THE USE OF CONSCIOUS INHIBITION IN THE WORK OF A PERFORMING ARTIST

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Introduction
This article reports on a study of the application of one of the central ideas of the Alexander Technique (AT), conscious inhibition (CI), by performing artists (musicians, actors) in their work, both during the preparatory period and in the moment of readiness (postural readiness) prior to performance. The objective of my research, which is part of a doctoral thesis, is to examine the use of conscious inhibition in the preparatory work and performance of performing artists, relying on the experience gathered from my work with actors/actresses and musicians.

Preamble
Alexander Technique is a part of the four-year long actor training in Estonia. Just like any other preparatory course, AT serves the training of professional actors by helping students integrate all their different disciplines. Should a student incorporate his or her impeding habits into their dance, voice or speech training, the habit gets fixed on an even deeper level and hinders the student’s progress. An acquired automatic impeding action cannot be pinpointed without becoming conscious of it first. A teacher’s remark: “don’t do that” doesn’t usually make much sense.

How then can we change these impeding reactions? One of the preconditions for making the difference is a halt, a stop, leaving oneself alone. Our predecessors might have said simply “calm down” or “catch your breath”. Consciously taking time and space to listen, to notice, to feel and to understand in order to make a choice in the current moment – this is how we today describe the process of becoming awake and alert.

The state of the inner world – by this I mean our personal history, our emotional and mental reactions - becomes visible through our physical body. When a person’s inner invisible axis or centre of power gets restored, his potential will be manifested. A proper ‘cleanup’ of one’s inner world needs determination, and often we are forced to perform such a ‘spring cleaning’ once we are in a crisis. With conscious inhibition (CI) we can pinpoint the physical and mental reactions, and forsake all the excesses in order to restore the primary control (PC). Alexander’s discovery of conscious inhibition found support from a much later discovery by physiologists that there exists a tiny window of time in our mental preparation, which permits a possible withholding of or a new control over the action. AT as a discipline, which uses CI as a means to change an ingrained habit, focuses on this very decisive moment: this readiness for a “leap” where every habitual element is about to be activated together with all the tie-ups and excesses that actually
have no place in the present and where change can happen. This fundamental element of the Alexander Technique allows us to become aware of the acquired and automated interference, or in other words “inhibition is a decision to withhold the habitual response to a stimulus” (Cacciatore, Horak, Henry 2006: 39, 40).

In my research into creative activities, I have focused on how a performer experiences and makes sense of the CI, and how s/he describes his/her experience. Amongst others, my research has been looking into the following questions: how strong is the performer’s motivation to renounce his/her triggered habitual reaction when having “caught oneself red handed”? And how important is the CI in professional training?

However, the most important precondition for the process of change is the student’s own discovery of what has been going on, or what he or she has actually been doing. The idea of CI as such reveals itself gradually depending on the person – here the students’ essays on their process continue to provide me with valuable information for this new theoretical and practical research. Working with students has made me realize that the most precise instructions for my teaching are actually provided by the students themselves.

The proposal to undertake scientific research in this area was unexpectedly presented to me while at the University of Tartu’s Institute of Kinesiology in 2006 – 2008. The empirical part of the study was prepared with the Chair of the Institute, Mati Pääsuke, PhD, professor of kinesiology and biomechanics, and his team. According to my information, to date, no similar research work, focusing on the use of CI in the moment of performance, has been carried out.

This paper briefly introduces the concept of conscious inhibition, describes the tests conducted with musicians and actors focusing on the use of CI, and analyses the results.

Key words: Frederick Matthias Alexander, Alexander Technique, conscious inhibition, primary control, kinesiology, acting, musical performance, habits, postural control, use of the self, psycho-physical unity, proprioceptive awareness.

The paper
Sixteen years of experience working with trainee actors and musicians (1999–2015) has shown me that good postural use in movement provides the actor with adequate proprioception in addition to the capacity to adapt and to develop performance efficiency. This is one of the prerequisites for a high-quality performance. If, at the pre-performance moment, the attention is fully focused on the end result, or if the learner exhibits poor use, that is to say the natural alignment is impeded, then what is also acquired during the learning process is excessive, compensatory tension. Any impediment becomes part of an integrated sequence of actions and is stored in the procedural memory. In order to “un-learn” this stored impediment, the programme needs to be dismantled, first – the actor/student needs to become aware of the impediment, and then to be able to give it up, stop it, “erase it”.

One of the best-known methods for “un-learning” deep-rooted habits is the Alexander Technique (AT), which is based on conscious inhibition. The Alexander Technique was named after an Australian actor Frederick Matthias Alexander (20 January 1869 – 10 October 1955). This is a “method for changing stereotyped response patterns by the inhibition of certain postural sets”. (Jones, 1999: 249).

