

A Handbook for Musicians learning the Alexander Technique

CHANGING HABITS:
The Power of Saying *No*

*A personal view for musicians, music
students and their teachers.*

Malcolm Williamson

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*A personal view of the Alexander Technique for musicians,
music students and teachers.*

Opening remarks

In September 2009, the Royal Northern College of Music awarded me a Teaching Fellowship. I have been teaching the Alexander Technique at the College since September 1985. My report is the product of a two-year review of this approach to developing personal performance and wellbeing. Viewed from my perspective as a musician, the Technique's basic principles are given a context that I hope will enable young musicians to relate to its vital message.

To get what you want, stop doing what isn't working.¹

I might be accused of letting my enthusiasm run away with me and giving an impression that the Alexander Technique is the ultimate answer to everything. But, when we find ourselves needing help, evidence shows that a *multi-disciplinary team approach* works best. Advisers will include teachers, medical advisers, therapists, counsellors, family members, colleagues and friends. Ultimately, though, the student must decide what suits him and works best for him. Students who naively hope that someone else can and will solve their problems risk wasting precious time going from one 'expert' to another and becoming progressively more despondent with the limited results. If someone tells you they have the answer, and that it involves little or no effort on your part, then think very carefully before parting with money. Of course, we all need all the help we can get. But it is the student's own persistence and intelligent enquiry that are the most reliable predictors for a successful outcome.

The best case I can make for why anyone should learn the Alexander Technique is that the way we use ourselves affects everything we do. We can't hope to get winning results by following any kind of advice, treatment or therapy if our standard of use is poor. Self-limiting habits will hamper any attempt to improve. So, firstly, see whether you are the unwitting creator of your problems by "something you are doing" in the way you are using yourself and, if so, *stop doing it*. Instead of putting yourself at a disadvantage, you will then be well placed to take things further with every chance of success.

Is it all a matter of habit?

'Alexander found it impossible simply to substitute one habit for another. The original habit constantly intruded. Thus the chief means of change became stopping (inhibiting) the original habit so that new directions could take effect. The ability to be aware of

¹ Attributed to Earl Warren (1891–1974) who led the inquiry into President Kennedy's assassination.

something and momentarily stop it can become a skill which can generalize to any sort of habit.’²

Habit seems to me to be a central issue for musicians. Most of the 10,000 hours of practising we are told it takes to be an elite performer are spent in forming ‘good’ habits that can be reliably summoned in demanding, and often uncomfortable and difficult, circumstances. The American philosopher and educationist, John Dewey, wrote a masterful discussion of habit in his book, *Human Nature and Conduct* (1922) in which he used Alexander’s arguments to show that established habits cannot be changed just by doing something else. The old habits persist. A systematic approach is necessary for fundamental change based on self-awareness, reasoning and, most of all, stopping the wrong thing happening. This starts at the ‘mental’ level – with how we are thinking.

Both men saw a need for individuals to develop the skill of ‘thinking in activity’³ for the (self-) regulation and adaptation of behaviour necessary for dealing with the demands of modern living. In Dewey’s opinion, all the requirements of a process for change were met by the technique developed by Alexander. The approach is simple, but not necessarily easy. One has constantly to be alert to the persistence and immediacy of habit. However, it provides a fascinating plan for exploring that which is of the utmost interest to each of us – *Ourselves!*

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1. Basics needn’t be boring

“T’ain’t what you do (It’s the way that you do it) – And that’s what get results,” say the 1930s lyrics.

Build your technical and life habits on sound principles even though, at first, this might seem the slower option.

The strength of the Alexander Technique is that it helps you realise when it is your own ‘doing’ that’s limiting your progress and also cultivates the personal skills for you to make the necessary changes and achieve far more. Applying the Technique in daily activities helps you move ahead through helping you realise what it is you need to do differently – perhaps more simply – and by increasing your confidence. It helps you attend to your physical performance and also to what’s going on in your mind. It’s powerful stuff! It helps you in your music study, in practising and performing and in most other areas of life. The Technique can help you to take a better approach to any task that might seem overwhelming. It will keep you ‘in the moment’ and help you to achieve more than you ever thought possible.⁴

I know we shouldn’t begin on a gloomy note **but** – most musicians start having Alexander lessons because they feel that there is something wrong with themselves or their playing – or singing. Things have to have got pretty bad before we start to wonder whether we might try to do things differently or we seek advice. That said, some students have lessons for less pressing reasons. They may want to

² Mixon, p.182.

³ *UOS*, p.42 etc.

⁴ Based on an Amazon Books review by Angela Sherman of Roy Palmer’s book (2006), *Zone Mind, Zone Body: How to Break Through to New Levels of Fitness and Performance – by Doing Less!* Penryn: Ecadamy.

improve their posture and appearance. Some want to gain more self-confidence and to feel less stressed or over-tense while performing. Others have a general aspiration for personal growth and development.

When things go wrong for musicians, careers often have to be put on hold. There are serious worries about “Will I ever be able to play again?” and “How will I pay my bills?” When this happens, it’s never the best time to start taking a calm, fresh look at yourself. The old maxim ‘Prevention’s better than cure’ holds true. But equally true for most of us, and on a more positive note, it’s better late than never. The good news is that very seldom is there anything irrevocably “wrong” with you. It is more likely *what you are doing* – how you are using yourself – that’s causing your problems. And if that’s so you can argue that, as you trained yourself into one way then you can *unlearn* old habits and retrain yourself in new and more useful ways of doing things. But, of course it’s not necessarily an easy matter. And it doesn’t help when others say we are being lazy, weak-willed or not trying hard enough. There are good reasons why we get set in our ways and old habits die hard.⁵ Most of us need professional help. For those in their thirties or forties with long-standing habits (a focal dystonia, for instance) an intensive and lengthy programme of re-education is necessary. All rehabilitation programmes, including aspects of Alexander lessons, are based on exercise and therapy to improve your ability to *relax* and to develop a more accurate *sense of self* (self-awareness). The two go together. The American philosopher, Richard Shusterman put it succinctly:

‘If we really know what we are doing (and not what we *say* or *think* we’re doing), we can better do what we want.’⁶

By learning the Alexander Technique you develop the skills to take a calm, rational approach to stopping old, unwanted habits and to forming new ones based on sound bio-mechanical principles.

Giving yourself time and space

Music exists within the context of time and space. It takes time for a musical idea to unfold, for vibrations to travel and for a gesture to be expressed.⁷ Remind yourself frequently, ‘I have time’. You are the only one who can give yourself time. Albert Einstein famously remarked on the usefulness of time: It stops everything from happening at once!

Think of all those hours you spend practising your playing habits. Habits need to be reliable and by their nature they have a certain automatic, mechanical quality. Once learned, habits are largely performed unconsciously but, in order to change our habits, we need to slow ourselves down and bring them back into awareness.

⁵ Human babies are born with a nervous system that is still highly plastic (i.e. ‘mouldable’). ‘By being flexible, the nerve pathways do not have to be wired in perfectly from the start. ... Instead, they can ‘feel’ their way into the job. However, once this basic pattern has been set [by the production of a fatty protein called myelin that wraps round nerves like the insulation round electric wire], it takes very considerable training and effort to change it. It is as if deep grooves have been cut in the brain’s processing surfaces to channel the flood of life’s experiences down familiar pathways. (...) It is true that the brain always keeps a certain degree of flexibility [but] myelinisation is expected to fix the basic pathways of the brain for life.’ (McCrone, pp.24-6) There is also plenty of evidence that the connectivity between brain cells (neurones) alters continually – we create and reinforce new pathways when we learn and repeat new tricks – by what is known as ‘Hebbian learning’ (Robertson, I (1999) *Mind Sculpture*. London: Picador.

⁶ Shusterman, R (2000), p.168. Compare, “All the damn fools in the world believe they are actually doing what they think they are doing.” An Alexander aphorism in Maisel, p.5.

⁷ The term “gesture” includes vocal-articulatory as well as limb movements, and is defined as “an equivalence class of coordinated movements that achieve some end” (Wilson, p.203). Walter Carrington used to describe the tongue as an “organ of gesture”; it gesticulates to form a range of vocal sounds.

Music has been described as the most ethereal and disembodied of art forms. Yet music cannot exist without the physicality of the musician's body. The way you use yourself, the way you move (which includes your breathing) influences your sound quality and ability to communicate your musical intentions. Through your body you experience sensations and emotions and feel alive. If you alienate your physicality and think of your body as something external to yourself – something that is inclined to be disobedient and that has to be made to comply⁸ – then your playing is in danger of becoming a “mindless repetition of proper body moves.”⁹ You make yourself prone to a range of serious health problems ranging from eyestrain, and back and neck pain, to tendonitis, carpal tunnel syndrome and other so-called work-related upper limb disorders.¹⁰

You are your main instrument. In other words, *you* are the ‘agency’ through which you make things happen.¹¹ Music is communicated through our bodily actions.¹² You need to know how to look after yourself so that you are fit and healthy for a varied and fulfilling career ahead. Alexander said that, knowing what he had discovered, no teacher could harm him.¹³ What he meant was that, if he applied his Technique, he could find a way to do whatever was required of him without incurring unnecessary and potentially harmful strain. It all comes down to the quality of how we move – being able to move with precision, deftness, surety, sensuousness and an economy of effort. *Making music and moving are inseparable.* You may not have thought of yourself as a professional mover but that's exactly what you are. ‘Poise’ and/or ‘grace’ are words that encapsulate the ideal of an overall quality in moving.

Before going any further, here's an important health warning.

See your doctor

There can be many reasons why we suffer from musculoskeletal pain or other problems associated with playing. So it's important that you make sure that there's no underlying medical condition that needs treatment. *If you are at all worried about your health then see your doctor.* Symptoms may be the result of strained muscles, tendons or joints, or to do with the action control (nerve signals) to your muscles. Physical symptoms can also be caused by psychological issues. Statistics from performance medicine clinics show that musicians are much more likely to identify and describe their problems as being physical rather than mental. Having something wrong with your muscles is somehow more acceptable than suffering from something psychological in nature. But, as you read on, you will begin to realise that there is not a one-or-other distinction.¹⁴ With better use and greater ‘physical’ balance and control, you will discover a renewed sense of mental resilience and confidence in yourself and your relationships with others.

⁸ See Carrington 1994, p.17

⁹ Leiberman, J. L. (1991), p.20

¹⁰ So-called RSIs, are the result of attempting to do too much, too quickly while under stress (such as an unreasonable accuracy or time pressure) creating added muscular tension and restricted breathing.

¹¹ ‘And this closest “something” is, precisely, ourselves, our own habits and ways of doing things as agencies in conditioning what is tried or done by us.’ John Dewey in Introduction to *CCCI*, p.XXXI.

¹² For a discussion of the role of effort and athleticism in the aesthetics of musical performance, see Juhan pp.257-9.

¹³ ‘If I went to a man to take singing lessons, it wouldn't matter what he taught me, he couldn't injure me.’ Maisel, p.12.

¹⁴ For an insight into the physical signs of psychological illness see Heaton, K. W. Body-conscious Shakespeare: sensory disturbances in troubled characters. *Medical Humanities* 2011;37:97-102.

Talk to your tutor

As well as seeing your doctor if you have a problem, you must also involve your tutor. An inadequate or faulty technique will place you under avoidable strain. Often a problem is labelled as a health issue when it's really a matter of a change to technique. The 'medicalising' of technical issues can seem an easy option: 'If I get some treatment then I can carry on as usual.' However, both you and your teacher must be honest and ask if fundamental changes need to be made to your instrument set-up or your playing style. An extreme example is the formation of vocal fold nodules (swellings along the edge of the vocal folds) with singers caused by excessive tension. Once vocal technique is corrected then the nodules will disappear spontaneously in most cases without any need for surgery. A timely review of your technique may be just what's needed.

Of course, you may find that your tutor can't see – or hear – anything wrong. The problem may not be with your playing in an obvious way. You may look and sound fine though your underlying habits are stressful and inefficient. You are, as we say, sailing serenely like a swan but paddling desperately below the surface to stay afloat. Medical professionals and teachers are not necessarily trained to observe and assess a person's manner of use. If music-making isn't by and large a physical joy, then you need to start thinking right away about what you're doing. The longer you bravely struggle on, the more ingrained your inefficient tension habits will become and the longer it will eventually take you to unlearn them.

And don't assume it's something you will grow out of or that will simply go away if you ignore it. In spite of all the evidence to the contrary some experts still firmly believe in 'No pain, no gain'. Musicians may be told to ignore the pain and to play on regardless. DON'T! DON'T! DON'T! There may be nothing that shows up in medical tests. The medical model is often inadequate when it comes to considering human performance in all its fabulous complexity. (See below, What happens when I move my arm.) Medical tests are not designed to assess whether a person's manner of use is satisfactory or otherwise. Remember it's not that there is necessarily anything wrong with you but it may well be *how* you are using yourself – *what you are doing* – that needs attending to.¹⁵

Good use – good technique

Experienced musicians who use the Alexander Technique often say that much of what is taught as instrumental or singing technique is, in fact, a collection of ways around the obstacles thrown up by poor manner of use. The amount of specific technical work needed is dramatically reduced when you adopt good general habits of personal use. The baritone, Thomas Hemsley agrees:

'A high proportion of the exercises that singing teachers recommend to their pupils are in reality attempts to compensate for bad postural habits. These tricks themselves frequently result in tensions, which are then in their turn compensated for by new tricks, and so on *ad infinitum*. All this can well be avoided if good posture and poise are established at the very beginning. Habitual good posture is one of the chief attributes of so-called 'natural talents'.¹⁶

¹⁵ Apropos, merely learning factual information about joints and muscles doesn't change habits. A large-scale study of US postal workers found that a preventive programme, consisting mostly of talks on safe handling and lifting techniques, made no long-term improvements to behaviour or absenteeism. A Control Trial of an Educational Program to Prevent Low Back Pain, Daltroy LH, *et al*, *The New England Journal of Medicine*, July 31, 1997: 322-328. Alexander is quoted, "They may teach you anatomy and physiology till they are black in the face – you will still have this to face, sticking to a decision against your habit of life." (Maisel, p.9.)

¹⁶ Hemsley, p.27.

Un-learning

‘Insanity is doing the same thing over and over again and expecting different results.’

(Albert Einstein)

It takes time and calm, patient practice to unlearn playing or singing habits even when we have decided not to do things as we’ve always done them. It can be hard to accept that habits we have practised so conscientiously for so many years are wrong. Alexander said that he would thank anyone who could tell him when he was wrong, and would regard him as a friend. To know when we are wrong is the best help we can ever hope for.¹⁷ At first glance, that might seem unduly pessimistic. But if we know what *not* to do – what we are doing wrong – and can stop ourselves from doing it, then the more likely we are to find a better way next time.

Trying harder and practising for even longer hours may feel virtuous but, unless we change our habits, it results in our merely doing more of the very same thing that we have been doing in the past. Changing our routines or habits is something none of us like to do unless we really have to. Yet dealing with change is a fact of life. As we grow older we have to adapt to our changing physical and mental capacities. For performing artists, change is part of their creative process. Musicians regularly encounter a need for change. They have to adapt to their own changing body shape, and to fit in with different instruments, chairs, venues, and requests from fellow musicians, conductors or stage directors.

In fact, performers spend lots of time thinking about themselves so you shouldn’t feel guilty about it. It’s not a matter of being selfish or self-indulgent; it’s part of the job. You frequently have to ask yourself, “How do I do that?” and find a practical solution. What could be more interesting than thinking about yourself? *Enjoy it!*¹⁸

The sooner you can accept all that has gone before as a positive learning experience rather than as some dreadful mistake, the sooner you can begin to discover how to do things differently and in easier ways than you ever imagined were possible. We don’t have to waste time and effort on things that don’t work. The American lawyer, Earl Warren, put it very neatly: ‘To get what you want, stop doing what isn’t working.’

Alexander was fond of saying that when we stop doing the wrong thing, then the right thing tends to do itself. As a young actor, he had an idea that his throat problems were being caused by extra muscular tension when he spoke on stage. He reasoned that he must first find a way to stop his inappropriate tension habits from happening.

‘Relaxing’ and ‘posture’

“Try to be completely relaxed,” is probably the most misused and misunderstood instruction teachers can give to their students. The only way it’s possible to be completely relaxed is under a general anaesthetic and that’s a dangerous state to be in. Breathing might cease and the heart could stop beating!¹⁹ Our muscles need a background level of tone literally to hold us together and to function. In any case, life is all about movement and when movement stops so also does life. Instructions such as

¹⁷ Compare, ‘To know when you are wrong is all that we shall ever know in this world.’ (Maisel, p.10)

¹⁸ An idea from Graham Norton in his autobiography, *So Me* (2004).

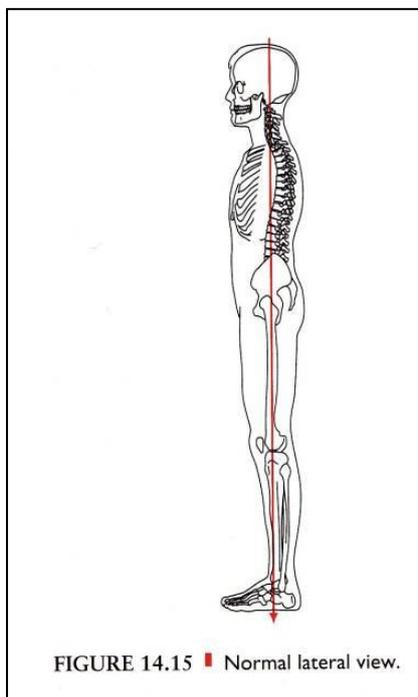
¹⁹ Based on section (pp.17-8) in *Stage Speech* by L. Charteris Coffin.

“Try to relax” are inadequate to describe what to do when what is required does not accord with your usual habits.

You have to learn “how to be otherwise” and to cultivate a new repertoire of ways of doing things as the new ‘you’.²⁰ Hands-on instruction as part of a lesson can greatly speed up the process once the student can inhibit immediate reactions for long enough to register new experiences. In the 1980s, Walter Carrington was fond of saying, “This is sitting down, but not as you understand it” (echoes of Captain James T. Kirk of the USS *Enterprise*). The same may be said of singing or playing.²¹

‘It is exactly this kind of awareness that competent bodywork [including aspects of ‘hands-on’ Alexander teaching] can impart to the individual, more quickly and more directly than any other means. (. . .) [It] gives the individual the chances to pause, to actually *feel* what has come about through habitual usage, to reflect upon the present situation’s progressive tendencies, to awaken insight into problem areas, to experience the relief of release, and – most importantly – to inspire the conscious will to take a more active hand in future developments.’²²

Balance and line of gravity



‘The ideal posture is (...) where the skeleton is held erect in a position mechanically most favourable for the transmission of body weight. (...) In good posture, the minimum contraction of all muscle groups is required to achieve balance. (...) The aim of [any approach to] re-education should be to restore the muscular balance and to mobilize joints within their normal limits.’²³

(RAF training manual)

A ‘relaxed’ posture might be understood as “a controlled, balanced state of dynamic postural alignment”. Looking at someone standing and facing sideways on, the ‘ideal’ Line of Gravity would drop down from the ear, through the shoulder, hip joint, slightly behind the knee and slightly in front of the ankle. Weight is then transferred via the foot arches to the heels and balls of the feet. (Inevitably, you will come across different opinions because the alignment is not something actual or

absolute.) Viewed from the front or back, the left and right sides of the body should be more or less symmetrical unless there is some good reason not to be.

In a state of dynamic alignment, minimum effort is required by the muscles that hold you upright and support you against the pull of gravity. Standing or sitting upright requires us to maintain our balance

²⁰ Wilson, p.253.

²¹ Walter Carrington (1915–2005) qualified as an Alexander teacher in 1938. After the war he worked as one of Alexander’s assistants and took over the running of the training course after Alexander’s death. I trained with Walter and his wife, Dilys, at the Constructive Teaching Centre, London W11 from September 1981 to July 1984.

²² Juhan, p.141-2.

