Hands-on teaching alone cannot give us this experience. But this is what we ultimately need to learn. With a working understanding of the underlying conditions that interfere with innate coordination, it is possible to learn good use without hands-on intervention.

Ultimately, each of us needs to do the work for ourselves — to learn how we commit our weight and how we brace in response. The more aware we become of how we commit weight in daily activities, the better able we become to commit it where it does us the most good — to the magnificent structures that jump-start our extending upwards. Upon committing weight more accurately, our muscular responses change of their own accord. When we are genuinely going up, not toppling, we have no need to brace to hold ourselves up.

## UNDUE TENSION

Alexander (1923) labelled our habitual tensings “undue” (e.g., p 71) — meaning, according to Webster, improper or excessive. Viewed from the perspective of weight commitment, our tensings are necessary, not excessive. They keep us from toppling, keep our head level and our eyes focusing on our object of choice. Such tensings are a counter-force in direct proportion to the destabilizing force of our weight commitment.

## ALEXANDER TECHNIQUE EFFECTIVENESS

In sum, although an Alexander Technique teacher may not explicitly identify the underlying weight commitment conditions that have disabled our optimal use, the teacher does impact our weight commitment through hands-on contact. Through the support of a teacher, we are momentarily freed to experience a more effective weight commitment and, with it, an ease of use. This inspires self-study.

As beginning Alexander Technique students, we usually have given little, if any, thought to our moment-to-moment use and functioning. As soon as we start lessons, however, this all changes. We begin paying a lot of attention, when before we paid none. It makes a world of difference. We begin to

- observe more completely, astutely, sensitively, frequently, clearly
- acknowledge the force of habit and our faulty kinesthesia
- pay attention to the means we employ in the pursuit of our ends, and ultimately
- take responsibility for how we are using ourselves and how we function.

## SECTION 6. TWO ILLUSTRATIONS

In standing, there are four possible weight mis-commitment patterns (forward, back, lateral and medial). We are all comfortable with all of them. The differences lie in which particular pattern a given individual emphasizes — and in the degree of the mis-commitment. In sitting, there is one dominant pattern.

I illustrate here two of these common patterns to provide a way to explore the phenomena associated with sustaining uprightness and committing body weight.

### SITTING BACK INTO A CHAIR-SUPPORT

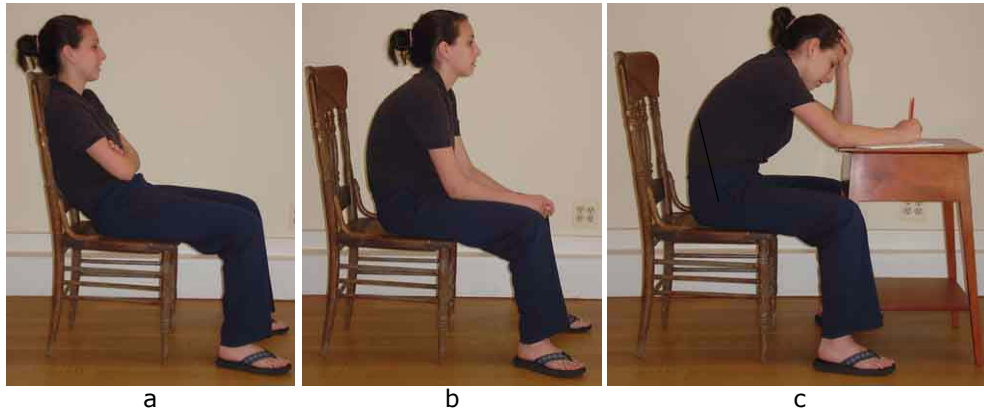


Figure 15. Sitting.

*See pages 16-18 for additional illustrations.*

1. Without giving it much thought, sit back into a chair. Let yourself experience being anchored back into the chair support.
  - Notice the point of contact with the chair support. Notice that it is behind the hip joints and the sit bones.
  - Notice the angle of the spine from hip joints to the point of contact with the chair support.
  - Notice the angle from the point of contact with the chair to the top of the spine.
  - Notice the shape of the whole spine.
  - Notice the bend in the spine at the point of contact with the chair support.
  - Notice the tensing of the neck and upper torso that creates the bend.
  - Notice that the upper torso, head and neck are being pulled forward and up relative to the lower torso, which is falling back and down.
2. Without acting in any way, consider what kind of effort it would take to move off the chair support.
3. Begin to gradually summon that muscular effort.
  - Don't move quickly off the chair support.
  - Pay close attention to the muscular effort.
4. Once torso, neck and head are over the sit bones, notice how are you staying there.
  - Are you letting your weight drop or are you holding the torso in place?