In his acting career, Alexander frequently struggled with vocal problems, which failed to respond to medical treatment and voice exercises. He then started observing himself in mirrors while he was reciting, and noticed that even before the actual speech act he would pull his head back and down, “shortening” the neck and thus putting pressure on his vocal cords. Thus he found a connection between the position of the head and the shortening of the torso. Continuing the work with himself, he realized that an habitual movement is triggered as early as the moment he starts thinking about performing an action, involving all unconscious involuntary movements, thus
impeding the use of the psychophysical unity. Habitual use of the self (“bad posture” as it might be termed by an onlooker) triggers automated movement programs, causing bad “use of the self”, in AT terminology, and the compromising of performance. Postural control is of primary importance in the work of a performing artist – it forms the basis for movement activity and the balanced use of muscles and effort. A habitually poor posture alone can bring about difficulties in performing an action, produce unnecessary effort, lead to technical issues and at worst, result in injuries.

Alexander discovered that only one means exists to effectively change the acquired habitual reaction patterns, and to restore an adequate proprioceptive awareness: the decision not to react immediately to the stimulus - in his case, the wish to start speaking – and inhibiting (stopping) oneself at this moment, not giving consent (surrendering) to the intention to start speaking, to delay the reaction. The concept of “conscious inhibition” means that it requires a mental act not to react in an automatic, thoughtless or habitual manner; a person can consciously develop this process and it is inseparable from the right use of primary control. Alexander found that most of us let our immediate goals dominate the field of our attention; he called this “end-gaining” or the “one brain track” method (Gelb, 2007: 80). Alexander’s findings found support from a much later discovery (1983) by the physiologist Benjamin Libet (1916–2007): that a mental event begins in the brain 350–400 milliseconds (about a third of a second) before we are aware of intending the voluntary movement (readiness potential) and 200 milliseconds (about a fifth of a second) before the action has begun (postural readiness). This time window permits a possible veto or a selective control of the action (Zahn 2005: 6, 15).

The objective of this study - “The use of conscious inhibition in the work of a performing artist” - was to examine what kinds of changes and outcomes are produced in the work of performing artists by applying the principal idea of the Alexander Technique, conscious inhibition. The Alexander Technique is “a means for changing stereotyped response patterns via the inhibition of the postural sets they lead to” or, in other words, “a method for expanding consciousness to take in inhibition as well as excitation (“not doing” as well as “doing”) and thus obtaining a better integration of the reflex and voluntary elements in a response pattern”, as the physiologist Dr Frank Pierce-Jones wrote (Jones, 1999: 249).

The study is a part of my research project for a doctoral studies at the Estonian Academy of Music and Theatre (EMTA) as an actor and theatre pedagogue. The extraordinary proposal to work with researchers of the Institute of Kinesiology, University of Tartu led to the idea to study the use of conscious inhibition (CI) during performance. This two-year cooperation with the researchers from the university was not originally planned, rather the institute approached me to collaborate with them, and this challenge gave an extra dimension to my work. As an actress and an AT teacher, I did not know about such laboratory tests. It was also an entirely new process for the researchers of the Institute of Kinesiology: to use technical tools to test the readiness for performance.

The researchers were Mati Pääsuke, PhD, professor of kinesiology and biomechanics; and his team Jaan Ereline, lecturer, PhD; Helena Gapayeva researcher, PhD, MD; and Tatjana Kums laboratory assistant, PhD.

Tests
Six performers were chosen out of 15 candidates. The prerequisites for taking part in this test were:
1. Prior experience with the AT;
2. Experience of problems during performing (playing an instrument), such as back pain, impeded performance, vocal or breathing problems;
3. A readiness and commitment to relearn.

The performance of six performing artists, three actors and three musicians, was tested three times over a period of two years (2006–2008): first before and then six months after the course
of 20 Alexander technique (AT) lessons had been completed and then after a further 6 months.

These participating artists were:
Musician I: 23 years old, EMTA, composition student, solo guitarist. 
Symptoms: cramps/spasms in the right hand during playing, back-ache, pain in the left foot.

Musician II: 23, EMTA, jazz musician, saxophonist. 
Symptoms: strong tensions right hand (from the tip of my fingers to the shoulder blade (scapula), “overplayed” hand with excessive rehearsing. Breathing difficulties.

Symptoms: lower back pains, left wrist pains.

Actor I: 45, worked in her profession and as a director and teacher for about 20 years. 
Symptoms: tensions in upper back, breathing problems.

Actor II: 31, Master’s student at the Drama School of the EMTA. 
Symptoms: Tensions in shoulders and back, performance anxiety.

Actor III: 26, Master’s student at the Drama School of the EMTA. 
Symptoms: Back tensions, performance anxiety, difficulty with concentration.