²³ Royal Air Force, 1959 (1975), pp.121-4. Illustration from Gross, et al. p.440.

for every activity carried out during waking hours.²⁴ Wilson (1998) points out that the need for maintaining balance is true of any tall, unstable structure that has ‘arms’ that extend, lift, grasp, move etc. such as a construction crane. You require a control system of self-monitoring and adjustment to maintain balance – one that doesn’t increase size or weight that impedes movement. Wilson interviewed ‘Richard’, a Californian whose profession was training crane operators, to illustrate the basic need for awareness and control:

‘I told him I was interested in cranes because they remind me of the arm, which has to position the hand, support it, and move it, in order for it to do its job. Richard’s perspective on cranes was more practical than mine: what really matters with cranes, he said, is preventing them from falling over. (...) When trouble does come, there may not be sufficient time for even a highly experienced human operator to take corrective action. (...) So this guy’s sitting in the cab, and he has to know how to stop what’s happening. *But he has to know it’s coming in the first place.* Otherwise he’s lost.’ (Wilson, pp.63-4)

In an Alexander lesson you may experience ‘kinaesthetic lightness’ as your balance improves. You will be taught how to maintain balance and ease of movement for yourself in any situation by applying the Alexander Technique.

Practising for ‘good’ habits

So, returning to the central issue of habit. Habits are learned or adaptive organisations²⁵, not just of our body and limbs but also including any tools we happen to be using (a chair to support us, an instrument we are playing), our surroundings and wider environment that includes what’s occupying our mind.

Habits *interpenetrate* one another. A habit does not exist in isolation but overlaps and intermingles with all our other habits to form our characteristic way of being. We are our habits and the habits we practise become as identifiably us as are our fingerprints.²⁶

‘Our entire histories become recorded in our flesh. Each stage of our motor [action control] development sets the overall tone and the idiosyncrasies which condition the next one, and we continually carry it forward with us, becoming what we have created stage by stage. Nor is it possible to completely avoid this process; the accretion of habits is simply the way that motor development works, and it has as many positive results as it has negative ones.’²⁷

Throughout our lives, we build up and reinforce a *reliably consistent sense of our selves* by selecting and maintaining our repertoire of movement habits. This selection is largely unconscious. We are rarely aware of the limitations or potential dangers our movement habits may entail. Even if a disturbing symptom does appear we generally don’t suspect that our well-worn, tried-and-tested

²⁴ Davies, P.M. (1985). Steps to follow. Berlin: Springer-Verlag. Quoted in Trew and Everett, p.229.

²⁵ T. Huxley calls them “artificial organizations” presumably meaning they are not innate. (Quoted in “Re-education of the Kinaesthetic Systems” (1908) in *ARTICLES*, pp.79–85..

²⁶ ‘It is clear that we are all born as mentally naked as we are physically naked, with only natural abilities like recognition, perception and awareness. Then, like dressing a newborn child, society comes along to clothe us with the habits of thought that create the modern human mind.’ (McCrone, p.153)

²⁷ Juhan, p.141.

behaviour could be its cause. The consistent nature of our normal patterns frequently prevents us from changing our ways for long enough to obtain such an insight.²⁸

‘But what we can do is to learn to recognise and to avoid the progressive development of *degenerative* habits, the ones that bow us, bind us, and trap us within even narrower ranges of comfortable activity. We can exert our will, and use our conscious efforts to throw off destructive patterns and to develop more flexible, open-ended ones. What is needed first to begin this sort of change is awareness, awareness of the tendencies towards which our muscular habits are leading us, awareness of the local areas in our bodies that are conditioning those tendencies, and awareness of what it would feel like if our patterns were different.’²⁹

Habits by their nature are also ‘mechanised’ and stereotyped. There is a quality of automation (‘automaticity’) and sameness when we do things by habit. We say we are “on automatic pilot” when we rely on our habits to perform repetitive tasks without our having to think at all about what we are doing or how we are doing it. Our mind is elsewhere and our habits are able to carry us along because of their ‘propulsive’ nature. Once initiated they then tend to run an inevitable course to completion without further thought.

Importantly for us, habits can be classed as two sorts: ‘blind’ habits we have somehow acquired and ‘intelligent’ habits we have developed consciously with thought and attention. These types of habit differ from one another in that the first type is relatively *fixed and automatic* (and, can be ‘*degenerative*’, as Juhan writes); whereas the other type is more easily brought back under conscious control and is *adaptable* when required.³⁰ We could say that these intelligently controlled habits include more ‘know how’ or practical intelligence.³¹

The American Alexander teacher, Frank Pierce Jones wrote several papers on the relevance of the Alexander Technique for musicians. He has this to say about habit:

‘In my view the chief disadvantage of automatic performance is that without awareness it cannot be changed. Socrates when asked whether it was better to do wrong knowingly or unknowingly shocked his listeners by replying that it was better to do it knowingly. If you know that it is wrong, he explained, you can change. Otherwise you cannot.

Even if a habit is good, it loses something if it becomes unconscious and stereotyped. People grow older, circumstances change, fashions change and a manner of responding or a style of performance may cease to be appropriate. (...) You have to know yourself what you are doing in order to change it.’³²

²⁸ Juhan, p.xxvi.

²⁹ Juhan, p.141-2.

³⁰ ‘In the first place it is essential to understand the difference between the habit that is recognized and understood and the habit that is not. The difference... is that the first can be altered at will and the second cannot. For when real conscious control has been obtained, the “habit” need never become fixed. It is not truly a habit at all, but an order or series of orders given to the subordinate controls of the body, which orders will be carried out until countermanded.’ (MSI 1910, p.74-5; 1918, p.54)

³¹ ‘It [the Alexander Technique] teaches you how to bring more practical intelligence into what you are already doing; how to eliminate stereotype responses; how to deal with habit and change.’ (Jones, p.1-2)

³² Jones, F.P., ‘The Organization of Awareness’. A paper read at a conference on “Co-ordination in Music” at Michigan State University, 18th May, 1967. In Jones (1997), p.175-6.

Habits as skills

‘We can all of us monitor and consciously control a good number of things. But what we can control, what we can choose, what is at our discretion, is limited by organized, skill-like ways of behaving – by our habits.’ (Mixon, p.185)

In general conversation, ‘habit’ often refers to what we are doing. We talk of ‘bad’ habits such as smoking cigarettes or eating too much fatty food; ‘good’ habits of taking regular exercise or keeping our socks drawer tidy. But here, what we are more interested in is not so much *what* we are doing but *how* we are doing it. Viewed in this way, habits are analogous to skills and capacities particularly in the context of what Alexander dealt with.³³ The act of sitting is discretionary (you can choose to or not) but how you do it is limited by organized, skill-like ways of behaving – by your habits.³⁴ Alexander’s friend, the American psychologist, John Dewey, believed Alexander had discovered a way of making our most pervasive and intractable habits flexible and that the Technique could be extended to other sorts of habit.³⁵

Unless you are in the habit of using yourself well then you cannot leave it to instinct or chance. You must cultivate and develop the necessary skills. Now is not the time for a long discussion on the nature of habit but Alexander and John Dewey had lots to say.³⁶

In *The Pianist’s Talent*, Harold Taylor (who was a student at the Royal Manchester College of Music) wrote that what makes the piano virtuosos’ ability extraordinary is not superior physical or psychological make-up, but their “discovery of an exceptionally simple means which allows them to use their faculties simply and naturally.” Taylor thought that so-called natural talent was determined principally by an individual’s “capacity for co-ordination” (p.18).

We all need to discover how to organise ourselves to function efficiently; to be able to do what we want with the least amount of effort or fuss.³⁷

Learn (and teach) from first principles rather than by the “Do as I do” (imitative) approach

‘The belief is very generally held that if only we are told what to do in order to correct a wrong way of doing something, we can do it, and if we feel we are doing

³³ ‘Changing or modifying a well-established habit is not easy matter, as anyone who has attempted the challenge can testify. This is especially true of the habit Alexander worked with. The way we carry ourselves and move is something that enters into everything we do, that is involved in every waking and sleeping moment.’ (Mixon, p.182).

³⁴ Mixon, p.185.

³⁵ Mixon, p.182.

³⁶ If you are interested to find out more, read the Introductions John Dewey wrote in Alexander’s first three books, or the chapter “Habits and Will” in *Human Nature and Conduct* by Dewey (1922).

³⁷ Measuring subjects’ pupil dilation as they perform mental tasks is a reliable indicator of their level of attention and mental effort (Kahneman, p.32). ‘As you become skilled in a task, its demand for energy diminishes. Studies of the brain have shown that the pattern of activity associated with an action changes as skill increases, with fewer brain areas involved. Talent has similar effects. Highly intelligent individuals need less effort to solve the same problems, as indicated both by pupil size and brain activity. A general “law of least effort” applies to cognitive as well as physical exertion. The law asserts that if there are several ways of achieving the same goal, people will eventually gravitate to the least demanding course of action. In the economy of action, effort is a cost, and the acquisition of skill is driven by the balance of benefits and costs. Laziness is built deep into our nature (p.35).’ Note though that ‘the ability to control attention is not simply a measure of intelligence; measures of efficiency in the control of attention predict performance of air traffic controllers and the Israeli Air Force pilots beyond the effects of intelligence (Kahneman, p37).’

it, all is well. All my experience, however, goes to show that this belief is a delusion. (UOS 1985, p33 original italics.)³⁸

Just because we can do something in accordance with established habits, it is not also true that we can reliably follow instructions to change our habits. The old way is too ingrained, too immediate. The proposed new way requires the formation of a new mental concept and experience of associated new sensory feelings – a different way of being.

Most approaches to teaching and learning don't address the problem of habit. Teachers (and students) assume that it is simply a matter of being told what to do and then, with our best of intentions, just doing it. Alexander and Dewey thought this was tantamount to believing in primitive magic. Until habits are changed, the necessary preconditions that lead to the new response are not yet in place. As soon as students try to do what they think is required their old, ingrained habits are stirred into action. The existence of a "pre-motor readiness potential" (RP), i.e. onset of a recordable change in brain activity that precedes the subject's conscious decision to move a muscle, was first demonstrated in 1965.³⁹ According to Libet it occurs some 350 milliseconds *before* the subject says that he or she made a conscious decision to carry out some action.⁴⁰ Before the student actually does anything overtly, the old habits will be at the ready as the questions arise: "How do I do it? Does it feel right?" The old habit intrudes and the concept of what's to be done is already formed in the usual, customary way. And the harder students try according to old habits, the more they do more of the same; more of what they already know – and what they are trying to prevent happening.

Knowing how to stop

The key to escaping from this dilemma is to be found in Alexander's concept of "Inhibition". Alexander (1918) explains:

'No real progress in the overcoming of faults can be made until the pupil consciously ceases to will or to do those things (...) which have led him to commit the faults that are to be eradicated. "Don't do this, but this," says the teacher, dealing with *effects*. In other words, it is assumed that the defective action on the part of the pupil can be put right by "doing something else." (...) He forgets that in "doing something else" the pupil must use the same machinery which, *ex hypothesi*, is working imperfectly, and that he must be guided in his action by the same erroneous conceptions regarding right and wrong doing. Neither teacher nor pupil seems to remember that to know whether practice is right or wrong demands judgement. Judgement is the result of experience. Faulty or wrong experience means faulty or bad judgement, whereas correct experience means good judgement.'⁴¹

³⁸ Compare 'Recently a friend [i.e. Alexander] remarked to me that there was one superstition current among even cultivated persons. They suppose that if one is told what to do, if the right end is pointed out to them, all that is required in order to bring about the right act is will or wish on the part of the one who is to act.' Dewey, *Human Nature and Conduct*. (p.28)

³⁹ Libet (2004), p.134. RP was first measured by Kornhuber and Deeke.

⁴⁰ Libet (2004), p.137. With pre-planned movement the RP can be as long as 800 milliseconds. Libet explores the implications for "free will". He concludes that there is a 200 msec window of opportunity between the moment at which one is aware of going to do some act and the sending of the motor signals to the muscles where a 'conscious veto' may be exercised to stop the act from happening (p.137). It is not so much a matter of having 'free will' but rather 'free won't'.

⁴¹ *MSI* (1918), p.124. Also 1912 pp.26-7. Dewey used Alexander's argument in later work.

The last published writing by Alexander in 1946 was an Introduction to a small book of papers by eight writers (including Aldous Huxley) called *Knowing How to Stop: A technique for the prevention of the wrong use of the self*. After some sixty years exploring the problem of how to change unwanted habits this is what it boils down to; stop the wrong thing from happening. Then, as Alexander said frequently in his later life, “The right thing does itself.”

A word about ‘endgaining’

‘The habit of *endgaining* is probably the most persistent and impeding habit [mankind] needs to overcome in seeking to make changes in himself and others.’

(F M Alexander)⁴²

Alexander regarded the endgaining attitude as a disease of modern society and a main reason why we develop poor ways of using ourselves. By overly narrowing our attention and failing to consider the bigger picture, our solutions to problems tend to be piecemeal and partial. Make it a rule of life not to let quick fixes and short-term aims side-track you away from longer-term growth and development. We are part of a culture that is addicted to endgaining, where most of our education is based on methods that aim for fast results and focus too narrowly on getting the ‘right’ (predetermined) answers.⁴³

Notice when our politicians and leaders respond too quickly to a call to action and come up with policies that fail to take account of the bigger picture. A quick solution may have immediate appeal but then it’s often seen to be not working and further measures have to be taken. Things get unnecessarily complicated. How much better to take time and think things through in the first place.⁴⁴

As musicians, we tend to focus on training our hands or voice without developing an enhanced, expanded field of attention⁴⁵ to include the whole of ourselves. In Alexander’s case, his attention was initially drawn to too much tension in his neck and throat. But he soon came to realise that his problem was not confined to that area. The functioning of his vocal organs depended on how well he organised the rest of his body.

‘When we consider the anatomical parts relevant to the voice, we naturally think of the larynx. (...) There are, however, equally important anatomical structures above and below the larynx, without which the voice could not be produced. These include the mouth, the palate, the pharynx and the lower airways (trachea, bronchi and lungs), as well as the abdomen and even the pelvis. In fact, there are only a few parts of the body not involved in some way in the process of voice production.’⁴⁶

Students sometime ask which muscles they should be using. In reality, there is only one muscle with many compartments that stretches over your bones like an elastic rubber wetsuit.

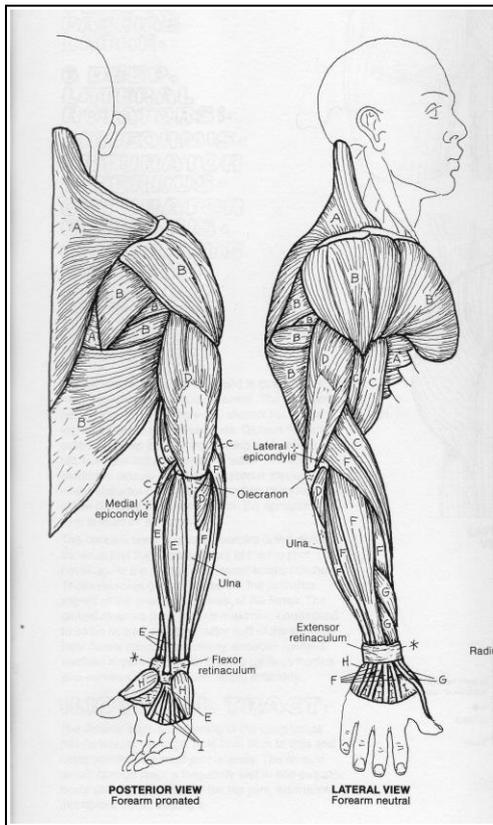
⁴² Alexander, 1996, Preface to New Edition (1945), p.xii.

⁴³ ‘To begin with, the methods of training and education in which [my pupil] is versed have developed in him a habit of endgaining through a too quick and unthinking response to stimuli.’ *UCL* p.80 see also p.91.

⁴⁴ See new book, *Thinking Fast and Slow*, by Daniel Kahneman, Penguin 2011.

⁴⁵ ‘The practice of the Alexander Technique, however, creates an expanded field of attention as an ongoing process. The perceptual field has a very simple organization, but it always takes in both the self (including the relation of the head to the trunk) and something of the environment.’ (Jones, p.159.)

⁴⁶ Davies, G.D., Jahn, A.E. (1998), p.1.



When a violinist moves an arm, it directly involves muscles from the lower back to the head. Study this picture of the arm muscles from the *Anatomy Coloring Book*.

In addition there are all the other muscles in the torso and legs used to adjust balance, to breathe, to pump blood etc. Held tensions will prevent the body from working as an efficient integrated unity and create a need for additional compensatory activity. The business of moving your arm becomes unnecessarily complicated. This is how Alexander described his realisation that his body worked as a whole:

“I came to see that any attempt to maintain my lengthening when reciting not only involved on my part my prevention of the wrong use of certain specific parts [such as the neck and throat]... but that this attempt also involved my 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.” (Italics added.)⁴⁷

What happens when I move my arm

‘Let us imagine ourselves observing a person who is standing erect and executing the simple gesture of raising their straight right arm to the side until it is horizontal. The fibers in the deltoid, the supraspinatus, and the upper trapezius will contract to produce the primary motion, while the fibers of the pectoral major, the pectoral minor, and the latissimus dorsi must simultaneously extend to allow it. But the contraction of the right trapezius will not only raise the right arm, it will also tend to pull the neck towards the right; therefore the left trapezius, along with other muscles of the neck, will have to contract as well in order to stabilize it. Furthermore, the extended right arm will overbalance the torso to the right, so the erector spinae muscles on the left side of the spine must contract to brace the whole torso and keep it erect. And since the contraction of the left erector spinae set will tend to pull the left side of the pelvis up as well, the gluteus medius and minimus of the left side must also brace to hold the pelvis level. Since not only the torso, but the body as a whole is threatened with tipping, by the overbalancing weight of the extended arm, the right leg must brace as well, using fibers in the hips, the thigh, the calf, the feet, the toes. And, of course, our subject continues to breathe, so all of the muscles which cooperate to fill and empty the lungs must now make the necessary asymmetrical adjustments to continue their rhythm without disturbing the poise. And to further complicate the picture, if we add a

⁴⁷ Alexander 1985, p.32.

weight (say a book) to the outstretched right hand, even more fibers from even wider areas will have to be called into play and instantly coordinated in order to preserve the position.

All of these muscular events must concur for such a small, isolated gesture, and even this description has been simplified considerably. It is the enormous complexity of this cooperative effort which drains the usefulness out of such singularized functional descriptions as “the deltoid raises the arm laterally,” “the gluteus maximus abducts the femur,” and so on. It is clear that muscle fibers from the occiput to the toes, and from both sides of the body, all must cooperate to “raise the right arm.” It is utterly arbitrary, and possible only in the rarefied laboratory of the imagination, to say that it is the “deltoid” which is solely – or even primarily – responsible for any part of this gesture.’ (Juhan, p.114)

All this complexity is automatically co-ordinate by our mind and body working together. It demonstrates why a problem cannot be fixed simply by doing exercises aimed at one muscle or group of muscles. Because we function as a whole our wish to improve how we move our arms, for example, requires us to make global changes to the preconditions.

The individual functions as a psycho-physical unity

Today, it’s difficult to understand the significance of Alexander’s insistence on ‘psycho-physical unity’ and why it was such a revelation to him in the 1890s. He takes the first few pages of *The Use of the Self* to explain to his readers how surprised he was to discover this. Only thirty years after the publication of Charles Darwin’s *On the Origin of Species* (1859) controversy was still rife between the new scientific method and traditional biblical revelation. Cartesian dualism would not be abandoned without a tussle and many upheld the view that “man stands upon the earth – a mind encased in matter, a spirit in substance, a soul in body.”⁴⁸

Today, most intelligent thinkers would agree that there is no “ghost in the machine” – no spiritual entity or separate soul living inside us and that animates our body. Science is gradually explaining how all our first-person experiences, our thoughts, feelings and emotions are underpinned by physical processes. That’s not to say that all higher human qualities like ‘consciousness’ or ‘free will’ can be explained merely as the results of chemicals sloshing around within our body systems. But it is difficult to say that there is a separate entity – a spirit or soul – living in some corner of our brain and acting independently of bodily processes.⁴⁹

⁴⁸ Brown, M.T. (1886).

⁴⁹ Today’s predominant scientific view is put clearly by John McCrone (1990) in the following passage:

‘In the past, philosophers in particular have muddied the waters by treating the mind as if it were an object with a separate existence, independent from the flesh and blood of the brain. ... This confused view of the mind should disappear once we realise that the word ‘mind’ is simply a convenient label for describing the brain at work. The brain can be doing many things at any particular moment, carrying out actions like seeing, thinking, imagining – and even being self-conscious. When we take all these actions together, we label the resulting mixture ‘the mind’. But, speaking correctly, we never have two separate objects – the brain and the mind – occupying the space within our skulls. We just have the brain and the host of things it can do.