5. Let yourself fall back again toward the chair support.
  - Notice that the trajectory of this movement is down, not just backward.
  - Notice how comfortable this movement is. We have done it countless times. It is easy to do, easy to control. We can move as little or as far as we want in a moment's notice; we can stop on a dime. This is committing weight, and bracing in response.
6. Go back and forth between the back of the chair and upright, playfully exploring.
  - As you let yourself go from upright to back, recognize this movement as something you yourself are commanding by telling your torso to fall down backwards.
  - Stop half way. Notice the effort required in the abdominals and hip flexors to counter the falling weight.
  - Notice the effort required to pull yourself off the chair-support.
7. Once upright, allow yourself to slump.
  - Do it while keeping your eyes focused relatively straight ahead.
  - Recognize the falling of upper torso, neck and head as a forward weight commitment.
  - Recognize the muscle tensing as *holding up* head, neck and back rather than *pulling it down*.
8. Pull yourself out of this slump.
  - Notice the muscular effort needed to do this.
9. Explore going back and forth between slumping and pulling yourself upright.
10. Experiment with letting the weight of your torso drop straight down.
  - See if you can *not* drop the lower torso backwards, while also *not* tensing hip flexors to hold it up.
  - See if you can *not* drop the weight of the upper torso, neck and head forward while also *not* tensing back extensors to hold it up.
  - Achieving upward extension through dropping weight straight down is not the same as achieving it though holding ourselves in an upright position. No holding is necessary when weight is actually committed straight down through the sit bones.
  - Remember that, in optimal sitting, we bear a small amount of weight and get a small but key bounce back from the foot/ankle (or from whatever forward structure bears weight when feet are not flat on the floor, such as in cross-legged sitting).

With the negative conditioning of life-long habits, dropping our weight straight down is no simple task. To learn to do it, we need to expose our conditioning. We cannot change how we habitually commit weight until we catch ourselves in the habitual act.

Having sat countless times while not noticing our weight commitment — both back into a chair-support and forward at a desk or dinner table — we lack awareness of what we do in these most familiar and common-place activities. A lifetime of sitting has been a breeding ground for faulty kinesthesia. The silver lining is that our habitual sitting patterns, and the forces that drive them, are simple to understand in theory. With persistent observation, we can improve kinesthetic accuracy. When observing ourselves in 'normal' sitting, we should not try to do it 'right.' The idea is to do it according to

habit, to sit as we did all those years growing up — but this time with awareness so that we can expose the major elements at play.

To subtly mask these forces would be counter-productive. We do not want to suppress our mis-commitment tendencies. These tendencies are a deep part of who we are. We will never lose them until we get to know them so well that we can choose to *not* commit our weight backwards or forwards. Committing weight straight down, however, runs contrary to a lifetime of subconsciously controlled sitting.

### STANDING WITH WEIGHT SUPPORTED BY ONE LEG

Stand in front of a mirror with each talus roughly under each hip joint. Rest the back of one hand gently on the sacrum, the palm of the other just below the navel, directly opposite the hand on the sacrum. This is to clearly identify for yourself the part of the body that you will be closely watching to see where your are committing it. In this case, you are marking roughly the center of the body.

1. Commit your body weight straight down, into the right and left talus equally (Figure 16).

- Do this in your ‘mind’s eye’ by simply dividing the body in two at the central vertical axis, asking your weight on the left side to fall into the left talus, and your weight on the right side into the right talus.

2. Pick a spot on the floor three feet out to one side and slightly back.
3. Commit the part of your body that is between your hands to that spot, so that you are basically standing on one leg, with the pelvis displaced laterally.

- This is a movement we have done many times.
- We are quite comfortable doing it.
- Be casual.
- Do it just as you would if you weren’t paying any attention.

4. Go back and forth a few times — alternating between a straight and then a lateral commitment.
  - You are still being casual here, not paying too much attention to detail.