During the test the musicians performed a piece that was already acquired and which they were performing at the time of the tests. The actors performed a monologue from a current play. This made ‘unlearning’ the habitual impediments even more difficult, since freeing oneself from consciously acquired actions (rehearsed text, music) is a slower and more complex process.

After the initial test, each performing artist received 20 AT lessons. It was important that the second test took place six months after the completion of the AT lessons and the third test after a further six months.

Both qualitative and quantitative methods were used. The former might include a posture rating or an interview with the artists, while the latter might include measurements of muscle tone, movement characteristics and balance.

Observation of posture
This was led by one of the five experts in the field, Kaja Hermlin, a lecturer from the University of Tartu. We analysed each segment (see the table).

In order to test the postural balance, a platform and balance-pad were used. The performing artist had to focus their eyes on a point over a distance of 2 meters for 30 seconds and then remain for 30 seconds with their eyes shut. We examined the change in muscle tone, balance, and body use during performance before and after receiving the Alexander Technique lessons.

To examine the characteristics of movement, the motions of each performer were filmed and recorded, with the help of markers, on three occasions over a duration of ten seconds each time. These were at the beginning, at the peak of performance and in the end of performing a monologue or a musical piece.

Below are two examples. In the tables we can observe the changes in the parameters of Actor I (AI) and Musician I (MI). The stills of the films give us just some idea of the change of characteristics of movement.
Actor I
Presenting problems: upper back tensions, breathing problems; all impediments were amplified during performance/monologue, culminating in a strongly closed upper back, disturbing the natural alignment of the body and overworking throat and upper back area. Thus, breathing was disturbed.

Musician I.
Problems: cramps/spasms in the right hand during playing, back ache, left foot pain.

Tables posture observation index.
Five independent evaluators assessed the alignment of the body on a scale from 1 to 10, from the front, the side and the back view, giving a mark for each segment.

The posture observation mark for AI before the AT lessons from the side view was 8.50, which improved to 9.83. It is remarkable that the improvement of all indicators continued after the second test, even after the AT lessons had been complete. The mark for observation from the back view increased from 7.86 to 9.36.

The posture assessment mark for MI from the side view increased from 9 to 10 and from the back view from 8.43 to 9.

Tables for body balance
Balance disc and balance pad were used. Body postural sway was tested standing on a balance pad, which measured both the front to back (antero-posterior) as well as sideways (medio-lateral) postural sway. Several parameters were recorded and the following observations were made:

AI. A: longitudinal (antero-posterior) postural sway reduced from 46.80 to 36.20.
Sideways (medio-lateral) postural sway: B: transversal (medio-lateral) reduced from 63.70 to 21.90.

MI (MI). A: longitudinal (antero-posterior) postural sway reduced from 39 to 34.90.
B: transversal (medio-lateral) from 51.30 to 24.
Equivalent (mm) indicators supplement this example. (tables not included here)
Conclusion and results
The results of the postural observations revealed that the parameters of all performers improved: that the artist’s central set (core stability) changed after having attended the AT lessons, where they used conscious inhibition and primary control. The improved muscular interrelation of head-neck and back affected the use of the psychophysical unity. This is because most of the weight of the skull is in front of the spine and the head is naturally inclined to nod forward effortlessly. This allows the neck and spine to lengthen. The primary control allows for the postural mechanism to work – it is our inherent, naturally functioning mechanism. Improvements with the performers’ postural balance and equilibrium (deep muscle stabilization) and enhanced characteristics of movement were taking them to a new plane of consciousness.

In addition these changes were maintained by the time of the second test, and even continued to improve over the period of the subsequent six months, as was evident from the final test (see the tables). The alignment improved due to conscious inhibition, direction and improved employment of primary control. These results showed that when good use is blocked due to habits, it is also possible for it to be restored.

Feedback: interviews with the artists.
The performing artists were presented with seven questions, eliciting feedback from them on their experience of the use of conscious inhibition in their professional work after they had attended the AT lessons. I consider this feedback to be very important. The artists responded in writing to the seven questions, which were open-ended in style:

1. What kind of impediments, if any, were you aware of before taking the AT lessons: During the playing of an instrument or the use of your voice, and with respect to breathing, moving, or learning a text?
2. Did you notice changes after attending AT lessons?
3. Has using conscious inhibition (CI) in combination with the primary direction helped you to change the bad use of the self?
4. What have you been able to discover, associate and change due to the use of CI?
5. How would you express what CI means for you?
6. How do you use CI in your profession or when playing an instrument or when working with your voice or when working with a text?
7. Have the AT lessons contributed to your becoming aware of, and changing, the way you play an instrument, or use your voice? Or of the impediments you experience while performing?

Feedback from the performers as well as the test results confirmed a better use of the self, resulting in a higher quality of performance in addition to improved awareness and a better ability to concentrate.