The traditional misuse of the word ‘mind’ can lead us into many wrong assumptions. As well as mistaking the mind for some phantom object separate from the flesh and blood workings of the brain, we make a similar error in talking about the different parts of the mind. We refer to memory rather than the act of remembering, to thought instead of thinking, to the inner voice instead of the act of speaking silently to oneself – and even to self-consciousness rather than the act of thinking about our own thoughts’ (pp.2-3).

Whenever Alexander writes about so-called “physical” processes he uses inverted commas to acknowledge that a large part is, in fact, mental. And when he writes about “mental” processes he similarly acknowledges the significant physical component to these processes.⁵⁰

Now we come to finding out how the Alexander Technique and its principles can help you in your studies and can serve to benefit every aspect of your life. Remember that you are using the same mental and physical faculties when you are playing as you are for everything else. You can’t bluster and blunder through your daily life and then expect a miraculous transformation into a ‘mean machine’ as you walk on stage. The skills (habits) need to be there, part of you, already established and available when the spotlight shines on you!

What is the Alexander Technique?

You will find many different answers to the question, even among Alexander teachers: What is the Alexander Technique? The term “Alexander Technique” is used to describe (1) the instructional method and procedures a teacher uses in an Alexander lesson and (2) the ‘technique’ of preventing and changing unwanted habits that the student is taught and then applies in daily life.

Here, we are more interested in knowing about (2) the self-help ‘technique’ but in order to teach it to you in lessons, your teacher will include some tried-and-tested methods and procedures.

Restoring ‘factory settings’

The Technique is a methodical approach to ensure that your basic, ‘core’ activities are operating smoothly (like maintaining balance, poise, and breathing) before adding ‘elective’ activities specific to playing an instrument, singing, running or throwing a ball, etc. You may wonder why such basics are not instinctively in place but, so often, students come to college with long-standing habits of inappropriate tension and effort that interfere with the basic bio-mechanics. This means that whatever they do will be performed inefficiently. For most of us, it’s a matter of *re-education*. It’s too late for primary prevention as we’ve already developed poor habits in the way we use ourselves and we need a way of restoring what we’ve lost. As Alexander put it –

‘Re-education is not a process of adding something, but of restoring something. It is to meet the needs of restoring actual conditions of use and functioning which had been previously experienced and afterwards lost that my technique for the re-education of the use of the self was evolved.’ (UCL, p.145)

Just as you sometimes need to restore your mobile phone’s ‘factory settings’, so we may need to stop our habits that are getting in the way of our bodily mechanisms from working smoothly.

People often ask questions like, “Does the Alexander Technique work for back pain? Is it good for migraines?” Well, it’s not that it’s difficult to answer such questions, but (as politicians say) they’re asking the wrong questions! The Alexander Technique is a learning process. Through learning to prevent (inhibit, withhold consent to) your unwanted habits, and restore a level of general functioning that is fit for purpose, you develop a plane of “constructive conscious guidance and control” in the use

Also Libet (2004). ‘We must recognise that there is no evidence to support the concept of separate entity status (...) the self and soul are emergent phenomena of brain activity.’ (p.203)

⁵⁰ The German psychologist, Wilhelm Wundt proposed similar in 1879 (Zahn, p.398).

of the self, as Alexander put it.⁵¹

Rather, the question that should be asked is: Can the individual put this enhanced self-awareness and control to good purpose, such as avoiding back pain, relaxing shoulders or improving bowing action? The evidence from tens of thousands of people who have learned the Technique over the past one-hundred-and-fifteen years is that many can.

When the Alexander Technique was first introduced into a music college in the 1950s, Royal College of Music singing professors recorded their conclusions as follows:

‘In each case [following a course of Alexander lessons] there has been a marked physical improvement, which was usually reflected vocally and dramatically. It was a revelation to discover that tricks of behaviour could be eliminated in a comparatively short space of time once the student learned to control his tensional balance from the head-neck region...

In all cases students since re-education are easier to teach, and can take and carry out stage directions with greater ease. The students seem to become aware of themselves in a new way. Each student reacted in a different characteristic way. For example, those who had been over-anxious to please authority discovered that they could be themselves with impunity, ceasing to be such model students, but becoming better performers...

In our opinion, this approach is the best means we have yet encountered for solving the artist’s problem of communication and should form the basis of his training.’⁵²

BACKGROUND AND HISTORY

You may want to skip this section for the moment and go to The Principles. However, just as it’s useful to know something about eighteenth century Europe if you’re playing Mozart, I’ve found it useful to know something about the life and times of the Technique’s originator, Frederick Matthias Alexander. The Alexander Technique came about as a practical solution to problems faced by him as a young actor.

F. Matthias Alexander (1869–1955), known as “F.M.”, was born in Tasmania. He left his local school at fourteen and went to work as a clerk for a nearby tin mining company. At school, he is said to have been always asking questions. He wanted to know how his teachers knew that what they were telling him was true.

His main interests were horses (his family bred horses for racing) and the theatre, in particular the works of Shakespeare. Alexander moved to Melbourne in 1889 to further his stage ambition. He was a keen member of the Amateur Dramatic Club where he acted in and produced plays and gave recitals. He was also learning to play the violin but he gave this up because he found it too difficult!

To earn his living, he worked as a clerk in a drapers shop and for a firm of tea, coffee and spice merchants. It was at this time that he began to suffer badly from what was known as “clergyman’s throat” – irritation of the vocal cords and hoarseness. Today, this might be diagnosed as chronic

⁵¹ *CCCI*, p.29 footnote and *UCL* p.11 end of Chapter 1.

⁵² The comparative data is published in Barlow, W. (1978), pp.98-9.

laryngitis⁵³ and it threatened to put an end to his dream of a career in the theatre. Various treatments had proved unsuccessful and his condition was affecting both his work and his acting. His doctor suggested he should go to the seaside to rest and recuperate.⁵⁴ However, the hoarseness persisted and, having discussed things with his doctor, Alexander realised that *he must be doing something* to exacerbate his condition.⁵⁵ He decided that he had to find the cause and a solution to his vocal trouble for himself. His journey of discovery is described in the first chapter of his book of some forty years later (1932) in the *Use of the Self*.

By 1894 his voice was much improved and Alexander told his family, then living in Wynyard, of his intention to be a platform reciter⁵⁶ that was a popular form of entertainment at the time.⁵⁷ From the start he saw teaching voice as a useful day job with a regular income. In a newspaper article of July 1894 he described himself as a ‘Natural Elocutionist’. It is clear, though, that he had yet to realise the potential of what he’d discovered for other than acting and public speaking.⁵⁸

From May 1895 to the end of November 1896, Alexander was giving recitals and teaching in New Zealand. It was during the last three months of his stay in Auckland that Alexander got an idea of what his work really was, and what it could be.⁵⁹ In his Autobiographical Sketch (c.1950), Alexander wrote:

‘My teaching experience at Auckland was the longest continuous experience up to then, and, during this time, I became convinced of the value of my technique, which did much to encourage me to make teaching my career instead of reciting.’⁶⁰

He considered travelling to the United States of America. However, news that his sister Amy had injured her leg and needed help with her recovery convinced him that he should return to Melbourne where he set up his teaching practice.⁶¹

Early influences

During his first years in Melbourne (1889–95) Alexander had several teachers that we know of. Frederick W. Hill, son of the renowned elocutionist Thomas Padmore Hill⁶², was a friend and

⁵³ Alexander 1985, p.24.

⁵⁴ Evans, pp.94, 96.

⁵⁵ Alexander 1985, p.25.

⁵⁶ Evans, p.102.

⁵⁷ ‘In an era before television, radio or cinema, such ‘recitals’ were a popular form of entertainment. Their popularity also appears to have reflected a particular interest in speech and elocution throughout the English-speaking world. What could be called the elocution movement had begun to emerge in England in the late eighteenth century as part of a growing emphasis on the importance of public speaking. People were becoming more literate and society gradually more democratic – all of which led to greater attention being paid to the quality of public speaking, whether politicians, lawyers or, indeed, clergymen.’ *The King’s Speech*, Logue, Conradi, pp.17-18.

⁵⁸ Alexander, Fischer ed. (1995), p.2.

⁵⁹ Carrington in Mace 1994-2002, p.13.

⁶⁰ In Alexander, Fischer ed. (1995), p.236. The *Sketch* was written for Ron Brown, who worked for the press agency, Reuters. It was to be included in a proposed book, *Alexander and the Doctors* covering the South Africa libel case. (Carrington, Carey, p.14.)

⁶¹ Compare accounts in Evans (2001), p.109 and Barlow (2011), p.89.

⁶² Alexander quotes extensively from Hill’s book in an *Auckland Star* article. Rodney Mace (1994), ‘F. Matthias Alexander’s Visit to New Zealand, April to December 1895.’ A 16-page ‘Introduction and Commentary’ Unpublished MS, London. See Staring I, p.37. (<http://ATeducationresearch.com> accessed 2006.)

supporter of Alexander's as well as his "most able" elocution teacher.⁶³ He stayed with Fred and his family for a time in 1892 at their home in the Melbourne suburb of South Yarra. There was also the veteran Australian actor James Cathcart whom Alexander mentions in the *Use of the Self*.⁶⁴

In an "advertorial" entitled "Speech Culture and Natural Elocution" published in *The Auckland Star* (20th July, 1895) Alexander is uncharacteristically frank about his sources: Andrew Comstock (an early nineteenth century American medical doctor and elocutionist), Charles S. Hartley (the English teacher of 'natural elocution'), Lennox Browne and Emile Behnke⁶⁵, and (most intriguingly) the American organist and singing teacher, Leo Kofler.⁶⁶ Kofler had been plagued by persistent throat problems as a young chorister. His book, *The Art of Breathing*, chronicles his own journey of discovery and outlines his teaching methods. There are some striking similarities between the two men's methods for teaching vocal production.⁶⁷

In June 1891, the renowned actress, Sarah Bernhardt, visited Melbourne and made a lasting impression on the young actor. Actors were exploring ways to move away from the declamatory style of the day and to 'get in touch' with character and emotion with greater naturalness.⁶⁸

In North America, throughout the 1870s and '80s the Delsarte System of Expression was all the rage.⁶⁹ Natural poses and gestures were studied and catalogued and formulated to provide actors and dancers with an outward means of expression for inner feelings and emotions. The system was the victim of its own success. Opportunists saw there was a quick buck to be made from teaching the system. It lost its subtlety and was reduced to superficiality and melodrama. It did, however, influence

⁶³ Evans, p.96.

⁶⁴ *UOS*, p.33.

⁶⁵ Emile Behnke (1836-1892) was from the 1880s to the 1940s one of Britain's most influential teachers on all matters relating to the voice. Along with his wife and daughter (both named Kate), the medical doctor Lennox Browne (1841-1902) who founded the Central London Throat and Ear Hospital (now the Royal National Throat, Nose and Ear Hospital) in 1874, and the musician, Charles Pearce, Behnke published dozens of books, some of which ran into a hundred editions. [E.g. Browne, L. and Behnke, E. (1887). *Voice, song, and speech: A practical guide for singers and speakers*. London: Sampson Low.] Behnke was among one of the first voice teachers to use the evidence of X-rays after their discovery in 1896 to study how the lungs and muscles of the throat actually worked when a person was speaking. Kate Emil-Behnke, like her father, made extensive use of the laryngoscope made popular by the famous London singing teacher Manuel Garcia in the 1870s. Rodney Mace, 1994, p.2. ATeducationresearch.com.

⁶⁶ 'It was especially those artists [singers] whom I found to bring forth their tones with the utmost ease and flexibility of the throat that I bothered the most with questions as to how and what they did, and what I should do in order to be able to do the same. Not one of them could ever give me the smallest practical advice as to how I could get rid of my trouble of stiffening my neck and forcing my tones with the throat' (p.9).

⁶⁷ Compare these two passages, for instance: 'In the sniffing and smelling process we contract the nostrils; in taking a full breath we dilate them as widely as possible, thus breathing inaudibly as well as almost invisibly' (Kofler, p.50).

"'Sniffing' or 'gasping.'" If the "deep breath" be taken through the nasal passages there will be a loud "sniffing" sound and collapse of the alæ nasi [the cartilaginous outer walls of the nostrils]' (*MSI* pp.100-1). *The Theory and Practice of New Method* (Pamphlet first published 1907).

⁶⁸ 'Unlike Stanislavsky, who was known to the whole world, Alexander was only known to a small circle, even though those who knew considered him to be of far greater use to an actor... [the Technique] answers all the questions Stanislavsky asked but never resolved satisfactorily, and is altogether more effective.' John Gray, Senior Lecturer and Tutor at the Royal Academy of Dramatic Art London, reviewing Alexander's teaching legacy in Evans pp.246-7.

In an interview (1988) with Judy Leibowitz, the interviewer, David Alexander, recalled the film actor, Christopher Reeve, saying that "He pulled his head and neck down during the ['mild mannered' Clark] Kent character and then went forward and up when he went into the Superman character. He publicly acknowledged that he used the Alexander Technique for that." Judy added, 'Besides being a very nice man he was a very good Alexander student.' *The Alexander Review*, vol. 3 no. 1, Long Beach CA: Centerline Press. Interview with Judy Leibowitz, pp.19-20.

⁶⁹ François Delsarte (1811-71) studied singing at the Paris Conservatoire and maintained that his voice had been ruined through bad teaching. He never wrote a book explaining his method first-hand, and neither did his protégé, James Morrison Steele MacKaye, who took his method back to America. However, Genevieve Stebbins (1857-1914?) who studied with MacKaye in 1876-7, did write a very successful book in 1885, *The Delsarte System of Expression*.

the early silent cinema style of acting and also American (and German) Modern Dance through a direct line from Isadora Duncan, Ruth St. Denis and Ted Shawn to Martha Graham.⁷⁰ Alexander's teaching notices include 'Delsarte'. We can only speculate about where Alexander learned about the Delsarte system.⁷¹

Students often mistakenly equate expressing emotional intensity with muscular tension or 'working hard' with an increased level of perceived effort or exertion. You should understand that, although there is an obvious mind-body interaction, intense feelings and tense muscles do not necessarily go together particularly when performing. Explore using your body and limbs to form shapes that are expressive of inner feelings rather than just simply adding extra tension. Sheila Barlow taught performance techniques based on the Delsarte system of expression to vocal students from 1945 (Royal Manchester College) into the mid-1980s. (The RNCM library has a recording of a 1978 talk by her.)

Alexander's teaching career in Australia – Melbourne (1896-1900); Sydney (1900-04) – was interspersed with theatrical productions to showcase his own acting talents and to attracting potential students. In Sydney he became a friend of the London-trained surgeon, W. J. Stewart McKay. McKay is reported to have started taking lessons from Alexander in 1902 telling him, "If your teaching is sound, I'll make you: but if it's not, I'll break you."⁷² McKay must have been impressed. He sent patients to Alexander who began to advertise his "full-chest breathing method." A newspaper described him as the "breathing man" – the man who could teach you all about how to breathe well.

Alexander set sail for London in April 1904 supplied with letters of introduction from his friend McKay. This was to be his home (except for some brief stays in America) for the rest of his life. The recent film, *The King's Speech*,⁷³ chronicles the career of an Australian speech therapist, Lionel Logue (1880–1953) that in many ways paralleled Alexander's own.

Alexander's unique contribution

'F Matthias Alexander, [was] a stubborn genius whose discoveries between 1890 and 1900 make him the true father of the non-verbal humanities in Western culture.'
Edward Maisel⁷⁴

'FM went on record years ago as saying, "You think that the Alexander Technique is a physical thing. I tell you that it's the most mental thing that's ever been discovered."
Walter Carrington⁷⁵

⁷⁰ Shawn, T (1954).

⁷¹ '[Delsarte] made a study of gesture – what nowadays we call 'body language' – and created a system for teaching actors. I remember that FM used to illustrate that a pick-pocket or sneak-thief who wanted to draw the attention of one of his accomplices would beckon like this by wiggling the little finger. So FM had certainly studied the Delsarte system and in the early days it was one of the things that he taught. It's also clear from what I have been able to find out that Delsarte had some rudimentary ideas about the use of the body. This would naturally interested FM, who was fascinated with anything to do with use.' Carrington, Carey (2001), p.31-2.

⁷² Bloch, p.50.

⁷³ Logue M, Conradi P, (2010). Film by Momentum Pictures, directed by Tom Hooper on general release in UK 7 January 2011.

⁷⁴ "Felix Morrow, F. Matthias Alexander and John Dewey – Fantasy and Fact" in *The Alexander Review* (Alexander, D. ed.), Winter 1988, Vo. 3; no. 3: p.15. Alexander is variously acknowledged as the "grandfather of the somatic approaches" (Hanna T, What is somatics? *Somatics*, 1986, 5: 4-8) and as the "father of somatic education" (Shusterman R, Collège de France 2008, "Le corps en acte et en conscience").

The observations that Alexander made of himself and others led him to think in terms of fundamental causes and their effects (Means and Ends). The way we use ourselves largely determines how well we function. A top of the range car is never going to perform at its best if the driver doesn't possess the necessary skills to get the most from it. Our postural, breathing and speaking habits depend on our habits of use. Activities like speaking or moving an arm are secondary and subordinate to (i.e. dependant upon) the individual's general functioning.

Alexander considered all specifically-aimed exercises for deep-breathing, strength, health and fitness to be, at best, partial remedies that merely substituted one form of imbalance for another unless there was a change in mental attitude and fundamental poor habits of use were improved. His teaching was quite new. All other methods took it for granted that 'one's awareness of using oneself' was accurate. Alexander, however, realised that a person who has been using himself wrongly and had developed poor habits of use could not rely on his sensory feelings to tell him what was 'right' in carrying out any activity.⁷⁶

Alexander had high hopes for his way of working, writing that:

'this practical and by no means visionary or untried psycho-therapy will in time supersede the tentative and restricted methods of somato-therapy⁷⁷, I am confident.'
(CC 1912, p.24 and MSI, pp.145-6)

Without changing underlying habits we will inevitably mobilise our bodily mechanisms in the same way that led to problems in the first place. Dewey put it like this,

"To attempt to gain an end directly is to put into operation the very conditions that are the source of the experienced trouble, thereby strengthening them and at most changing the outward form in which they manifest themselves. . ."⁷⁸

The only sure way forward is to improve the underlying preconditions that are causing the unwanted symptoms. Alexander's niece, Marjory Barlow said:

[W]here FM was so brilliant was in the way that he gave us the means to improve our use by thinking. The point to note here is that the bad habits we have are in the nervous system. Often people think they're in the body but that's quite wrong – habits manifest in the body, but they're in the brain and the nervous system. If that wasn't the case, FM could never have got control of the problem. Whatever the impulse as a response to a stimulus was, he realised that if he could stop it at its source – for example, by giving himself the order "No, I won't speak" – he was gradually able to assert conscious control. In the end, he only did what he intended to do rather than something being done by force of habit. He found out that he had to say 'no' to his first

⁷⁵ Carrington, W (1994) p. 19.

⁷⁶ See Wilfred Barlow quoted in Bloch, p. 221.

⁷⁷ Physiotherapy as a modern profession began to take shape in the UK when a number of forward-thinking nurse-masseuses banded together to form the Society of Trained Masseuses in 1895. Hydrotherapy, exercise and massage hark back into the mists of time. The ubiquity of Swedish Gymnastics (1813) and revival of a general interest in exercise during the nineteenth century influenced every schoolyard, military parade ground and gymnasium. Traditional skills of 'bonesetters' and 'rubbers' lost out to the new science and medicine (see Sir Arthur Keith, *Menders of the Maimed*). Until the 1940s treatments were restricted to exercise, massage and traction. From the start the new profession of respectable women trained in anatomy and physiology sought approval from the medical profession. In the context of two World Wars social status, value and purpose of physical treatments change in public and professional perception though physiotherapy remained ancillary and subordinate to medical doctors until the 1970s. (*Oxford Companion to the Body*, 2001; 2003.)

⁷⁸ John Dewey's *Freedom and Culture* (1939) quoted in McCormack, p.129. Compare *Conscious Control*, 1912, p.26-7 and *MSI* 1918, p.124.

reaction to the idea, say, to speak, rather than say 'no' to the speech act itself.⁷⁹

Despite early optimism his discoveries are still not mainstream. Being an “outsider” to the scientific, and medical establishments, Alexander realised it would take time to bring about a “reorientation of the viewpoint” towards the study of physiology.⁸⁰ Also weighing against a ready acceptance of his ideas was that no one wants the mental discipline required for personal change; “none of you want anything mental really” (Aphorisms, p.76). Most of us are too fixed in our endgaining habits and firmly believe in the necessity of having to ‘do’ more (rather than less) to get positive results.