Figure 16. Standing Illustration



5. Now go back and forth again, but with greater awareness this time. Proceed slowly.
  - Although this movement out to the side may seem 'horizontal', this is deceptive. Gravity is always taking our weight *down* to earth.
  - As we commit weight down to that spot on the floor, our whole selves move in that downward direction.
  - We do not recognize this as a downward movement because the very moment we begin committing weight away from the talus, automatic compensatory adjustments take control to negate the impact of our tilting descent.
  - Leg muscles tense to brace ankle and/or knee joints to keep us from moving too far toward that spot.
  - Deep hip muscles — on the side we are moving toward — yank our leaning torso back towards the upright.
  - Neck muscles tense to keep our neck straight and our head level.
  - These automatic adjustments provide us with a seamless experience as if nothing was happening.
  - This is an illusion — a product of inured kinesthesia. It is vital to expose this illusion. Otherwise, we'll just keep repeating this experience.

6. Shift back to center, committing weight into each talus equally.

- When done accurately, we eliminate the need to brace ankle, knee and hip joints. Since bracing, however, is so deeply ingrained, it is necessary to keep reminding ourselves, again and again, moment-by-moment, to let it go.

7. Commit weight out to the side again, as in Steps 3 to 6. But this time, only one foot away from the talus.

- Make sure you pick out a spot on the floor, and go for it, literally. Then, alternate between the talus and that spot, comparing the two different commitments and the respective responses.

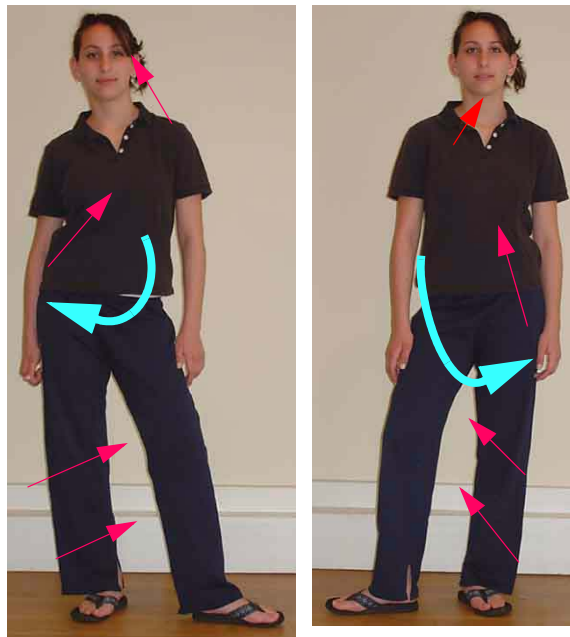


Figure 17. Right and left commitments.

8. Commit weight out to the side again, as in Steps 3 to 6, but only two inches away from the talus this time.



Do this all very slowly. Notice the muscular reactions around ankle, knee, hip, head/neck. Notice how the reactions are different, depending on the particular direction of the weight commitment. When we successfully drop our weight directly into the talus, this generates an uplifting response in the feet. We sustain uprightness with minimal effort and enhanced freedom of movement.



## SECTION 7. CONCLUSION

Alexander originally labelled neck tensing and stature shortening as “symptoms” of a “general mal-coordination.” He did not, however, articulate what they are symptoms of — what it is about our general coordination that causes a tense neck and shortened stature. His characterization of these symptoms as “pulling down” has influenced future generations of Alexander Technique teachers to regard “pulling down” as the cause of mal-coordination — as how we interfere with our head-neck-back relationship. Self-study has taught me otherwise:

1. The force generated by our body weight as it is compelled down to earth by gravity is the overwhelming influence on our use — for good or for ill.
2. We are in control of this force; we control it by how we *commit* our weight — in effect, telling it where to fall. We are doing this continually, even when we are unaware of doing so.
3. Committing weight is an act of consciousness — directing a force that impacts our every moment. Committing weight requires no muscular effort, no pulling. Gravity does all the work. Muscle tensing comes in reaction.
4. When we commit our weight accurately — through the talus in standing, the sit bones in sitting — we activate highly evolved processes that jump-start our extending upwards, enabling us to lift ourselves with minimal effort.
5. Without fully exploiting this boost from below, optimal use is impossible.
6. To the degree that we commit weight away from these activation points, (a) we diminish the boost from below, and (b) since these activation points also happen to be our balance points, we destabilize ourselves, throwing ourselves off balance.
7. When we commit weight away from the talus or sit bones, our auto-pilot brain recognizes this as a threat to our continued uprightness. Our will to be upright is supreme. We immediately tense muscles to counter the force of our toppling.
8. This tensing is not “undue;” it is proportionate to the destabilizing force of our weight. Tensing is necessary to hold ourselves up, to maintain uprightness. Tensing is necessary to keep the head relatively straight and level. These are matters of survival.
9. We cannot completely release this bracing tension so long as we are mis-committing body weight — not if we want to remain upright.
10. The act of sustaining uprightness underlies all of our sitting and standing activities.
11. We cannot inhibit our sustaining-uprightness response prior to acting. The stimulus to sustain uprightness, and our response to this stimulus, are ongoing. There is no ‘prior to’ moment. We are always in the midst.
12. Before age ten, we have all become well-practiced at committing our falling weight away from our innate support mechanisms by routinely and repetitively sending it back and down as we sit back into our school chair.

13. Subconsciously commanding the pelvis and lower torso to fall back and down as we sit into a chair-support requires that we pull upper torso, neck and head forward to achieve uprightness. Doing this repetitively reinforces a forward relationship of upper torso to lower torso. In standing and unsupported sitting, this forward displacement of neck and head becomes more obvious. But its source is in our habitually committing weight backwards in sitting into a chair-support.
14. This tendency to mis-commit body weight in sitting spills over into our standing activities, where the developing strength of our superficial leg muscles makes it easy to brace ankle, knee and/or hip joints to hold ourselves up. We do this without awareness. There are no apparent consequences to grab our attention. We always remain upright.
15. Through repetition upon repetition, we learn to regard as 'normal' the sensations attendant to mis-committing body weight and bracing in response. They become part of our background sense of self, our habitual manner of use. As such, they are beyond our control.
16. Once we recognize that we do in fact commit our weight, we can begin to observe how we tend to do this in our simplest, most habit-prone activities.
17. To change how we commit body weight, we must expose, not suppress, our habitual tendencies. When we catch ourselves in the act of committing weight in one of our favored ways, we have the raw material with which to play.
18. We then can begin to compare and contrast our habitual ways of committing weight with a more conscious commitment, and to observe the respective muscular reactions.
19. It is through exploring in this fashion that we are able to 'get inside' the act of sustaining uprightness.
20. This enables us to begin to register formerly unnoticed sensations and to cultivate a new understanding.
21. As we learn to commit weight more accurately, we improve how we sustain uprightness. This improves the overall use of the self — including, of course, the quality of our head-neck-back relationship.

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## **ABOUT THE AUTHOR**

Michael Protzel began Alexander Technique lessons in 1980 at age 30. He came to lessons with chronic back pain, the culmination of a lifetime of ‘mishaps’ — a severely swollen left knee requiring drainage at age nine, an inflamed right hip joint requiring hospitalization at age 17, recurring back spasms beginning at age fifteen, a blown-out knee requiring reconstructive surgery at age twenty. After two years of private lessons, he entered a four year teacher-training program directed by Tom Lemens. He was certified in 1986 by STAT and in 1987 by NASTAT (now AmSAT). He was *NASTAT News* Editor from 1989-1996 and currently is Chair of AmSAT’s Professional Conduct Committee.

Michael is involved in other long-term self-observation processes in addition to the Alexander Technique, including psychoanalysis, Tai Chi/Qigong, Carl Stough’s Breathing Coordination, and the study of jazz guitar. In the mid-1990s, Michael worked with Alexander Technique teacher Ed Bouchard and his AT student, University of Chicago measurement guru Ben Wright, on *Kinesthetic Ventures, Informed by the Work of F.M. Alexander, Stanislavski, Peirce & Freud* (MESA Press, 1997). This book explores the languages of art, psychology, philosophy and cognitive science to describe the Alexander Technique lesson experience.

In addition to teaching the use of the self, Michael is President and CEO of Gann Law Books, Inc., one of the few remaining small, independent law publishers in the United States. Gann specializes in publishing high-end, state-specific legal treatises, for use by attorneys and judges, that comprehensively analyze the law in a particular field of legal practice.

Michael’s first paper on weight commitment theory, “Down To Earth”, was published in AmSAT News, Issue No. 45, Summer 1999. A revised version of that paper is now online at [www.kinestheticventures.com](http://www.kinestheticventures.com).

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