**Answers.**

Complaints before AT lessons: Lower back pain, tension in shoulders and upper back, spasms in arm muscles during performing, foot pain. Strong tensions in the right hand (from the tip of my fingers to the shoulder blade or scapula), breathing difficulties, stage fright and difficulty in concentrating.

- “I realised that my muscle tone was very high during the preparation phase – many times higher than necessary. In other words, the energy that I should have been using during the actual performance was wasted during preparation; I myself was of the opinion that I only used an ap-
propriate amount of it.”
• “I had previously noticed a variety of obstacles to performing fast and technically demanding music on my instrument – fingers were not fast enough, or I hit the wrong notes. I thought I needed more intensive practicing in order to solve this.”
• “When I know that a technically difficult section is approaching, I forget about enjoying the moment and get anxious instead. After I’ve played it, I often feel an easing of tension in my body. I was not able to spot this pattern, it was rather subconscious.”
• “I used to come up with all sorts of reasons for why I don’t get the ‘right’ voice some days. By focusing on that, my voice and body became even tenser and relaxing became more and more difficult.”

After AT lessons:
Most of the symptoms disappeared, natural alignment of the body improved as a result of CI and improved employment of the primary control, reducing the overwork of the body in areas previously experiencing aches and pains:

• “After Alexander Technique lessons I tried to optimise the use of my muscles during preparation and it seemed to result in other factors balancing out, too: various parts of the brain functioned in a more holistic way during the performance.”
• “AT proved to be much more effective, since I learned to perceive the tensions in my body.”
• “The quality of my performance has undoubtedly improved, I feel at ease while on stage, I rather focus on enjoying myself, and not on playing the instrument.”
• “I can now learn the pieces and read music much faster. There has been a shift of focus.”
• “CI is a part of my warm-up. What has often helped me, are the directions of AT and emptying my mind of the unnecessary – not so much stopping the flow of thoughts as just letting them go.”
• “CI is the ability to control and command your body at a highly sophisticated level, to focus and channel the energy to the right direction at the right time.”
• “My sense of rhythm has improved in the process of practicing AT, I see less temporal fluctuation and haste in terms of rhythm; I can structure and subdivide a beat of a brief moment in music much better. Figuratively speaking I feel “as if I had more time”.
• “The visual examination of carriage was very exciting. I was amazed by the changes in

Fig. 5: Observation of postural segments in a musician test subject. The posture observation element of the study was led by Kaja Hermlin, a lecturer from the University of Tartu, and her team of five experts. Each segment (see figure 1) was analyzed.
my posture - the fact that it all happened in such a short time. During my first observation I was completely crooked.”

• “My posture improved and I have less back problems; it helped me to improve my playing technique and the quality.”

• “AT also helped me to convey a content-based meaning to performing and making music. This is a conceptual change. By knowing myself and understanding my actions, what I do, CI and conscious use of the self have brought a new quality to my performance.”

The main points are outlined below:

• Becoming aware of unnecessary effort and obstacles. As a participant said: “Alexander Technique made me aware of several of the obstacles involved in playing fast and demanding music on an instrument.

• The Alexander Technique enabled me to play more effectively, since I became better at perceiving the impeding obstacles in my body.

• “I now enjoy rehearsing sessions more because my body is free and the development faster”,

• “Preparing for a performance has become more effective, concentration has improved”.

• “Performing technique-intensive pieces has improved”.

• “The period of learning new material – rehearsing, working with the text or scores - which used to be tedious and frustrating, has become an exciting part of the process on the way to the result”.

• “Learning new pieces has become faster and reading music more fluent”.

Conclusion

The objective of the study was to examine how a performing artist understands conscious inhibition during a short learning period and how they employ it in the preparatory phase. Generally, at the Estonian Academy of Music and Theatre, it is compulsory for the drama students to receive both group and individual lessons regularly during the first two years of study, whereas the musicians receive only 15 group sessions and then only a select few are able to have 10 individual ones. This is because at present I am the only AT teacher in Estonia, and it is not possible to provide Alexander lessons for all the music students.

My research proved that taking 20 individual lessons is effective enough in terms of raising their awareness about the use of the self before the performance, in the moment of readiness and
during the performance. That fact alone, that the results of observation-based posture assessment and balance tests improved, confirms it. The recorded episodes of performance also verified a more economical use of the self. For me, the feedback from the performing artists was very important, confirming that the improved use of the self made performing more efficient, thus putting their existing potential to the best possible use.

For me, working with researchers explained the “invisible” part of my daily work. The laboratory results confirm the findings of my research with these types of creative activity: i.e. improved use of the self, better use of the voice, more sensitive and deeper tone of voice (sound). I am convinced the resources the laboratory has at its disposal are particularly valuable for further studies.

Bibliography