Alexander’s niece, Joan Evans (née Mechin, sister of Marjory Barlow)⁸¹ once said that people like her who were fit and healthy didn’t need the technique. But, she added, “Everyone who performs on stage (or sports arena) needs to know about it.”

When asked why the Alexander Technique wasn’t more widely known, Walter Carrington said that, in general, people didn’t like to be told what *not* to do.⁸² It reminds them of being reprimanded as children. Being told what not to do simply isn’t sexy. So most people prefer an expert who meets their expectations and gives advice on what they should be doing.

The Basic Idea (*recap.*)

Once he had eliminated the possibility of organic causes (i.e. disease, injury) for his voice loss, Alexander formed the basic premise that his voice problems were the result of *something he was doing*. He saw that he wasn’t just tightening his neck and throat but other things were happening also. He tensed his feet, for instance, thinking that he was following his teacher James Cathcart’s instruction to “Take hold of the floor with your feet.” And there was a general shortening in stature when he was reciting.

Most performing artists and athletes know, in theory at least, that tensing and over-shortening muscles lowers your ability to perform at your best. A general sense of *release* – lengthening and expansion – into activity is the key to winning. You must “think tall!”⁸³ So, before he could begin to solve his specific problems of hoarseness and noisy breathing, Alexander had to find a way to stop his habit of tensing and shortening.⁸⁴

He was surprised to find that it wasn’t simply a matter of deciding not to do it anymore. As he explained (and as I am sure you know also) at the “critical moment” he went to speak, his old tension habit would re-assert itself despite his best intentions not to do it.⁸⁵

⁷⁹ Barlow, Carey (2011), p.32. See also Barlow (1965) in Barlow W. (1978, 2005): ‘the inadequate assumption that bad posture can be altered satisfactorily from the *outside*, by *doing* something different’ (p. 4). Alexander anticipates the Phenomenologists (Husserl, 1859–1938 and Merleau-Ponty, 1908–1961) in addressing ‘embodiment’ and the first-person, lived experience of the ‘subjective self’.

⁸⁰ UCL, p.110.

⁸¹ I was summoned out of class by Walter to meet Joan Evans and her daughter, Jackie, in his living room late one morning in 1996. They were concerned that, with my being editor of the Society’s newsletter, I might give publicity to Jeroen Staring’s privately published book (Staring 1996). Apart from containing unfair personal bias and inaccuracies, the two were anxious that it should not detract from their own forthcoming book about the Alexander family’s history (Evans 2001).

⁸² MATTS visit to Lansdowne Road, 15 June 2004.

⁸³ Record-holding athletes like Geoff Capes (shot-put), and Steve Backley (javelin), discovered that ‘thinking tall’ helped them perform better.

⁸⁴ Alexander (1985) p.29 footnote.

⁸⁵ Alexander 1985, p.31 etc.

Admittedly, it may sound simple but in practice it's not always easy, particularly when you are feeling under pressure to perform at your best. If you don't sense the customary effort, then it *feels* as though things won't work properly. Alexander wrote that some of the best intellectual minds could understand in principle but found it difficult (if not impossible) to put into practice. John Dewey, one of the greatest thinkers in America at the time, said he was surprised that, when it came to ways of moving, he could not carry out an aim or intention contrary to his habit without further training and practice. He wrote of:

'The most humiliating experience of my life, intellectually speaking. For to find that one is unable to execute directions, including inhibitory ones, in doing such a seemingly simple act as to sit down, when one is using all the mental capacity which one prides himself upon possessing, is not an experience congenial to one's vanity.'
(Alexander 1931, p.xvii)

Taking Alexander lessons

'You can't tell a person what to do because the thing you have to do is a sensation.'⁸⁶

(F. M. Alexander)

NOTE: THIS OR ANY OTHER BOOK ON THE ALEXANDER TECHNIQUE, IS NOT A SUBSTITUTE FOR TAKING LESSONS

That said, Alexander and other teachers have found that lessons are more effective when new students know something about the background and principles. If you've got this far, then you already know the basic ideas essential for getting the most out of your lessons.

Alexander used to tell prospective students to read one of his books and, if they agreed with the ideas expressed, to come for lessons and learn how to put the ideas into practice. Practical experience is essential to an understanding of what the Technique can do for you. The Technique can be learned in about 20 lessons. It then becomes (as Dewey wrote) the possession of the student and continues to promote an optimum standard of physical and mental functioning.

The technique of Mr Alexander gives to the educator a standard of psycho-physical health (...) It supplies also the 'means whereby' this standard may be progressively and endlessly achieved, becoming the possession of the one educated. It provides therefore the conditions for the central direction of all special[ised] educational processes. It bears the same relation to education that education itself bears to all other human activities.⁸⁷

In other words, it's about "Learning how to learn" and "Getting better at getting better."

⁸⁶ Maisel p.4; Aphorisms p.14.

⁸⁷ Alexander (1985), Introduction, p.12. "[Dewey] says quite definitely that he regards this technique as being to education what education is to life in general, that it is the thing which gives education the possibility of really doing some good" (p. 234). Huxley A, Ferrucci P (ed.) (1994). The Human Situation: Lectures at Santa Barbara, 1959. London: Flamingo Modern Classics.

2. THE PRINCIPLES

THIS SECTION IS BEST UNDERSTOOD AS AN ACCOMPANIMENT TO LESSONS.

Sometimes people refer to “the” Alexander Principle as though it is self-evident. There is an excellent book by Wilfred Barlow (1973) of this title: *The Alexander Principle*. Incidentally, it was published the same year Nikolaas Tinbergen devoted half of his Nobel Oration to Alexander’s story as an example of the ethnologist’s scientific method of “watching and wondering”.⁸⁸ The principle of prevention – stop wrong things from happening – could be regarded as The Alexander Principle. But more commonly, the overarching Alexander Principle is stated as:

Manner of Use is basic (more so than posture) and affects an individual’s Standard of general Functioning. “Use Affects Functioning”, for short.

Without consideration of the influence of a person’s manner of use on his condition, then any diagnosis or assessment – be it for medical, health and fitness purposes or job suitability – will be incomplete.⁸⁹

There are then other principles including the two key principles at the core of the Technique:⁹⁰

- The dynamic relationship between head, neck and back acts as a “primary control” in the use of the self; and
- Our perception of sensory feelings is conditioned by our habits and is an unreliable guide to doing something new.

To these theories must be added the operational principles of the unconditional necessity of **inhibition** (i.e. principle of prevention as a foremost step in any process of change) and the projection of **mental directions (orders)** to restore and maintain the satisfactory working of the ‘primary control of use’.⁹¹

Perception of sensory feelings is conditioned by habit and may be unreliable

As late as the 1940s, there were eminent, classically educated medical men willing to argue against the idea of unreliable sensory appreciation. Yet all performers know about the difficulty of self-monitoring and knowing or certain what they’re doing. It’s useful to work in front of a mirror (as Alexander did) or have someone giving objective feedback rather than relying solely on bodily feelings.

⁸⁸ Nobel Prize for Physiology or Medicine, along with Conrad Lorenz.

⁸⁹ Letter with nineteen signatories to *BMJ* 29 May, 1937, vol. 1, p.1137. Quoted in *UCL*, pp.13-4.

⁹⁰ See McCormack’s analysis, pp.22, 32-36.

⁹¹ There are variations to this scheme. Patrick Macdonald writes that the following five principles, taken together, make the Alexander Technique unlike any other:

- Recognition of the Force of Habit
- Recognition of Faulty Sensory Appreciation (Awareness)
- The Primary Control in the Use of the Self
- Inhibiting and Non-Doing
- Sending (mental) Directions

Macdonald writes, “If one meets a technique that has some similarity to the Alexander Technique, run these five simple items over it and see what is missing.” (*The Alexander Technique as I See It*, Patrick Macdonald. Brighton: Rahula Books, 1989, p.86.)

Our appreciation of what our senses are telling us (sensory information) is unreliable because of our endgaining habits. In a similar way to the sense of taste being distorted by our routinely adding extra salt or sugar to food, so the sense of your own body can be distorted by habitually adding extra muscular tension to activity.

Early on in his investigations, Alexander remarked to his father that we are no more aware of how we use ourselves than a dog or cat knows what it's doing.⁹² He reasoned that if we can educate ourselves into bad habits then it must be possible to re-educate ourselves out of them and to restore a more natural and efficient way of doing things. As our use of ourselves improves, so our body-sense ("proprioception") becomes a more accurate register of muscle tension and perceived effort.⁹³

Muscle spindles

'Muscle spindles are sense receptors buried within our muscles. They are sensitive to being passively stretched and slackened by the contraction and release of surrounding muscle fibres.

The muscle spindles are the location where the two halves of the nervous system, the sensory and the motor, have their closest physiological association, where movement and sensation are joined directly together in firm embrace. (...) Spindles are motor units that can feel themselves, a combination that is unique to them.' (Juhan, pp.193-4)

Muscle spindles are an important input to our sense of our own body – to *proprioception*. When muscles are habitually tight they squeeze these receptors making them less sensitive; when muscles are allowed to release the spindles can resume their function. Sometimes in lessons, students say that they feel as though their arms or legs have lengthened by an impossible amount. The sensation may be caused by the freeing up of the muscles and their spindles recalibrating. One of the aims of the procedure known as Hands On [Over] the Back of a Chair (*CCCI*, Chapter IV. Illustration, pp.112f.) is to restore a reliable sense of physical (muscle) tension. (See *CCCI* p.109.)

Proprioception is our 'sixth sense'. Strictly speaking, proprioception means all those bodily sensations that are neither kinaesthetic nor tactile. (Kinaesthesia is our sense of moving – accelerating or decelerating through space – and tact is our sense of touch, as sight is our sense of seeing.) However, in older writings, 'kinaesthetic' often includes all bodily sensations. Conable and Conable (1995) try to clarify the situation by quoting Oliver Sacks', *A Leg To Stand On* (1984):

'There used to be another old word, still often used – kinesthesia, or the sense of movement – but 'proprioception,' less euphonious, seems an altogether better word, because it implies a sense of what is 'proper' – that by which the body knows itself, and has itself a 'property.' One may be said to 'own' or 'possess' one's body – at least its limbs and moveable parts – by virtue of a constant flow of incoming information, arising ceaselessly, throughout life, from the muscles, joints and tendons at all times, by this sixth sense' (Conable and Conable, p.26).

We can also add sensory inputs from our skin, eyes, and inner-ear organs of balance.

⁹² 'Because we do not *know* how we use ourselves any more than the dog or cat *knows*. By this I meant that man's direction of his use, through being based upon feeling, was as unreasoned and instinctive as that of the animal.' (*UOS*, p.37.)

⁹³ See Alexander 2004 (1931) pp.109-111 and the following chapter, IV. Illustration, where Alexander describes the teaching procedure of Hands On the Back of a Chair. In *MSI* 1910 he writes of the "sense register of muscle tension" and a "debauched sense of feeling" (p.55).

Inhibition, non-doing, ‘withholding consent’ and ‘saying No’

‘The order or orders concerning what is not to be done are to be considered as primary, and those concerning what is to be done as secondary.’⁹⁴

Preventing our “too quick and unthinking reactions” is the cornerstone of the Technique. It is primary and cardinal and until you can say *No* to too quick and unthinking reactions you will remain a slave to your unconscious habits and impulses. The answer is, firstly, to STOP the relentless stream of automatic habit. Alexander first describes the act of “mentally saying *No*” in his book *Man’s Supreme Inheritance* (1918):

- ‘1. Whenever a person speaks to you, asking a question or in any way trying to open up a conversation, you must as a primary principle refuse to answer by mentally saying *No*. (This will hold in check the old subconscious orders. (...) It constitutes the inhibition of the old errors before attempting to speak.)
2. Then give the new and correct orders to your general co-ordinations and command the ‘means whereby’ of the act of correct and controlled speaking.
3. Make this a principle of life.’ (p.136)

Through practising your inhibitory power to withhold consent or ‘say no’ you can develop an enhanced self-awareness for reliable “conscious guidance and control” of how you use yourself and *allow* the right things to ‘do’ themselves. Once you have experience of “this wonderful force”⁹⁵ – the power to exercise your decision *not to do* in the face of what may seem an irresistible stimulus to react – then you are well on your way to discovering what you really want; you are on the Road to Tipperary, as Alexander would have said!⁹⁶

More on Inhibition

‘Just as no bone can move without shifts in the tensions and the lengths of muscles, so no muscle can make those shifts without neural stimulation. And the patterns of stimulation that are passed on by the nerves contracting the muscle cells are the ongoing summations of all of our sensory and mental events.’ (Juhan, p.144)

⁹⁴ “Re-education of the Kinaesthetic Systems (1908) in *ARTICLES* p.83.

⁹⁵ *MSI* p.23 “In animals the inherited power is there; in man also the power is there as a matter of physical inheritance, but with what added possibilities due to the accumulated experience gained from the conscious use of this wonderful force [inhibition].”

⁹⁶ ““You see, the inhibitory idea becomes the primary means of the volitional act [i.e. what you want to do].”

Alexander then stepped back a few paces, held out his left hand and extended the index finger and middle finger, and said: “For the sake of argument, say these two fingers represent the old habitual track. You receive a stimulus from within or without the self to do something, for example, sitting back in the chair. And you give consent to this idea – the message goes down this old track. But now, if you do not give consent to the stimulus to ‘sit back in the chair,’ the message stops here [pointing to his knuckles]. Then after withholding this consent, you prepare a new track [Alexander now extended his fourth and little fingers] which represents the new means whereby of allowing the neck to be free, the head to go forward and up, and the back to lengthen and widen [primary control]. This is the main idea, you see. You don’t care a jot whether you sit back in the chair or not. That is not important. (...) What results, finally, is the development of a new track, a new line of communication. This becomes a new habit, one consciously formed and maintained. You are bridging the subconscious and the conscious. The subconscious is the old way of doing, a way you never leaned consciously but acquired without awareness at all.” (Binkley, pp.59-60)

Alexander describes our capacity to ‘withhold consent’ – making a decision *not to do* something (‘non-doing’) – as an act of conscious inhibition to prevent our too quick and unthinking reactions. Familiar everyday examples are: deciding whether or not to answer the phone, the children’s games “Simon says” and grandmother’s footsteps, or stopping to check before crossing a busy road.

The word “inhibition” as Alexander used it can get confused with the different meaning put on the term by some schools of psychology. Inhibition can mean unhealthy repression. This is not Alexander’s used of the term. Rather than subconscious repression he meant a wholehearted choice to substitute one idea for another.⁹⁷ Alexander would have been aware of the work of Sigmund Freud and the ‘unconscious’ mind, but was indifferent to it. Later schools that saw neuroses as learned habits, acquired behaviours spreading out over our consciousness would have been more congenial to his ideas. Viewed in this way neural patterns might be pruned back and unlearned through forms of cognitive behavioural therapy (CBT) and, indeed, the Alexander Technique.

The term Inhibition appears in Alexander’s writings around 1908–10. His meaning is closer to that in the field of neurology. Back in the 1860s, the first-generation of specialist neurologists began trying to understand the mechanisms by which the nervous system organises the parts of an organism into a concerted, purposeful whole. They were surprised to discover that inhibitory signals (nerve signals that ‘told’ muscles or organs *not* to act) were just as prevalent as excitatory signals calling for action. Integrated functioning requires a balance between the two.⁹⁸ The classic definition of “inhibition” was formulated in 1883:

‘By inhibition we mean the arrest of the functions of a structure or organ, by the action upon it of another, while its power to execute those functions is still retained, and can be manifested as soon as the restraining power is removed.’⁹⁹

This definition by a neurologist can easily be adapted to refer to the cognitive (thinking) process of Alexander’s conscious inhibition of unwanted habits. Here, unwanted automatic activity is arrested by ‘will power’ and our decision not to (re-)act. By being clear about *what we must not allow to happen* (i.e. stiffen or shorten) our conscious wishes can indirectly influence subconscious processes.

It is important to understand that it’s not so much our muscles themselves that need re-educating but our thinking and how this indirectly affects the neural control of our muscles. As Alexander’s niece, Marjory Barlow, pointed out in a 1965 lecture, “posture training is based on the inadequate assumption that bad posture can be altered from the *outside*, by doing something *different*.”¹⁰⁰ Change can only happen at a deeper level – at the action control level in the central nervous system. And this can be done through our ability to make decisions and choices about what we ‘do’ or ‘not do’.¹⁰¹

⁹⁷ William James makes this distinction in *Talks to Teachers* (1899), pp. 192-3. Cf. *UCL*, pp. 103-4.

⁹⁸ See Charles Sherrington quoted from *The Brain and Its Mechanism* (1937) in Alexander (1942), p.85: ‘I may seem to stress the preoccupation of the brain with muscle (...) often, to refrain from an act is no less an act than to commit one, because inhibition is co-equally with excitation a nervous activity.’

⁹⁹ T. Lauder Brunton, *On the nature of inhibition* (1883) p.419 see Diamond et al p.7.

¹⁰⁰ ‘The Teaching of F. M. Alexander’ (An Alexander Memorial Lecture given November 1965) in Barlow, W. Ed. (2005). *More Talk of Alexander*, Southampton: The Camelot Press, okp.4.

¹⁰¹ ‘My experiences (...) convinced me that in any attempt to control habitual reaction the need to work to a new principle asserts itself, the principle, namely, of inhibiting our habitual desire to go straight to our end trusting feeling for guidance’ (*UCL*, p.25).

Non-Doing

‘Non-doing’ is arguably one of Alexander’s most puzzling concepts. We understand an instruction to ‘do’ something but not to ‘non-do’. Non-doing refers to our preventing (inhibiting) extra habitual ‘doing’ *within ourselves* that gets in the way of the integrated reflex-organised activity that seemingly ‘does itself’. Additional ‘doing’ in the form of imposed muscular activity or tension is counterproductive and is, therefore, something we would *not* wish to ‘do’. As Alexander writes, it prevents the self from doing itself harm by misdirection of energy and is an act of inhibition (*UCL*, p.101).

But if we get the idea that ‘doing’ is bad and ‘non-doing’ is good, then it can become an excuse for prevarication and inaction. “‘Non-doing’,” as Marjory Barlow once remarked, “doesn’t mean ‘nothing doing’.”! If, for instance, I am standing quietly and calmly “doing nothing” then there is still lots going on. My life processes are working away, I’m staying in balance, my senses are sensing. There’s lots happening but I am not ‘doing’ it. ¹⁰² I’m in a state of readiness so that when I decide to ‘do’ something – take a step, sit down, play or sing – I can ensure that extra habitual ‘doing’ doesn’t get in the way. As Shakespeare puts it, “The readiness is all.”

Primary Control

‘Where the human machinery is concerned Nature does not work in parts, but treats everything as a whole.’ ¹⁰³

Alexander’s technique puts particular emphasis on our avoiding ‘doing’ habits that disturb the reflex-organised inter-relationships of the head, neck and back as our body moves and adjusts to the ever-present force of gravity. Being upright, maintaining balance is basic.

‘Balance is essential for every activity carried out during waking hours and skilled movements are dependent upon the ability to maintain equilibrium in a variety of positions and under many conditions.’ ¹⁰⁴

Being vertebrates, our spine is the defining feature of the way we function. ¹⁰⁵ You may be familiar with the idea of a ‘skeletal system’ – your skeleton made of some 400 bones; you may be familiar with your ‘muscular’ system or your ‘nervous’ system. But, in reality all these systems are part of a total mega-system, the ‘self’ – a fabulously complex system of systems.

We live in a rapidly changing world dominated by technology. Alexander reckoned that it was no

¹⁰² See Patrick Macdonald’s 1963 F M Alexander Annual Memorial Lecture: “On Giving Directions: Doing and Non-Doing.” Society of Teachers of the Alexander Technique, London.

¹⁰³ ‘The Theory and Practice of a New Method of Respiratory Re-Education’ (1907) in *MSI* p.206. Also *MSI*, p.142.

¹⁰⁴ Davies (1985) quoted in Trew and Everett, p.229.

¹⁰⁵ If you are interested to find out more about this, I suggest you look at the work of the American physiologist, George Ellett Coghill (Herrick, 1949), and his Appreciation to Alexander’s fourth book, *The Universal Constant in Living*. “I am delighted to have the books you sent... I am reading them with a great deal of interest and profit, amazed to see how you, years ago, discovered in human physiology and psychology the same principle [of “total pattern”] which I worked out in the behaviour of lower vertebrates. (Letter 4 June 1939 quoted in *UCL*, p.113.)

Arthur F. Busch (who wrote under the *non de plume*, Michael March) wrote an editorial in the *Brooklyn Citizen* (7th April, 1939) called “The Basic Error of Psychology in which he wrote: Coghill has discovered the actual mechanism of integration and Alexander has perfected the technique of employing it in the improvement of human beings. Coghill, in a word, has proven a principle scientifically whose import ultimately will revolutionize the whole structure of psychology, medicine and education, and Alexander has perfected the means of putting it into practice.” (Evans, p.204)

longer possible to leave the guidance and regulation of the ‘self’ solely to Nature or instinct. We have to use our self-awareness and reasoning power to adapt ourselves to all the novel circumstances we frequently encounter.

But how can we possibly apply a control with any reliability given our partial understanding of the mechanisms? Where do you begin? Well, if we want to unravel knots in a piece of string we have to find its ends; if we want to solve a jigsaw puzzle then finding a key piece makes it easier. I think Alexander’s most important contribution to ‘the control of human reaction’ was in identifying where to begin – with the head, neck, back relationship.

By “keeping our neck free”, as he described it – we are able, with practice, to prevent “degenerative” tension habits in this vital area and so bring about improvements to our functioning in general. Alexander describes the head-neck-back relationship as a “governor”¹⁰⁶ – something that regulates the use of ourselves – and an “indicator” – something that shows a trained observer how efficiently a person is using him- or herself.¹⁰⁷ With the help of your teacher, you may need to discover and release tension in other parts of the body that are interfering with the satisfactory working of the primary control.¹⁰⁸

‘There is a primary control of the use of the self, which governs the mechanisms and so renders the control of the complex human organism comparatively simple.

This primary control... depends upon a certain use of the head and neck to the rest of the body, and once the pupil has inhibited the instinctive [habitual] misdirection leading to his faulty habitual use, the teacher must begin the process of building up the new use by giving the pupil the primary directions towards the establishment of this primary control.’ (UOS, p.65 original italics.)

Of course, Alexander wasn’t the first to recognise the significance of head carriage for postural alignment and co-ordination. The dancing masters and fencing instructors of the seventeenth century knew about the importance of the alignment of the head and torso for graceful, easy movements. In 1737, François (Francis) Nivelon, looking back to the precepts of the dancing master De Lauze who in 1623 stressed the great importance on the position of the head for elegance in deportment, wrote:

‘THE HEAD BEING THE PRINCIPLE PART OF THE HUMAN FIGURE, MUST BE FIRST CONSIDERED, BECAUSE IT ENTIRELY GOVERNS ALL THE REST... A PERSON WHOSE HEAD IS RIGHTLY PLACED, IS CAPABLE OF STANDING, WALKING, DANCING, OR PERFORMING ANY GENTEEL EXERCISE IN A GRACEFUL, EASY AND BECOMING MANNER.’¹⁰⁹

¹⁰⁶ *The Universal Constant in Living* by F. M. Alexander (Mouritz, 2000, London), pages 48-49

¹⁰⁷ ‘This is a sign that he is endeavouring to do with the muscles of the neck the work that should be performed by certain other muscles of his body, notably those of the back.’ (MSI, p.59) ‘Subconscious efforts were being made that caused little necks to take up the work that should be done by little backs.’ (MSI, p.78) ‘Let us take, for example, the case of a pupil who has been accustomed to stiffen the muscles of the neck in all his daily activities... this habit has come about because he is endeavouring to make his neck perform the functions of other parts of his psycho-physical mechanism, so that it is not an isolated defect, but connected with other harmful imperfections in the use of himself. His stiffened neck, in fact, is merely a symptom of general mal-coordination in the use of the mechanisms, and any direct attempt to relax it means that he is dealing with it as a “cause” and not as a “symptom” and such an attempt will result in comparative failure unless a satisfactory co-ordinated use of the mechanism in general is restored.’ (CCCI p.103)

¹⁰⁸ See Carrington (1994), “Lengthening in Stature,” pp.33-37.

¹⁰⁹ Sell, p.71.



The medical profession has been slow to grasp the overall picture of how the healthy individual performs as a whole. This illustration shows an apparatus designed (c. 1820) by the Scottish anatomist, John Shaw, for keeping a pianist's back straight and head erect. Of course, their priorities were different from studying how an individual might attain peak performance.¹¹⁰

Alexander lamented that the work of the medical profession wasn't informed by a theory of the proper working of the postural mechanisms.

“... in taking full advantage of the influence for good in correctly employing this *primary control* we hold the key to the bringing about of the “normal working of the postural mechanisms” as a whole.”¹¹¹

This is mostly true, even today.

We function as a unity with all our parts working interdependently with one another. A change in one area brings about compensatory adjustments throughout the entire system. Alexander found that if he could stop his habit of tightening his neck muscles and pulling his head back when he spoke, there was the possibility of nipping other unnecessary muscular tension habits in the bud.

Cause and effect is traced back to its origins or roots. By ensuring that the spine tends to lengthen and the back widen (“lengthening in stature”) any predisposing conditions that place the self at a disadvantage are reduced or avoided. An over-tensing habit in the throat or arms, for example, is “outflanked” – i.e. out-manoeuvred by taking pre-emptive action. This interpretation is supported by the fact that before 1925, Alexander thought in terms of “the *true primary movement* to each and every act” rather than Primary Control.¹¹²

The old tension habits are no longer supported by the new optimising conditions. Provided these are maintained by the mental skills of Inhibiting and Directing we can begin to rediscover ways of functioning (speaking or moving an arm) that are more efficient and pain free.¹¹³

¹¹⁰ Illustration from Keith (1919) p.214.

¹¹¹ *UCL*, p.107f. p.109.

¹¹² *MSI* 1996, p.200. From 1907 pamphlet, “The Theory and Practice of a New Method”.

¹¹³ ‘The only way of accomplishing the discovery is through a flank movement. We must stop even thinking of standing up straight. To think of it is fatal, for it commits us to the operation of an established habit of standing wrong. We must find an act within our power which is disconnected from any thought about standing. We must start to do another thing which on one side inhibits our falling into the customary bad position and on the other side is the beginning of a series of acts which may lead into the correct posture.’ John Dewey, *Human Nature and Conduct*, p.34. In fact this is a reworking of Alexander’s arguments for ‘a boy who stoops (...) [and] is told to “stand up straight”’ reproduced in Alexander 1910, p.191 (*Re-education of the Kinaesthetic Systems* pamphlet 1908) and, again, regarding breathing in his pamphlet, *Why We Breathe Incorrectly* (1909) quoted in Alexander 1996, p.90-1.

What does Alexander mean when he writes “*a certain use of the head and neck to the rest of the body... renders the control of the complex human organism comparatively simple*”? Well, take for instance a violinist performing the action of a ‘down’ bow. The right arm is raised and extended away from the body out to the side. This seemingly voluntary gesture involves reflex adjustments throughout the entire body. (See, ‘What happens when I move my arm’.) To get an idea of the complexity of what goes on, violinists might compare Juhan’ description to the gesture of a ‘down’ bow. If you tighten and fix then all the adjustment throughout the body cannot happen smoothly and the business of playing becomes unnecessarily complicated and effortful.

It’s obviously far too complex to try to adjust muscles individually. Muscles do not work like that anyway, but respond as a system to carry out our wishes to move. Nor can anyone else, for that matter, truly *know* what’s right for us in all situations and at each given moment. We must make discoveries for ourselves.

More on Primary Control

The head and torso are *primary* in considering how to apply ourselves to an activity. Our arms and legs are *secondary* in that they depend on the integrated activity in the torso for their functioning.

At the Society of Teachers of the Alexander Technique’s Annual Conference held in Manchester (RNCM Hartley Hall, Whalley Range, Manchester July 1998), Walter Carrington explained, “When someone is asked to do something they nearly always begin by stiffening their arms and legs.” Now, when you begin an activity by routinely stiffening your arms or legs to “get ready” this causes tensions that interfere with the smooth co-ordination of the musculature of the torso. The arm is in effect dictating to the body and reverses the ordered hierarchy in the line of command. In effect, the tail is wagging the dog!

Directions and giving directions

‘Neck free (or free your neck), head forward and up, back to lengthen and widen” and, very importantly, “knees to go forward and away.” [Alexander] said to me, “If I stand beside you and say these words you can’t go wrong. But I can’t be with you all the time so you’ve got to learn to do it for yourself.’ (M. Barlow, p.29)

The Alexander ‘directions’ and the thinking of ‘directing’ (or ‘giving orders’) are concerned with stopping energy from going in the wrong direction and getting it to flow where it is most effective. Alexander described the directing (or ‘giving directions’) as:

‘...the process involved in projecting messages from the brain to the mechanisms and in conducting the energy necessary to the use of these mechanisms.’¹¹⁴

“Direction is the generation of energy – something has actually got to happen. (...) It’s not enough to envisage something. [You’ve got to say] ‘That is what I want. I want my head to go there.’ It’s about wishing and wanting. A child wants the fairy on the Christmas tree, the puppy in the window. There is intensity to the want. Babies are good, strong wishers. Time doesn’t enter into it, they want it *now*.”

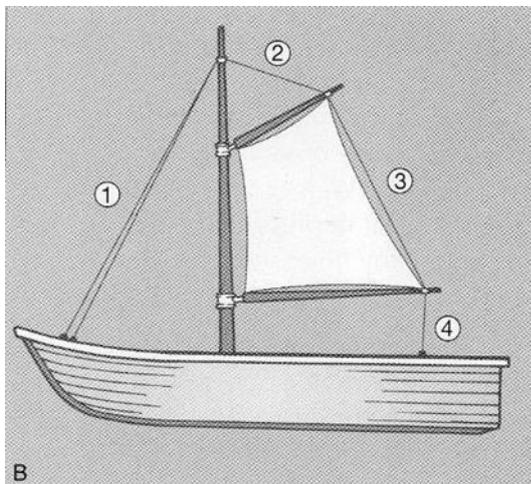
¹¹⁴ Alexander 1985, p.35 footnote.

Walter Carrington¹¹⁵

Stopping the wrong things from happening may be the first and most important step for changing habits, but it is not the whole story. If it were simply a matter of preventing the wrong things from *ever* happening – then making sure we didn't ever go wrong might be sufficient. For most of us as adults, though, we've already formed “degenerative” habits of “pulling ourselves down” and shortening. If we are to get energy flowing in a different way to that of our habits, then *we need to think differently*. We have to practise giving the directions and remind ourselves again at the ‘critical moment’ of action *not* to pull down in our customary fashion and to “think up” instead. Thinking ‘up’ encourages us to lengthen in stature and prevents us from ‘pulling down’ and shortening.

‘Brainthought’

We give directions in the form of a wish.¹¹⁶ “That’s what I wish for – I would like to ‘go up’ or ‘widen across the upper chest’, as examples. The thinking, be it inhibitory or directive, is about sending messages from the brain and so is done *in the brain* (above the eyebrows and ears) or from your ‘attic’, as Missy Vineyard describes it.¹¹⁷ Margaret Goldie reminds us that “Brain activity should not involve muscle activity” (Robb, p.40). She describes giving directions as “brainthought” (p.83).¹¹⁸ It is analogous to “laying down railway lines” along which the neural signals and energy will eventually travel.¹¹⁹



The way we support ourselves on two legs in an upright stance can be compared to the arrangement of mast and rigging on a sailing boat. Look at the picture taken from the book *Anatomy Trains* (p.117).

The mast represents the human spine with (1) representing the postural back muscles (erector spinae, etc.) bringing it into the upright. Muscles in the front of the body (represented by rigging 2-3-4) are designed to pull up the lower structures from above. The rigging

¹¹⁵ Talking in class 11 July 2003. Also, “Directing is energy. Just thinking is not energetic. Wishing, wanting, willing is required. Take aim, take care and then go! This is not end-gaining. “We wish a lot of things for ourselves. We wish for a healthy heart (...) we wish for good lungs. And one of those things that we must wish for ourselves is to go ‘up’.” Walter Carrington, informal talk to my (MATTS) students on 15 June 2004.

¹¹⁶ Carrington (1994) 15-9.

¹¹⁷ ‘Conscious inhibition is a thinking act. This requires that you shift your attention up out of your mental basement and the apparent location of your feelings in your body. You must learn to *turn on the light in your attic*, the part of the mind that lets you be more widely aware of the whole of yourself and your behaviour.’ (p.158.)

¹¹⁸ See Bedford Lecture (1934) in *ARTICLES*, p.177. This is not to say that information travels only one way. Cognitive scientists have emphasized in recent years that cognition is embodied; you think with your body, not only with your brain. Robson, D. “Your Clever Body: It’s not just your mind that does the thinking.” *New Scientist*, 15 October 2011: 35-8. Also, psychophysical unity v. body-mind “dissociation” (Zahn, p.373f).

¹¹⁹ ‘By the repetition of these experiences the pupil develops confidence, and whereas at an earlier stage in these experiences he registered doubt and confusion, little by little the new lines of motor and sensory communication are laid down along which he will sooner or later habitually project his messages.’ *UCL*, p.83.

Compare M. Barlow 1965 in W Barlow ed. (2005), p.10. ‘He [Alexander] had to be content for a time to give himself a stimulus, refuse to respond to it, and give the conscious messages or directions without actually carrying out the movement. This is the preparatory stage of what one might call “road building” or “laying down of railway lines along which the train will eventually travel.’ Also, Binkley 59-50 and Barlow (2011).

(2-3-4) holding up the sail (i.e. the rib cage) can be compared to a line of musculature from the pubic bone at the front of the pelvis to the mastoid processes at the base of skull (behind the ears). When we collapse down in front, it's not simply a matter of our back muscles not working hard enough or gravity doing its inevitable worst. There is a definite pull down in front that shortens our muscles and, literally, brings us down. "Forward head posture"¹²⁰ – a term used by some physiotherapists and body workers – refers to when the head is held forward in space and is a feature of this general muscular shortening and pulling down in the front of the body. It might more accurately be called "forward neck posture" as in this pattern the head is, in fact, pulled back in relation to the neck dropping forward. This is because the muscles in the front of the body are attached to the skull behind where the head pivots on the atlanto-occipital joint at the top of the spine (see below). To counter this habit we have to direct (wish) for the opposite, hence the directions for the head to go 'forward and up' as the back 'lengthens and widens'.

HINT: If you play a wind instrument then be mindful to bring it to your lips maintaining your sense of 'up' rather than taking your mouth to the instrument by poking your head and neck forward. Similarly, with a violin or viola, take the instrument to your shoulder whilst maintaining your sense of 'up' rather than taking your shoulder forward to meet the instrument.

All together, one after the other

... the pupil should be given the experience, at first in the simplest of activities... of projecting the directions for the new and more satisfactory use in their proper sequence, primary, secondary etc. 'all together, one after the other' (*UOS*, p.68).¹²¹

To be effective, the directions need be given in their proper sequence as they each follow on from the one before. But previous directions must be continued as the next is added. You have to keep all the balls in the air at once, so to speak. Alexander said that this skill was most people's *pons asinorum* – their major stumbling block – to successfully applying the Technique. But it shouldn't be too much of a problem for musicians who are already used to multi-tasking.

The directions – summary

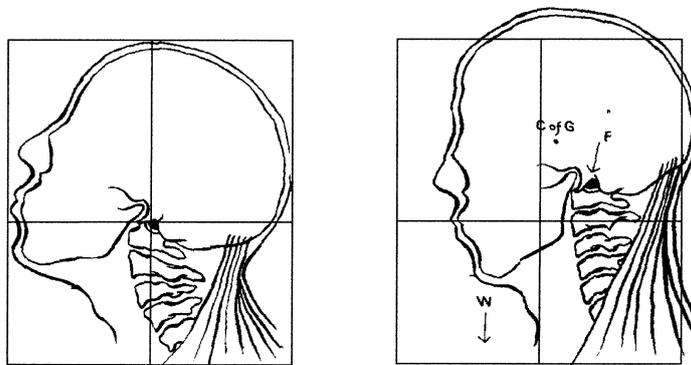


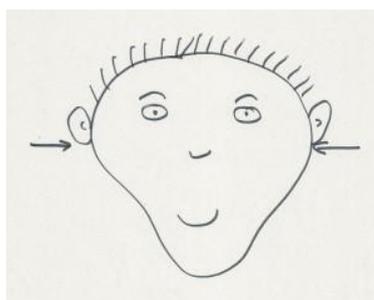
Diagram based on Gorman (1982). Left, head pulled back and down. Right, head releasing forward, and up as the spine lengthens naturally.

¹²⁰ Gross, et al. p.442.

When most people go to do something there are three basic things that they do to put themselves at a disadvantage and be less efficient than they might otherwise be. They:

- Stiffen their neck muscles
- Pull their head back and down, and
- Shorten in stature.

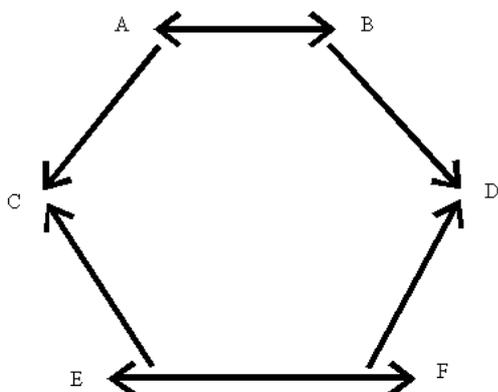
The directions are designed to counter these tendencies – to stop unduly tightening the neck (*Allow the neck to be free*), to stop pulling the head back and down (*Allow the head to go forward and up*), and to promote lengthening in stature (“Know where up is,” Walter, would say¹²² – “Think ‘up’ and keep your length, dear,” Ethel Webb would remind her niece, Erika Whittaker¹²³). And then, importantly, the pelvis stays back so that *knees can release forward from the hips and away from each other*.



To find where the **head balances on the top of the spine**, place a finger in the soft dent behind each ear lobe. Imagine a line going between these two points. The middle of this line is approximately where the head balances on the neck. It’s higher than people imagine it to be. (Thanks to Tanya Shoop, www.freeyourneck.co.uk)

Other, secondary directions may be useful when working on yourself, such as:

- Allow widening across the upper chest (along the collarbones to include the shoulder girdle).
- Upper arms slightly away from sides; left upper arm towards the left, right upper arm towards the right to create space under the arms.
- Lengthen (“pull”) to the elbows.



Six-sided figure showing the ‘directions’ for the arms and upper torso:

“Pull to the elbows” is an ambiguous instruction but it can be understood as the resultant of all the directions in this six-sided shape. Looking at your reflection in a mirror, A-B represents the width across the upper chest (the shoulder girdle); A-C and B-D are the upper arms taken slightly away from the sides of the ribs with the elbows (C and D) releasing away from the shoulders; C-E and D-F are the forearms lengthening back from

¹²¹ “The phrase ‘all together, one after the other’ expresses the idea of combined activity I wish to convey.” *UOS*, p.42 footnote.

¹²² Carrington in discussion with MATTS students, 15 June, 2004.

¹²³ Personal recollection related to author.

the wrists to the elbows; finally, E-F represents whatever you are holding such as the rail of the back of a chair.¹²⁴ (See All together, one after the other.)

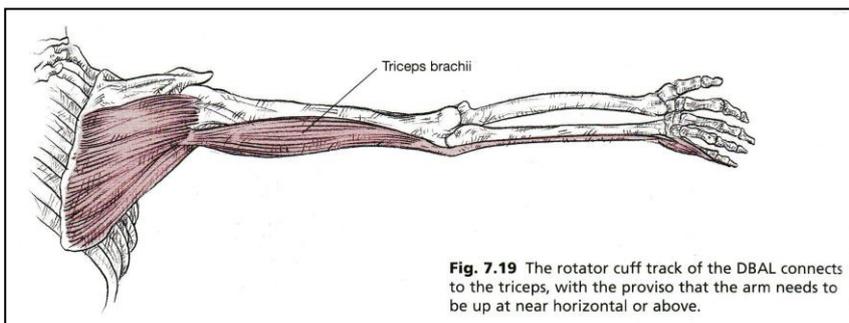
- Lengthen (“point”) your hand and fingers away from the wrist; and similarly, your foot and toes away from the front of the ankle.

There are many other ‘secondary’ directions that you or your teacher might invent to help you to correct misconceptions or undo habits.

Shoulders and arms

Over the years, I’ve found it useful to think of the co-ordinating pathways of the arms into the shoulders and back.¹²⁵ As musicians we are so often focussed on what we are doing with our hands so I have included this short section on arms which must be explored without losing a sense of the whole self.

Musicians in general need to forget the idea that raising the shoulders is *always* bad. Over time the shoulders can get held down and fixed as part of generally ‘pulling down’. The triangular-shape of muscles above the shoulder blades loses its lively tone. The main muscle is called “trapezius”. Its upper and middle fibres lift and suspend the shoulder girdle from above like a circus trapeze.¹²⁶ Trapezius and other shoulder-lifting muscles become tense and over-stretched, pulling down and dragging on the neck. So, it’s important to think about the direction to “widen across the upper part of the chest (collar bones)” and to think of having space up the sides of the ribs and under the arms (armpits). This will help you to avoid overcompensating for any tendency to hold the shoulders raised. You should be able to feel the ribs high up under your arms moving as you breathe.



Then, when you’re doing your Alexander work, you might think about the co-ordinating pathway that connects the widening across the upper chest with the length to the thumbs.

And, at the same time, the little finger side of the hand

connects deep into the back. If you explore the dynamic relationships between the following anatomical features it will help you to find this important connection:

- The pisiform bone on the little finger side of the wrist,
- The medial epicondyle of the humerus at the elbow, and
- The proximal attachment of triceps (long head) at the infraglenoid tubercle of the shoulder blade. (You need to look at an anatomy book to visualise where this is on yourself.)¹²⁷

¹²⁴ Based on ideas from Nicholls, C (2008). *Body, Breath and Being*, Hove (UK): D&B Publishing, p.112. Glenna Batson workshop March 2011 (and conversation with Gillian Pierce).

¹²⁵ Trapezius has attachments to the spine C6 to T3 (Gray’s, p.337) and Latissimus dorsi has “extensive origins”: T6–T12, ribs 8–12, lumbar and sacral regions of spine, and iliac crest (Gray’s, p.339).

¹²⁶ Gray’s, p.337.

¹²⁷ This line of connection is very like the ‘deep back arm line’ in *Anatomy Trains*. (Myers, p.170f.).

Whilst maintaining your primary directions, explore the inter-relationships between these three anatomical points as you move each arm, one at a time. Take them through a movement sequence that involves flexion, extension, supination and pronation.¹²⁸ In lying-down work make sure that the medial epicondyle is contacting the supporting surface and that you're aware of the pisiform bone as a potential weight-bearing point like a miniature heel bone. Remember always that it's the lengthening and widening of the back that is dominant. Arm action has to accommodate to, and be conditioned by, the 'advantage' created by the lengthening in the torso – the 'primary control'.

You might then work through the HOBC procedure and take the ideas into 'hands on a table,' 'hands on the closed lid of a keyboard,' bowing action, etc. Think of the arms as "hanging" from the back of the shoulders (the spines of the scapulae) as you allow yourself to widen across the upper chest and lengthen the thumbs. It's also interesting for singers to explore this. Surprisingly, there seems to be an association between having an over-tense jaw and habitual tightening the wrists and thumbs.

In a similar way to arms and shoulders, the legs connect deep into the pelvis and lower back. You are not going to find the openness and freedom you would like in the upper torso, arms and breathing if the legs and lower body are unable to give appropriate support. For instrumentalists, over-loose joints (hyper-mobility) in the knees is often as much a problem as in wrists or finger joints. There isn't space to go into more detail but the important message is not to neglect overall co-ordination and the influence of the 'primary control of use' when you're focused on developing arm/hand skills.

The Doctrines of Antagonistic Action¹²⁹ and Mechanical Advantage

A short paragraph was written as an introduction to "Re-education of the Kinaesthetic Systems: Concerned with the Development of Robust Physical Well-Being" (1908) for when it was reproduced in the 1910 edition of MSI. It was omitted from later editions.¹³⁰

'The position of mechanical advantage which may or may not be a normal position is the position which gives the teacher the opportunity to bring about quickly with his own hands a co-ordinated condition in the subject. Such co-ordination gives to the pupil the experience of the proper use of a part or parts... which enable[s] the pupil after a short time to repeat the co-ordination with the same perfection in a normal position.' (MSI, pp.118–19)¹³¹

A simple practical example of what is meant by a mechanical advantageous position would be to ask a seated pupil gradually to incline their body backwards while rehearsing the mental orders (directions) to maintain length. The upper body would eventually be supported by the chair back and the teacher would place two books, or a padded cigar box, behind the pupil's shoulder blades (MSI, p.118 footnote).

Alexander proposes the Principle of Mechanical Advantage – due muscular tension (cf. 'optimal resting length') – as an alternative to the "theory of relaxation" or "rest cures" (MSI, pp.53, 17, 58-

¹²⁸ It's vital to think of dropping the elbows in a way that encourages widening and connects the arm into the back. Peggy Williams used to say, "Think 'best elastic' (from elbows to floor)." I find that directing elbows towards the posterior superior iliac spines works well.

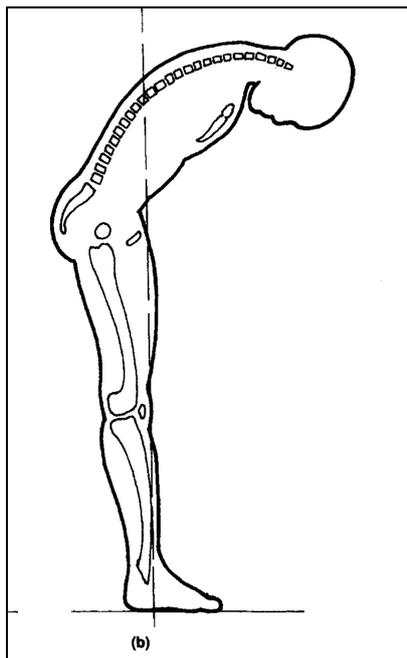
¹²⁹ "antagonistic [muscular] pulls" (Bedford Lecture in *ARTICLES*, pp.177, 179)

¹³⁰ MSI, p.218.

¹³¹ MSI, p.118-9. See also in MSI Mechanical Advantage related to lifting, 60-1; writing, 81; breathing, 118 footnote (cigar box); 170 (shoulder blades); 204 (1907 paper); and standing, 168.

59). As with many of his other terms, he writes that the phrase “position of mechanical advantage” is inadequate and is used only because “a better one was not forthcoming.” (CCCI, p.112)

Although he considered it to be the great principle of his technique¹³², for some unexplained reason, Alexander does not use the phrase Antagonistic Action in later writings. Could words like “rigidity” and “antagonistic” have seemed too ‘doing’ and conveyed the wrong impression to pupils? However, he continued to use the *principle of opposition* in his teaching. (Maybe this concept goes back to his early study of Delsarte?) See, for instance, the transcript of his lecture to students at the Bedford Physical Training College (1934) where he speaks of “antagonistic [muscular] pulls”. (ARTICLES, pp.163–182)

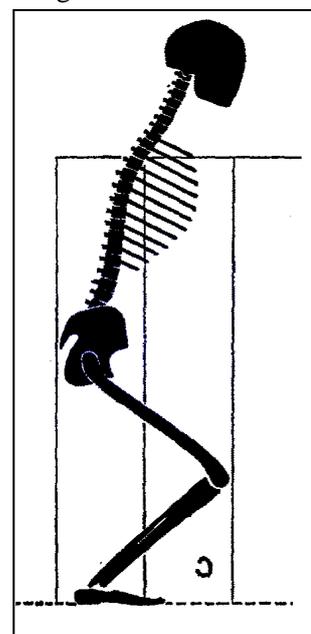


The illustration from a book on the treatment of back trouble (Brown, p.22) shows how most people tend to bend down. It shows how many of us put ourselves at a mechanical *dis*-advantage. The intervertebral discs are distorted and compressed, and the “large [latissimus dorsi] lifting muscles of the back” (CCCI, p.120) are under-used. This puts a greater reliance on ligaments and extra strain on the mid and lower back.¹³³

Compare the bodily use involving bent spine and straight legs (Brown 1996) with that of “monkey”, the position usually associated with the term mechanical advantage (Barlow 1973).

In monkey the functional integrity of the spine and torso muscles is

maintained. The back extensors are working over the whole back – the rib cage is unrestricted – the uni-articular muscles (gluteus maximus, vasti, soleus) are stretched by antagonistic muscular action and the bi-articular muscles of the leg (rectus femoris, hamstrings, gastrocnemius) are likewise in *isometric* contraction (i.e. maintaining length).¹³⁴



Chair work

Chair work, along with lying-down (table) work, creates a plan for formal Alexander lessons. To the casual observer it may look as though it is instruction in deportment and how to sit properly. However, the whole-body activity of moving from sit to stand and *vice versa* – of folding the legs and maintaining balance and freedom in breathing, etc. – gives the student an opportunity to develop self-awareness and personal skills that, once learned, can

¹³² See New Method (1906) in ARTICLES, p.43 and Fischer’s note p.318.

¹³³ “The largest back muscles are those in the topmost layer. They are triangular, extending in diagonal sheets across either side of the back, and they attach the spinous processes of the backbone to the shoulder blade and shoulder joints [trapezius, latissimus dorsi; also rhomboids major/ minor]. *These muscles hold the whole body steady when you are using your arms and legs to lift heavy weights.*” (Brown, H., p.20)

¹³⁴ For a detailed description, see Gorman, Vol. III, pp.168-9.

be applied to other sorts of habit. These two quotes from Alexander encapsulate all that needs to be said:

‘It’s not getting in and out of chairs even under the best of conditions that is of any value: that is simply physical culture – it is what you have been doing in preparation [i.e. your thinking] that counts when it comes to making movements.’

“You come to learn to inhibit and to direct your activity. You learn, first, to inhibit the habitual reaction in certain classes of stimuli, and second, to direct yourself consciously in such a way as to affect certain muscular pulls, which processes bring about a new reaction to these stimuli. Boiled down, it all comes to inhibiting a particular reaction to a given stimulus. But no one will see it that way. They will all see it as getting in and out of a chair the right way. It is nothing of the kind. It is that a pupil decides what he will or will not consent to do.’¹³⁵

Lying-down work

One of the most familiar aspects of learning the Alexander Technique is lying-down work. I remember Sting demonstrating this on TV chat show *Wogan* (i.e. Terry Wogan, broadcast BBC1 1982–1992). The anatomist, Raymond Dart, describes the procedure and benefits below.¹³⁶ As well as the purely mechanical benefits of untwisting and restoring postural alignment, the position is, as Dart writes, relaxing and restful. It is also an ideal position to practice ‘working on yourself’, that is practising inhibition and giving directions. Reports vary about Alexander’s use of lying-down work – lying semi-supine or table work, as it is variously called. Some say he never did table work (actually, in the early days pupils would lie on the floor), others (Barlow, 2011 and Erika Whittaker) remember that he did on occasions. Either way he definitely sent his pupils for “inhibitory work” with his assistants, Ethel Webb and Irene Tasker. From my experience, there is no doubt that the benefits to be gained from regular lying-down work continue to reveal themselves no matter how long you have been learning the Technique.

‘The *infantile supine posture* advocated is to lie on a carpeted floor with the occiput resting comfortably on several books forming a hard bolster (ordinarily two or three inches high, although some may prefer it varied to six inches or more in height) and the feet drawn as close to the buttocks as possible without muscular strain (knees in the air and slightly abducted, elbows on the floor, and the relaxed hands resting on the junction of thorax and abdomen). Fifteen to twenty minutes’ midday rest in this symmetrical posture induces a gradual and progressive relaxation or inhibition of the *sacrospinalis* mass in particular, and of the extensor musculature in general, and a temporary release from their inevitable state of torsional strain in the erect posture. Being pentapodal (or heptapodal if we include the feet), [pentapodal means five points, i.e. five feet; heptapodal means seven] the supine posture trains simultaneously five distinct dorsal body areas (overlying the occiput, scapula spines, and the posterior-superior iliac spines respectively) to share with the feet in an equilibrated fashion the business of sustaining

¹³⁵ Maisel, pp.4, 9. Occasional notes made by Ethel Webb (1866-1952) of what she overheard Alexander saying to pupils.

¹³⁶ Only Dart calls Alexander lying-down “infantile supine posture.” It is sometimes referred to as lying in “semi-supine” though exactly when this term was coined is unclear. A few teachers borrow the term “constructive rest position” from Ideokinesis (see Cranz, p.158) that I think is confusing and misleading for students.

the bodyweight. A resistant base where the sensations evoked by these several contacts with the hard surface can be felt and experienced (instead of on the spring mattress where sensory discrimination is obliterated) gradually elicits with daily repetition, in addition to the extensor relaxation, a progressive postural untwisting of the spinal column between each pair of the temporally fixed weight-bearing sights of the leftwardly (or rightwardly) rotated body, as well as an untwisting of the neck between the occiput and the scapular spines.

This procedure in postural education, simple as it is, if persisted in over a couple of years, is not merely relaxation, but produces widespread effects in de-rotating the spine and improving the equilibration of the body by bringing the head into this more forward and appropriate position relative to the neck, and by cultivating the individual's habit of keeping it there.' (Dart, p.134)

Breathing

'...secure with minimum effort, perfect use of the component parts of the mechanisms concerned in respiration and vocalization. Then, sooner or later, adequate mobility, power, speed, absolute control, and artistic manipulation must follow.' (Alexander 1907 in *MSI*, p.204.)

In 1902 Alexander made his name in Sydney as “the breathing man”; the man who could show you how to breathe well. Optimal breathing function is central to the Technique but Alexander regarded the act of breathing as an *outcome*, which could not be improved by working on it directly.¹³⁷ He taught what he called the ‘Full-Chest Breathing Method’ (1900).¹³⁸ The activity of breathing depends on predisposing conditions of general functioning and ultimately on the standard of a person’s manner of use. Think of a Formula One racing car and its driver. Driven without skill, the car will never perform at its best. The same is true of our mechanism for breathing when it powers the arts of singing or public speaking. Rather than trying to improve breathing directly, one must cultivate the necessary psycho-physical preconditions for the appropriate activity of breathing to ‘do’ itself.¹³⁹

Alexander’s early writing prior to 1908 is all about breathing and voice. Respiratory diseases were a major public health concern. Deep breathing exercises were popular and often performed badly by puffing out the chest. Without careful guidance, they encouraged sniffing and gasping in large quantities of air and, taken to extremes they caused disfigurement of the ribcage (Alexander includes photographs of school boys with deformed barrel chests. CC 1912, p.xi, xii.). Alexander thought the ‘take a deep breath’ concept was flawed. When someone had a problem with breathing such as noisy sniffing or gasping, then it was because they were doing something that interfered with the natural way breathing worked. This had to be identified and prevented.¹⁴⁰ People needed to change their

¹³⁷ Alexander 1923: STAT Books, p.138; Mouritz edition, p.129.

¹³⁸ Murray, A. D. (2011). *F. M. Alexander In his own words and those who knew him*, pp. 10–14.

¹³⁹ ‘The thing we call breathing happens.’ ‘I see at last that if I don’t breathe, I breathe.’ (aphorisms)

¹⁴⁰ “Why we breathe incorrectly” (1909) in *ARTICLES*, p.92. (Quoted in Alexander 1918, Mouritz edition, p.91)

“*Sniffing*” or “*gasping*.” If the “deep breath” be taken through the nasal passages there will be a loud “sniffing” sound and collapse of the *alæ nasi* [the cartilaginous outer walls of the nostrils]... The pupil has not been told that if the thorax is expanded correctly the lungs will be filled with air by atmospheric pressure, exactly as a pair of bellows is filled when the handles are pulled apart... [T]he proper expansion of the chest, as a primary movement, causes the *alæ nasi* to be dilated and the lungs to be instantly filled with air by atmospheric pressure, without any harmful lowering of the pressure. (*MSI* pp.100-1) *The Theory and Practice of New Method of Respiratory Re-Education* (Pamphlet first published 1907 and included in

attitude to what breathing entailed and to understand that atmospheric pressure causes the lungs to fill with little extra muscular effort. Carrington said that Alexander was always quoting, “All [extra] muscular effort tends to make for thoracic rigidity” (Carrington, Carey 1992, p.26).¹⁴¹ Why put greater demand on a system that is already working imperfectly? It is like taking a badly running car for a 200 mile spin in the hope that by simple making it work harder it will perform better.

I don't have room for a full account of what Alexander advocated as full chest breathing. You can read his description in *CCCI*, Chapter V. Respiratory Mechanisms (126f.) Also see the passage beginning, “Most people who need lessons in speaking . . .” (pp.106–109)

Regarding singers' and wind players' concern for a quick in-breath between musical phrases, Alexander writes:

‘In all these considerations [about breathing and the voice] we must bear in mind that (...) though speed will follow as the result of the necessary experience in the correct use of the parts concerned, a correct use can hardly follow a speed which has been achieved at the cost of an incorrect use of those parts.’ (*CCCI*, p.109)

One or two points I think are of particular interest:

- Manage the out-breath, so that at the end of expiration the mechanism is primed for the in-breath to happen swiftly and silently. Avoid “pulling down” during expiration (i.e. maintain your ‘up’) so that the next in-breath can happen ‘effortlessly’.¹⁴²
- Avoid the mouth breathing habit. This is true of singing and wind playing, and also when engaging in sports.

‘Humans come into this world as nose breathers. We are “obligate nose breathers,” to be scientific, which means that we do not possess the voluntary ability to breathe through our mouths. Mouth breathing is a learned response triggered by emergency stress.’ (Douillard, p.151)¹⁴³

Advantages of nose breathing:

- Air is conditioned (warmed, filtered and moistened) for optimum oxygen exchange in the lungs
- A natural balance between diaphragmatic and chest breathing (rib action) is easier to achieve
- Abdominal muscles¹⁴⁴ engage naturally in the exhale and ribs are freer
- Air is more likely to reach the lower lobes of the lungs where blood supply is richest and where the parasympathetic response (calming and rejuvenating) is triggered¹⁴⁵

Man's Supreme Inheritance, 1918.)

¹⁴¹ For instance, *UCL* p.42, “all physical effort tends to increase thoracic rigidity and to cause breathlessness.”

¹⁴² “... a valuable mechanical advantage is secured in the respiratory movements... so essential to the proper performance of the next inspiratory act.” (*MSI*, p.207).

¹⁴³ Douillard, J (1994) *Body, Mind and Sport*. New York: Harmony Books.

“[B]etween four and six months of age... [a]ll human beings go through the transitional stage of obligate nose breathing to volitional mouth breathing as part of the functional development of the vocal tract.” Crelin, pp.90-91.

¹⁴⁴ The abdominal muscles are one of the primary muscles of exhalation. But this is not to be confused with the outmoded technique of Abdominal (Stomach) Breathing – “Abominable Breathing” as it has been called.

- A slower heart rate and less strain placed on the heart
- Perceived effort/exertion is lower; greater sense of enjoyment
- Less stress means less stress hormones – adrenaline and cortisol – which, when frequently flooding the system, cause premature ageing and disease
- Naturally produced nitric oxide¹⁴⁶ can work its wonders on regulating blood pressure, boosting the immune system, killing cancer cells and micro-organisms, increasing blood supply to cells, aiding muscular control, balance, and coordination, and protecting against cardiovascular disease, etc. The nasal passages produce a significantly higher amount of nitric oxide than mouth breathing.¹⁴⁷ Increased blood flow to and from the heart that further increases cardiovascular efficiency (Douillard, p.161)
- Avoid sniffing and narrowing the nostrils
- Breath support just happens:

‘*Support*’ - a word [used by actors and singers] that describes the action that takes place when all the muscles are in balance and working together in harmony to support the out-breath. “Support results from the necessary muscle action working together rather than from a direct action of any one set of muscles.’ (Ron Murdock in Sontag, pp.149–155)

‘Support for the voice is strength with direction and it comes about when the breathing muscles are working in a state of co-ordination with a good head/neck/back relationship. To put it simply, it is the refusal to collapse, and the physical means whereby you make your breath last as long as you want, at the pressure you need to make whatever sound you want, at whatever volume, pitch and resonance is called for.’ Michael McCallion (p.41)

The whispered ‘ah’

The usefulness of the vowel sound, *ah* had “been acknowledged by all physiologists... as the starting-point whence all the positions of other vowels may be said to be differentiated,” so wrote the medical doctor William A. Aiken in his book *The Voice* (Aiken, pp.44-5). Aiken was a leading medical breathing specialist in London. He was associated with the newly opened Central School of Speech and Drama) and was a pupil of William Shakespeare (1849–1931) – the English tenor (Staring, Bouchard, p.22).¹⁴⁸ Alexander had the opportunity to read Shakespeare’s *The Art of Singing*, a three-part series published 1898/9. Shakespeare had been a pupil of Francesco Lamperti and he taught at the

¹⁴⁵ “In practical terms, this means that the fast heart rates, sweaty palms and pre-race jitters associated with sympathetic dominance are controllable with the parasympathetic influence of deep nasal diaphragmatic breathing.” Douillard, 162

¹⁴⁶ Nitric oxide, a colourless, odourless gas – named Molecule of the Year 1992 by the journal, *Science* – had been known as an air pollutant that contributed to smog and acid rain. Research by Robert Furchgott et.al. proved (Nobel Prize 1998) that it acted as an important signal in the cardiovascular system, mediating blood pressure and blood flow. This discovery (among other things) is the inspiration behind Pfizer’s Viagra. (Martin, D. *New York Times*: Obituary, May 22, 2009. “Robert Furchgott, Nobelist for Work on a Gas, Dies at 92”)

¹⁴⁷ Douillard, p.164 quoting *Japanese Journal of Physiology*.

¹⁴⁸ Staring, J. and Bouchard, E., ‘The Early History of F. M. Alexander’: Jeroen Staring Talk at the American Center for the Alexander Technique, 02-13-2002. Available on ATeducationresearch.com 2001-2002. (Accessed 2006.)

Royal Academy of Music from 1878. Aiken's book was first published in 1900 and republished many times through to 1951.

“In the vowel *ah* the whole resonator is in a comfortable open position (...) It is principally a position of rest, except as regards the soft palate, which directs the breath through the mouth by closing, or nearly so, the way into the nose. The jaw hangs loosely without any straining, and the tongue lies flat in its forward position without any sense of contraction or pulling, and the lips simply follow the jaw without any action of their own. The erect position of the head, the chest expansion, and the associated action of the sterno-thyroid muscles are grouped together in the common sensation of wide expansion of the lower part of the neck, which frees the breath from all obstruction there.”¹⁴⁹

Alexander adopted this vocal procedure. In an early booklet, he wrote:

“In cases needing re-education the mind attitude will be wrong so far as the production of ordinary vocal tone employed in song and speech is concerned. Therefore, if these tones are employed in vocal practice at the outset of re-education, the difficulties to be contended with are increased a hundredfold. We must resort to the whispered tone, which is rarely used in speaking, and is, therefore, little associated with cultivated bad habits. It affords, also, the most favourable opportunity for freeing an unduly depressed larynx and correcting the imperfect action of the vocal reeds, soft palate, cheeks, and tongue, and the student is more easily enabled to open the mouth correctly.

The breath control necessary in the whispered tone is much greater than during the use of the ordinary speaking or singing one; consequently the student who is taught from the very beginning of his respiratory re-education to convert the air exhaled into whispered tones (consciously employing the true motive power) and the proper vowel or vowels will have learnt what should be one of the simplest forms of vocal effort, but is, in effect, one of the most difficult even to many leading actors, singers and speakers, and arises from inadequate respiratory control. ...”¹⁵⁰

Lightly place the tip of the tongue to the back of the lower teeth so that it rests in “neutral position” forming the floor of the mouth (oral cavity) and think of something funny that brings forth a genuine smile. (This is sometime called a ‘Duchenne smile’ after the French neurologist – Duchenne de Boulogne, 1806–1875 – who first described it to science.) Smiling is one of the most important and useful instructions and this holds true for any performer, not just for public speaking or singing.¹⁵¹ I discovered its effectiveness in controlling bow tremor (known as the ‘pearlies’ – Pearly Gates = Shakes) when performing a simple, but very slow and quiet solo passage.

¹⁴⁹ Aiken, pp.45-6.

¹⁵⁰ Alexander, FM, *Introduction to a New Method of Respiratory Vocal Re-Education*. 24 page booklet published in 1906 by Bailliere, Tindall & Cox, Covent Garden. In *ARTICLES*, pp.46-7. This passage is quoted in Bloch (2004) p.74. Compare *CCCI*, p.141-2. Producing a whispered ‘ah’ sound requires that the abdominal muscles naturally do what they are supposed to do for optimal breathing. Compare Douillard, p.165, making the ‘Darth Vader’ sound. If you sustain a whispered ‘ah’ and bring your lips together you will be making a sound rather like the Star Wars character – only on the exhale though.

¹⁵¹ “One day he [Alexander] came prancing in . . . He said, “I’ve got it, I’ve got it with the ‘whispered ahs.’ Don’t start with a smile, but think of something funny.” (Wielopolska, p.2)

Alexander was known for his twinkly eyes. In the past, the singing teacher, Giambattista Mancini (1714–1800), advocated the ‘smiling position’ for the mouth and pharynx (Sell, p.15).

Unfortunately, this was misinterpreted by less-able teachers as a fixed grin and was ridiculed as a method. Opera characters would be singing of despair and death while holding a manic cheesy grin.

Understood correctly (i.e. generated by a genuine emotion) the smile energises and raises the soft palate, releases held tension in the jaw, face and scalp and facilitates an open throat. The thought of a yawn or a happy surprise can help to get the right idea but smiling is best.

As you begin to say ‘ah’, the muscles holding the mouth shut release to allow the jaw to fall while *thinking* a slight forward (gliding) movement at the temporo-mandibular (TM) joints to avoid pulling the jaw back – it does not hinge like the visor on a medieval knight’s helmet! The most effective way I have found to teach this is to ask the student to think of the bottom back teeth (molars) falling away from the upper molars.

At the end of the out-breath check that you remain ‘present’ with your attention ‘out there’ with your surrounding – energy is not drawn in or allowed to fall away, or the eyes monetarily to ‘gaze inwards’. The breath returns (the back ‘lengthens and widens’) swiftly and silently through the nostrils, as though smelling a rose – “Take enough breath to smell a rose” is a common instruction to singers attributed to Elizabeth Schumann.

Students usually need help progressing from whispering an ‘ah’ sound to vocalizing as their old habits come into play as soon as they think of speaking or singing. Experimenting with humming¹⁵² or placing a ‘ma’ at the beginning of the whispered vowel can be useful. The trick is to maintain the conditions created by working with the whispered ‘ah’; to continue to inhibit and maintain the directions so as not to revert to old speaking (or singing) habits at the ‘critical moment’. In this way, the Alexander Technique is not merely a supplement to vocal training but it provides insights into the fundamental conditions for vocal production and how to prevent unhelpful habits that disturb natural (reflex-organised) co-ordination (Dimon).

3. Some other ‘somatic’ (mind-body) disciplines

Sitting on chairs – a role for ergonomics

‘What we need to do is not to educate our school furniture, but to educate our children. Give a child the ability to adapt himself within reasonable limits to his environment, and he will not suffer discomfort, nor develop bad physical habits, whatever chair or form you give him to sit upon.’ (MSI, p.94)

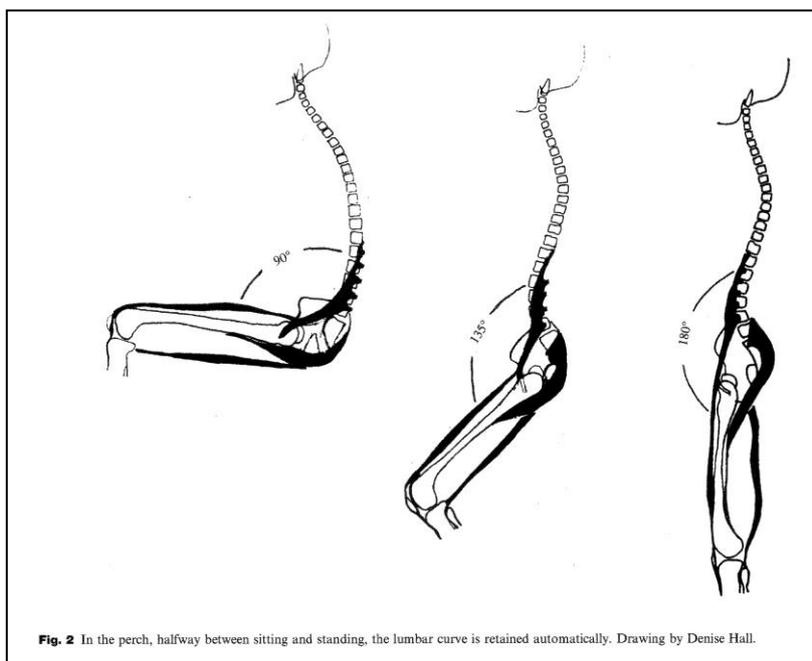
Musicians spend lots of time sitting. Some, cellists and pianists, are professional sitters. The art of sitting is part of their playing technique. Habits, remember, not only involve how we organise ourselves but include the way we relate to our surroundings and take account of the tools we are using. Make sure that you are sitting where you can comfortably see the music (check height of music stand), conductor or other members of the ensemble, and that you are not being restricted to an

¹⁵² Giovanni Battista Lamperti (1838-1910) described humming as “the rain-bow bridge connecting voice and breath.” (Sell p.119)

Kofler instructs humming should be ‘done so softly that no vibration can be felt in any part of the nose, especially at the bridge of the nose. Let the throat be completely released, especially (...) in front of the larynx and upward. All humming exercises should be done alternately on *m*, *n* and *l*’ (Kofler, pp.154-5).

unbalanced or awkward twisted position.

If you are sitting on a chair, then you are using a tool – the chair – to support you. Sitting leads to 40–90% more stress on the back (intervertebral disc pressure) than standing posture.¹⁵³ The chair will be doing what chairs do best in accordance with the thought put into its design. With luck, your chair will have a good design to make your part in ‘organising’ as easy as it can be. No matter how well a chair has been designed it cannot accommodate mindless disorganisation on your part. It’s no good blaming the chair; it’s your responsibility! Many conventional approaches attempt to bring about particular changes according to biomechanical or ergonomic principles but there is little dependable evidence of their effectiveness. Musicians must become their own expert and work out how to adapt and use the chair by working out what to do from first principles.



That said, of course, Alexander realised that our successful adaptation can only be expected within “reasonable limits.” Institutions mostly make purchasing decisions based on colour, style and price. A cheap plastic chair with a ‘bucket’-shaped seat and unstable back support will test anyone’s powers of adaptability and endurance. It’s best to insist on something more suitable. Failing that, you might experiment by stacking two chairs together to increase the seat height, or by placing

books or wooden blocks under the back legs to bring the seat closer to horizontal.

Most importantly, you *must* be sitting on your ‘sitting bones’ (ischial tuberosities) which are part of the pelvis and not on your thighs or the base of your spine (coccyx).

Above all, adjusting the seat height is the most important consideration. When your chair seat is at the correct height for you, your heels will be on the floor without causing pressure at the back of your thighs. If your chair is too high then you should place your feet on a footrest or thick book. Pressure on the spine can be relieved with a more open angle between the trunk and the thigh, i.e. the hip joint angle in front. A small study (Smith, 2006) identified the optimal angle between the trunk and top of thigh for sitting as 135 degrees.¹⁵⁴

This angle translates to *your hips being higher than your knees* when the torso is in a more upright position for playing an instrument. With a heavy instrument such as the tuba the player may prefer to

¹⁵³ Harrison, D. D. *et al.* Sitting biomechanics part I: review of the literature. *J. Manipulative Physiol Ther*, 1999 2(9), pp. 594-609.

¹⁵⁴ Study (n=22) by Francis Smith, et al, University of Aberdeen (2006) Presented at the Radiological Society of North America (RSNA) conference in Chicago, Nov. 2006. Reported by Anne Asher, Back and Neck Pain, ‘About.com’ Accessed 30 December 2011. Cf. American National Aeronautics and Space Administration (NASA)’s “weightless neutral body position” where hip angle is 128 degrees \pm 7.2 degrees. Cranz, G. The Alexander Technique in the world of design: posture and the common chair. *J. Bodywork and Movement Therapies* (2000) 4 (3) 155–165 (p.162).

sit near the back of the chair seat in order to use the back support. From various studies, the preferred seat back angle for comfort is 13-15 degrees from the vertical. At this angle the pressure on the discs is minimal but it may not be optimal for playing. A happy compromise must be sought between the requirements for adequate support (comfort) and readiness to play.

Ideokinesis

The term *ideokinesis* is translated as “the image or thought as facilitator of the movement”. The kinaesthetic training method uses imagery to change inefficient habitual ways of moving. All movement is based on an image or picture (see, ‘ideo-motor’ footnote). If you want to get up out of a chair and leave the room you have to think it – you have to have the intention or form a subconscious image of the movement before you do it. It’s not just going to happen. Forming fresh images helps to modify the (habitual) message that is going to the muscles and so change the movement pattern. Thought, desire, intention, insight, and attitude are forms of imagery which can be used as a part of a specific image (Bernard et al, p.15).

André Bernard (*Ideokinesis: A Creative Approach to Human Movement and Body Alignment*) gives four rules for the use of imagery in teaching (p.24):

1. the image must be moving, such as a stream;
2. the student must be clear about where the image is in the body;
3. the student must be clear about the direction of the image’s movement; and
4. the student must not make any voluntary movement.

Some Alexander teachers borrow the term “constructive rest position” for lying-down work implying that they teach a similar method. However, though the reasons Bernard gives for “constructive rest” are relevant to Alexander work, the two approaches should not be confused. (See lying-down work.)

Bernard was an actor-dancer who early in his career discovered the work of Barbara Clark in 1950s New York. Clark was a second-generation teacher of the work begun by Mabel Todd (1874–1956), author of *The Thinking Body* (1937). Todd’s book is described as “one of the pioneering works of body-mind literature” and I remember being inspired by its originality during my Alexander training. Todd’s students, Lulu Sweigard and Barbara Clark continued her work. Sweigard (*Human Movement Potential*, 1974) was instrumental in making ideokinesis more widely known in the States and Barbara Clark, a clinical nurse, used ideokinesis in a therapeutic setting.

In his Preface to *Ideokinesis*, Wolfgang Steinmüller writes:

‘Mabel Elsworth Todd lived and worked at the same time as F. M. Alexander and was a generation older than Moshe Feldenkrais. Not surprisingly, there are remarkable parallels between these three founders of body-mind methods. First, for all three, investigating the way the human body works was motivated foremost by the need to solve a physical problem of their own. They all began by observing their own actions and reactions with great attentiveness and curiosity, but they did not stop investigating once their symptoms improved. Instead, the learning process itself inspired them to continue. The crucial aspect about this kind of learning is that it changes the learner. Habits of which we are aware are no longer unconscious, and so we can change them.

When theory is fused with the learning process, the knowledge becomes at once educational and therapeutic.’ (p. viii)

The book *Ideokinesis* is a compilation of various sources documenting Bernard’s teaching. The main section describes lessons given in a two-part format: “lecture and laboratory” – information and then practical exploration in pairs. Like many teachers, Bernard was reluctant to commit his experiences to the constraints of the printed word. It is the personal journey – the process – that they see as the most important aspect of learning. Considering the complexity of Alexander’s writing and the difficulty I have experienced in trying to keep my writing straightforward and jargon free, they’re probably right. The ideokinesis method is worthy of careful consideration and the ideas can be used to good effect in group Alexander classes.

Feldenkrais Method of Somatic Education

Moshé Feldenkrais (1904–1984) distinguished himself as a nuclear scientist and judo expert before a severe knee injury led him to develop his method of body-awareness for self care. He shared Alexander’s view that heightened sensory-motor self-knowledge holds the key to self-improvement: “self-knowledge through awareness is the goal of re-education.”¹⁵⁵

Feldenkrais was eager to glean what useful information he could about the Technique. He had some lessons with Walter Carrington in the early 1950s although when Alexander heard about it he accused Feldenkrais of plagiarism and showed him the door. The incident is recounted by Carrington (2001).¹⁵⁶

¹⁵⁵ Shusterman (2000), p.168.

¹⁵⁶ [SC] “You told me once that Alexander was, by nature, a suspicious man. Can you say a bit more about this aspect of his personality?”

[WC] Yes, until he got to know someone he was watchful and very reserved. He was always on the look-out for people who would try to do him down (...)

[SC] Does that watchfulness explain the episode when he demanded to see Moshe Feldenkrais – the founder of the Feldenkrais Method – upon finding out that he was having a course of lessons with you at Ashley Place?

[WC] Oh yes, and with good reason. After all, Feldenkrais’ book, *Body and Mature Behaviour* [1949], has a lot of material in it that looks as though it is practically paraphrased from Alexander’s books. When FM realised that Feldenkrais was having lessons, he naturally wanted to see him to find out what reasons he had for coming when he’d written the book and developed his own method. It was perfectly clear by implication that Alexander was accusing him of seeking to plagiarise further by taking more lessons (...)

[They met] just for a few minutes. Alexander had Feldenkrais’ book with him and told him that he’d read it and wanted to know why he had come for lessons. He said that, if he didn’t receive a satisfactory answer he could have no more lessons. Well, Feldenkrais was left absolutely speechless – he didn’t have a word to say – and that was it. He was ushered out.” (Carrington, Carey, 2001, pp.85-86)

See also, ‘The Potent Self: A Guide to Spontaneity’ – A Review by Walter Carrington. *The Alexander Review* vol. 1, no. 1 (1986). Minneapolis: Centerline Press: 26–30. “It was in 1949 that Dr. Feldenkrais first came to Alexander’s teaching rooms, at 16 Ashley Place, to arrange for lessons in the Alexander Technique (27). ... In 1959 there was an international conference in Copenhagen called “The Release of Tension and the Re-education of Muscular Movement”. This was under the auspices of the Danish Ministry of Education and at the instance of Gerda Alexander who had developed a teaching method of her own called “Eutony”. She was no relation of F.M. Alexander, the name was just a coincidence; however, she worked extensively with Charles Neal, and he with her.

They were to lead the conference together. There was to be a week of lectures followed by a week of practical demonstrations and workshops. Charles Neal died before the conference took place, but Feldenkrais, and many others, gave lectures and workshops. Frank Pierce Jones gave a lecture on the F. Matthias Alexander Technique (28–9). [“Charles Neal, who had originally been trained by Alexander [had] broken away from F.M. and was then teaching his own idiosyncratic version of the Alexander Technique. Neal and Feldenkrais worked together for quite a long while . . . “ (28)]

Carrington was somewhat dismissive of the Feldenkrais Method. “The dreaded Feldenkrais. It’s just another form of ‘doing’”, he would say.

‘[Feldenkrais] got to thinking (...) “Now, if you really want to get the head going forward and up, rather than spend all this time – like a “couple of years” as Dart says – lying on your back doing nothing (...) you make a little exercise and (...) lift your head from off the books and hold it there, hold it there as long as you can, and then put it back and take a rest and then hold it again (...) you’ll stretch the muscles at the back much quicker (...)

So, brilliant! But, of course, what is so easily overlooked is that you’re going to have to use other muscles, that is to say you’re going to have to use the flexor muscles, you’re going to have to use the sterno-mastoid muscles and so on. And you’re going to have to use them very powerfully to overcome the weight of the head (...)

So, if you practice doing this, you really do practice shortening and contracting these muscles in front and really practice pulling yourself down in front, indeed as [Feldenkrais] had done, then the predictable outcome of it was that he lost his voice .

You’ve really got in that situation a model of how the [Alexander] Technique works and how it can be misunderstood and misconceived and put wrong. That is to say that the Technique works by inhibition. The Technique works by stopping doing the wrong thing and the wrong thing in this particular case is shortening and stiffening the extensor muscles at the back of the neck, and so on, with the result that the head is pulled back.¹⁵⁷

I have no personal experience of the Feldenkrais Method but I have spoken to several people who have. There are two aspects to the programme: ‘Awareness Through Movement’ and ‘Functional Integration’. Of course, the way it is taught depends on the interests and skills of the teacher but it appears that students are given instructions to perform movements or combinations of movements in order to explore new (non-habitual) patterning. The student has to “try” his or her best to follow the instructions accurately and to experience (feel) and reflect on the resulting bodily sensations. In this way, the individual’s repertoire of movements can be extended and improved. Unless this is done within the context of “inhibiting” the immediate habitual response, then the same criticism could be laid against Feldenkrais as with most other forms of exercise. I have heard comments like, “I found it too subtle and couldn’t understand what I was supposed to do.” That said, the Feldenkrais Method has much to offer and is made more complete and beneficial by the addition of Alexander’s principles of “Inhibition” and “Direction”.

Further reading: *Awareness through Movement* (1972, 1977).

¹⁵⁷ Walter Carrington talking to student teachers, March–May 1983, about Raymond Dart’s paper (1947) ‘The Attainment of Poise’. Transcribed from tape recordings 1990, 2011. T. Marwick, M. Williamson, Unpublished.

Body Mapping

‘Music education belongs on a somatic foundation because musicians move for a living, like dancers and athletes, except that musicians’ movement is even more refined, precise and rapid.’ Conable (1998), p.iv.

“Body Mapping” is a method for developing an accurate sense of one’s own body and for correcting misconceptions about how we move. It was developed by William Conable as he taught ’cello and the Alexander Technique at the Music School, The State University of Ohio in Columbus.

Knaub (1999) writes in the background to her study¹⁵⁸:

‘It is a well known fact that many musicians suffer from various problems while performing. Some of these problems’ causes may be attributed to such things as stress, environmental factors, or instrumental and furniture design. However, a most important aspect remains which is that the problem is not what is done to musicians, but what musicians do to themselves.’ (p.1)

Knaub thinks that it “is clear from [Conable’s] teaching that Body Mapping does not ever take the place of Alexander work but is a complement to it, a helpful partner in the communication of Alexander’s discoveries.” (p.2)

At the International Congress of Alexander teachers in Engelberg in 1991, Conable explained that we form ideas (mind maps) of our body and how it works. The underlying principle is that human movement is determined by an individual’s internalised body map.

‘Since [the map] is formed out of many experiences over a long period of time and on the basis of an incomplete awareness of the totality of the body (or indeed, of the self)¹⁵⁹ it is quite usual for different aspects of the body map to be, if not grossly contradictory, at least subtly inconsistent.’ (Conable and Conable 1995, p.128)

The theory that our ideas shape our body’s movements – and vice-versa – goes back to the nineteenth century and the emergence of psychology as a discrete field of scientific enquiry.¹⁶⁰ Conable says that the concept of Body Mapping is implied by Alexander’s principle of Unreliable Sensory Appreciation. Correcting misconceptions about the structure and functioning of our own body is an important part of learning reliable control over its movements.

General rule:

‘In any case the person will *always* try to move according to how he thinks he’s structured.¹⁶¹ When there is a conflict between the map and the reality, the map will

¹⁵⁸ Knaub, Maribeth J. H. (1999). Knaub’s study is mainly concerned with “the differences and similarities between how male and female music students perceive the application of the Alexander Technique in their lives” (p.8) – “...females were more reflective and descriptive of their thinking process than males as they pondered the information received in class (p.103).

¹⁵⁹ Compare Feldenkrais, p.21. ‘A complete self-image is a rare and ideal state.’

¹⁶⁰ William Benjamin Carpenter (1813-1885) “ideo-motor” c.1842. “In ideo-motor action (...) an idea present in the mind automatically and involuntarily resulted in a corresponding movement.” (Smith, p.43) “Ideo-motor” a term used by William James (1842-1910) meaning whenever a movement follows unhesitatingly and immediately the notion of it is in the mind; concept to execution with no awareness of having to “get ready”. An act which requires will, however, has the additional element in the shape of a fiat or mandate where expressed consent is involved. *The Principles of Psychology* (1890) cited in *Cognitive Neuroscience, A Reader*, Gazzaniga, M (ed.), Blackwell 2000.

¹⁶¹ Compare Feldenkrais, p.23. ‘Individuals act in accordance with their subjective image.’

always win in movement (...) Always. I have never seen an exception to it. It's inevitable because *the map is what shapes our experience and we can change it only by a conscious effort.*' (Conable and Conable 1995, p.32. Italics added for emphasis.)

Music students need to know the location, size, shape/structure, and function of key parts of their body relevant to understanding how to hold and play their instrument. And, to be truly meaningful, to know from practical experience what it feels like. Conable writes: "Most music teaching is still done without attention to the movement aspects of making music." (1995, p.132) The authors list several pages of common Body Mapping errors (pp.83-93).

From my own teaching, the most frequently encountered misconceptions about the body concern:

- That the substantial weight-bearing column of support *and lengthening* provided by the spine (backbone) runs fairly centrally through the body.
- The accurate location of where the head (skull) moves freely on top of the spine – the atlanto-occipital joint.
- That the hip joints (the top joint of the legs) are not located at the same place as the hip bones (your waist).
- That when you bend your knees, as in sitting, the knees naturally move away from each other and are not drawn tightly together (contrary to what ladies may have been taught at their convent schools!).
- That when standing, your weight is transferred through each leg and the foot arches, *back* onto your heels and forwards onto the balls of your feet (i.e. bases of your big toe and little toe). Each foot forms a tripod – heel bone, base of big toe and base of little toe.
- That, when seated, your body weight is supported by your sitting bones (ischial tuberosities) – i.e. part of the pelvis – on the chair and not by your thighs or your lower spine.
- That arm movement has potentially to include the collarbone (clavicle) and shoulder blade (scapula) as, for instance, when a cellist plays on the 'A' string at the tip of the bow. The collar bone should always be regarded as an arm bone as its joint with the breast bone (the sternoclavicular joint) is the only place where the arm and shoulder girdle articulate directly with the main (axial) skeleton.
- That the forearm has *two* bones – the radius and the ulna. These are parallel when the arm is by one's side in the "anatomical position" with the palm facing forward (supination). In turning the hand over (pronation) to hold a bow or play the piano, it is the radius on the thumb side of the wrist that crosses over the ulna (on the little finger side of the wrist).
- That the base of the thumb articulates with the wrist (the carpo-metacarpal joint), and the big knuckles of the fingers (the metacarpo-phalangeal joints) do not coincide with where the fingers become separate.
- That your ribs go all the way round your torso and join on to your spine at the back. Their action on the in-breath is mainly one of lifting and swinging out to the sides, often described as "like bucket handles", to widen the back.
- That the tops of the lungs go up behind the collar bones, and

- That the respiratory diaphragm is an involuntary dome-shaped muscle connected at its base to the lower ribs (front and sides) and lumbar vertebrae L1-L3 (back), and with its apex roughly at the level of the 6th rib (the male nipple) when the out-breath is completed.
- That, in opening the mouth, the jaw falls away from the skull; or (to put it another way) the lower back teeth (molars) fall away from the upper molars. Very often you can feel when a student is opening the mouth to speak by pulling the head back to try to lift the top teeth away from the lower teeth – an impossibility! The jaw is a fifth appendage that moves in relation to the skull. So the skull is mobile and balanced in relation to the spine (articulating at the atlanto-occipital joint), while the jaw is mobile in relation to the skull. Worryingly, some post-graduate singers have to have this explained to them.

Knaub's study confirms that learning about the principles of human movement and how the body accomplishes these directives are of paramount importance to musicians. She recommends that "College administrators who seek ways to make their theatre, dance and music departments more state-of-the-art and competitive would profit from understanding the students' perspective about a mind-body technique such as the Alexander Technique." (p.5)

Many thanks to my post-graduate (MA) student, **Lynne Krayer-Luke**, for her help in writing the section on Body Mapping. Lynne gave a presentation at the RNCM in 2008 that was largely based on the content of Barbara Conable's Body Mapping classes. Lynne is a freelance flutist and licensed Andover Educator (Body Mapping specialist) residing in New York City. Lynne's Body Mapping mentors have included Amy Likar (Andover Educator President), Lea Pearson (author of *Body Mapping for Flutists*), and Barbara Conable (founder of Andover Educators).

- Other methods not considered: **Émile Jaques-Dalcroze** (1865–1950) Method, **Rudolf Laban** (1879–1958) Laban Movement Analysis.

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Where possible page numbers refer to modern editions of Alexander's books.

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|-------------|---|
| MSI (1910) | <i>Man's Supreme Inheritance</i> . London: Methuen & Co. Ltd. |
| CC (1912) | <i>Conscious Control</i> , Methuen & Co. Ltd. |
| MSI (1996) | <i>Man's Supreme Inheritance</i> , Mouritz. (Original work published in 1918) |
| CCCI (2004) | <i>Constructive Conscious Control of the Individual</i> , Mouritz. (Original work published in 1923/1924) |
| UOS (1985) | <i>The Use of the Self</i> , Gollancz. (Original work published in 1932) |
| UCL (2000) | <i>The Universal Constant in Living</i> , Mouritz. (Original work published in 1941/42) |

Bibliography

- Aikin, W. A. (1951). *The Voice*, London: Longmans, Green and Co. 1910.
- Alexander F.M. (1910). *Man's Supreme Inheritance*. London: Methuen & Co. Ltd.
- Alexander F.M. (1912). *Conscious Control*. London: Methuen & Co. Ltd.
- Alexander F.M. (1996). *Man's Supreme Inheritance*. London: Mouritz. (Original work published in 1918.)
- Alexander F.M. (2004). *Constructive Conscious Control of the Individual*. London: Mouritz. (Original work published in 1923/1924.)
- Alexander, F.M (1985). *The Use of the Self*, London: Gollancz. (Original work published in 1932.)
- Alexander F.M. (2000). *The Universal Constant in Living*. London: Mouritz. (Original work published in 1941/42.)
- Alexander F.M. et al. (1946). *Knowing How to Stop*. London: Chaterson Ltd.
- Alexander, F.M., Fischer, J.M.O. ed. (1995). *F. Matthias Alexander: Articles and Lectures*. London: Mouritz.
- Alexander, F.M., Fischer J.M.O. ed. (2000). *Aphorisms*. London: Mouritz.
- Barlow, M., Carey, S. (2011). *Alexander Technique: the Ground Rules*. London: Hite Ltd.
- Barlow, W. (1973). *The Alexander Principle*. Southampton: Camelot Press.
- Barlow, W. ed. (2005). *More Talk of Alexander*. London: Mouritz. Originally published by Victor Gollancz 1978.
- Bernard, A., Steinmüller, W., Stricker, U. (2006). *Ideokinesis*. Berkeley CA: North Atlantic Books.
- Binkley, G. (1993). *The Expanding Self*. London: STAT Books.
- Bloch, M. (2004). *FM: The Life of Frederick Matthias Alexander*. London: Little Brown.
- Brown, H. (1996). *The Which? Guide to Managing Back Trouble*. London: Consumers' Association.
- Brown, M.T. (1886). *The Synthetic Philosophy of Expression*. Boston: Houghton, Mifflin and Co.
- Carrington, W. (1986). "'The Potent Self' by Moshe Feldenkrais – A Review'. In *The Alexander Review*, vol. 1 no. 1, 1986. Minneapolis: Centerline Press, 26–30.
- Carrington, W., Carey, S. (1992). *Explaining the Alexander Technique*. London: Shieldrake Press.
- Carrington, W. (1994). *Thinking Aloud*. San Francisco CA: Mornum Time Press.
- Carrington, W., Carey, S. (2001). *Personally Speaking: Walter Carrington on the F.M. Alexander Technique in discussion with Séan Carey*. London: Mouritz.
- Coffin, L.C. (1963). *Stage Speech*. London: Herbert Jenkins 1954.
- Conable, B.H., Conable W. (1995). *How to Learn the Alexander Technique*. Columbus, OH: Andover Press (Third Edition).
- Conable, B. (1998). *What Every Musician Needs to Know about the Body*. Columbus OH: Andover Press.
- Crelin, E. S. (1987). *The Human Vocal Tract*. New York: Vantage Press.
- Dart A.R. (1996). *Skill and Poise*, London: STAT Books. "The Attainment of Poise" first published in the *South African Medical Journal*, 21: 74–91, 8 February 1947.
- Davies, G.D., Jahn, A.E. (1998). *Care of the Professional Voice*. Oxford: Butterworth Heinemann.
- Dewey J. (1922). *Human Nature and Conduct*. New York: The Modern Library 1957.

- Diamond S., Balvin R.S., Diamond F.R. (1963). *Inhibition and Choice*. New York: Harper Row.
- Dimon, T (1996). *Alexander Technique and the Voice*. Day Street Press (USA).
- Douillard, J. (1994). *Body, Mind and Sport*. New York: Harmony Books.
- Evans, J.A. (2001). *Frederick Matthias Alexander: A Family History*. Chichester: Phillimore & Co. Ltd.
- Feldenkrais, M. (1977). *Awareness Through Movement*. London: Arkana (Penguin Group) 1972.
- Gorman, D, (1982). *The Body Moveable, Book I* (3 volumes). Guelph, Ontario: Ampersand.
- Gray, H. *Anatomy, Descriptive and Surgical [Gray's Anatomy]*. New York: Bounty Books 1977 (revised American edition. (1901) from the fifteenth English edition.
- Gross, J., Fetto, J., Rosen, E. (1996). *Musculoskeletal Examination*. Malden MA: Blackwell Science Inc.
- Harrison, K. (2007). *Your Body: The Fish That Evolved*. London: Metro Publishing.
- Hemsley, T. (1998). *Singing and Imagination*. Oxford: Oxford University Press.
- Herrick, C.J. (1949). *George Ellett Coghill*. University of Chicago Press.
- Jones, F. P. (1997). *Freedom to Change*. London: Mouritz. Originally published as 'Body Awareness in Action,' Schocken Books Inc. 1976. "The Organization of Awareness", Michigan State University, 1967 is included as Appendix B. pp.174–181.
- Juhan, D. (2003). *Job's Body: A Handbook for Bodywork*. Barrytown NY: Station Hill.
- Kahneman, D. (2011). *Thinking, Fast and Slow*. London: Allen Lane (Penguin Books).
- Kapit W., Elson, L.M. (1993). *Anatomy Coloring Book*. New York: Addison-Wesley Educational Publishers, Inc.
- Keith, A. (1919). *Menders of the Maimed*. New York: Robert E. Krieger Publishing Co. 1975.
- Knaub, M.J.H. (1999). *Body Mapping: An instructional strategy for teaching the Alexander Technique to music students*. University of Pittsburgh.
- Kofler, L (1897). *The Art of Breathing as the Basis of Tone Production*. London: J. Curwen & Sons Ltd. Originally published 1887.
- Leiberman, J. L. (1991). *You Are Your Instrument*. New York: Huiksi Music.
- Libet, B. (2004). *Mind Time*. Cambridge MA: Harvard University Press.
- Logue, M. Condradi, P. (2010). *The King's Speech*. London: Quercus.
- Macdonald, P. (1989) *The Alexander Technique as I See It*. Brighton: Rahula Books.
- Maisel, E (1969). *The Alexander Technique: The Essential Writings of F. Matthias Alexander*. London: Thames & Hudson.
- McCallion, M (1988). *The Voice Book*. UK: Faber and Faber.
- McCormack, E.D. (1958). *Frederick Matthias Alexander and John Dewey: A Neglected Influence*, Doctor of Philosophy dissertation, University of Toronto. Distributed by North American Society of Teachers of the Alexander Technique (NASTAT) 1992. New edition by Mouritz 2014.
- McCrone, J. (1990). *The Ape that Spoke*. Macmillan London Ltd.
- Mixon, D. (1977). *The Place of Habit in the Control of Action*. *J. Theory of Social Behaviour* 1977, 10, 3: 169-185.
- Myers, T. M. (2001). *Anatomy Trains*. London: Churchill Livingstone,

- Nivelon, F. (1737). *The Rudiments of Genteel Behaviour: Method of attaining a graceful Attitude, an agreeable Motion, and easy Air, and a genteel Behaviour*. London. (Paul Holberton publishing facsimile reprint 2003 from original copy in Gainsborough's House, Sudbury, Suffolk.)
- Pearson, L. (2002). *Body Mapping for Flutists*. Columbus OH: Andover Educator.
- RAF (1975). *Principles of Anatomy and Physiology for Physical Training Instructors*. London: HMSO 1959.
- Robb, F. (1999). *Not To 'Do'*. London: Camon Press.
- Sell, K. (2005). *The Disciplines of Vocal Pedagogy: Towards an Holistic Approach*. Ashgate Publishing Aldershot (England) and Burlington VT.
- Shawn, T. (1954). *Every Little Movement*. New York: Dance Horizons Inc. 1974.
- Shusterman, R., (2000) *Performing Live*. New York: Cornell University Press.
- Smith, R (1992). *Inhibition*. London: Free Association Books.
- Sontag, J. ed. (1996). *Curiosity Recaptured*. Mornum Time Press. R. Murdock, "Born to Sing" pp.135–162.
- Staring, J. (1996, 1997). *The first 43 years of the life of F. Matthias Alexander (Volume 1, 1996; Volume 2, 1997)*. Limited edition 50 copies. Nijmegen: Jeroen Fr. Staring.
- Stebbins, G. (2011). *Delsarte System of Dramatic Expression*. Charleston SC: BiblioLife. (Originally published by Edgar S. Werner, New York 1886.)
- Taylor, H. (1982). *The Pianist's Talent*. New York: Taplinger Publishing Co., Inc.
- Tinbergen, N. (1974). *Ethnology and Stress Diseases*. *Science*, 5 July 1974; vol. 185: 20–27.
- Todd, M.E. (1937). *The Thinking Body*. New York: Dance Horizons 1968.
- Trew, M., Everett, T. Eds. (2001). *Human Movement*. London: Churchill Livingstone.
- Vineyard, M. (2007). *How You Stand, How You Move, How You Live*. New York: Marlowe & Company.
- Wielopolska, C., Pazzaglini, M., Attwood, C. A. (ed.) (1975? undated). *The Discovery and Use of the Eye Order in Teaching the Alexander Work*. Distributed by the author.
- Wilson, F.R. (1998). *The Hand*. New York: Vintage Books.
- Zahn, R (2005) Francisco Varela and *The Gesture of Awareness: a new direction in cognitive science and its relevance to the Alexander Technique*. In Oppenheimer, A. ed. (2005) *The Congress Papers*. London: STAT Books: pp. 371–428.

Malcolm Williamson qualified as an Alexander teacher in July 1984 and began teaching at the Royal Northern College of Music, Manchester the following year. He studied viola with Bernard Shore, CBE at the Royal College of Music, London and played with numerous orchestras, notably as principal of the Iceland National Symphony Orchestra, the Royal Scottish National Orchestra and in West End shows. He was an assistant teacher at the Constructive Teaching Centre, London for twelve years and has been running the Manchester Alexander Technique Training School – offering a three year, full-time course for teachers (approved by The Society of Teachers of the Alexander Technique) – since 2001.

Over the years, Malcolm has been interested in how musicians use the Alexander Technique to develop personal skills. He has been active on the governing council of the lead professional body, the Society of Teachers of the Alexander Technique as treasurer, chairman and editor of its newsletter.

Main publications, presentations:

- Williamson M (2015). 'Speaking with the tongues of angels and of men' (pp. 136-63) in Rennie C, Shoop T, Thapen K, eds. *Connected Perspectives*. London: Hite Ltd.
- Review of Teaching Fellowship (2009) project presented at the RNCM Annual Staff Conference. 13 September, 2011.
- Williamson, M. (2011). John Dewey and F. M. Alexander: Habit and performance skills (poster). Proceedings of the International Symposium on Performance Science, Toronto. Utrecht: Association Européenne des Conservatoires (AEC): 451-6
- Williamson, M. (2008). The Alexander technique and the means for happiness. Music, Health and Happiness (poster). Conference held at the RNCM 6–8 Nov. 2008. Organisers: RNCM, RCM, BAPAM.
- Williamson M., Roberts N., Moorhouse A. (2007). The role of the Alexander technique in musical training and performing. International Symposium on Performance Science, 21-24 Nov 2007, Oporto. Association Européenne des Conservatoires (AEC): Utrecht. pp.369-374.
- Williamson, M. (2007) The Alexander Technique: Knowing where to begin. Talk to RNCM Annual Staff Conference, Sept 2007.
- Williamson, M. ed. (2006). Conference Papers: 6th International Conference for Alexander Teachers working in Music Institutions. Held at the Royal Northern College of Music, Manchester, United Kingdom, 20–21 February, 2006 (unpublished).
- Williamson M. (2003). Making Connections: An introduction to the Alexander Technique for practitioners of performing arts medicine. *Journal of the British Association of Performing Arts Medicine*, Summer 2003, Issue 4: pp.9–19.
- Williamson, M. (2003) Making Connections: An Introduction to the Alexander Technique, *Alexander Journal* London: STAT Autumn 2003.
- Williamson, M (1998) Means to means: the role of the Alexander Technique in musical training. Talk given at the Royal College of Music, London, 31st March 1998 to 3rd conference for Alexander teachers working in music colleges. (Unpublished)
- Williamson, M. (1997). Making Life Easier. Health and Musician, talk to RNCM Annual Staff Conference, September 1997.
- Ballard, K. J., Colyer R, Williamson, M (1997). Understanding and Preventing Misuse in Musical Performance by Employing the Alexander Technique. Musicians' Health, York Conference. MU, MBF. Unpublished.

APPENDIX

- Interviews 2011 Confidential material.

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