Managing Performance Stress Examining the role of EMDR in Vocal Training

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'A Performer suffering from performance anxiety shows the same neurological effects found in those experiencing a traumatic event'

David Grand 1

Introduction

The phenomena of what we now term 'Performance Stress', is well documented. From actor Paul McGann's insistence that he will only work in film and television because of his terror on stage to concert pianist Glenn Gould's self imposed exile from live performance, the often fragile nature of the artistic temperament remains a favourite staple of broad sheet reporting. Organisations such as ISSTIP² and BAPAM³, were established in the 1980's in direct response to the growing awareness of the price being paid by artists in terms of their health and well being. Via workshops, conferences and more recently course components on undergraduate programmes looking specifically at the issues surrounding performance health, much has done much to highlight the less glamorous side of our industry.4 Yet the issue of prevention remains on the agenda. The fact that these organisations have been predicated on issues predominantly surrounding musicians and dancers, raises other questions too. It is not that actors are immune from performance stress, but rather that the theatre culture with it's battle cry of 'The Show Must go on', engenders a stoic acceptance of everything being 'all right on the night', when clearly it is not. The acknowledgement of the actor as 'a vocal athlete' and the incidence of 'vocal crash' highlighted at recent BVA conferences, demands that we ask questions about how we train the actor's voice; there must be an alternative to medication or an enforced change of career.

This paper is an introduction to preliminary research undertaken by 'The Centre For Voice in Performance', at the Royal Scottish Academy of Music and Drama. The basis of our work in both sung and spoken voice, is rooted in Nadine George's technique, and provides the foundation not only for all performance programmes in The School of Drama, but a shared philosophy and language, taught to and accessed by colleagues in all departments of our Conservatoire. The paper seeks to establish the parallels between our

¹ Quote from David Grand's website:www.biolateral.com

² The International Society for the Study of Tension in Performance, founded by Prof. Carola Grindea in 1982

³ The British Association of Performing Arts Medicine www.bapam.org.uk (accessed 24/4/10).

⁴ Prof. Grindea established and taught modules on the prevention of performance stress for Thames Valley University. The Royal Welsh College of Music & Drama also has course components on 'The Healthy Musician' as part of its undergraduate music degree.

⁵ Hereafter referred to as RSAMD

⁶ Hereafter referred to as NGT.For a full account of the Nadine George technique see www.voicestudiointernational.com (accessed on 23/4/10)

⁷ For example: Steen,R & Deans, J *Co-Direction: How Creativity is translated educationally in a moment of rehearsal* ELIA Teachers Academy Proceedings 2007

voicework and the psychotherapy technique Eye Movement Desensitisation and Reprocessing⁸ and its relevance as a technique for preventing Performance Stress

Genesis

October 13th 2007: having dropped my daughter off at her dance class, I take the opportunity to read the Saturday papers. An article entitled 'Too Jung To Die'⁹ grabs my attention. In it, the jazz musician James Taylor chronicled his battle with drink and drugs and his salvation through EMDR. I had often noted during my fourteen years tenure at the RSAMD, how little our students appeared to suffer from performance stress – by the time I had finished reading the article, I thought I might have discovered why.

Nadine George's technique is rooted in the work of Alfred Wolfsohn.¹⁰ It has much in common with other voice systems; there is a focus on floor work to release extraneous tension, attention to postural balance and re-connection back to the energy of a deep and natural breath mechanism. What makes it unique though is it's constant reference to the engagement of the visual field and the vocal-ocular connection. It is this particular component which provides the link to EMDR, a technique developed by the American Psychotherapist Francine Shapiro in 1989¹¹ and increasingly the preferred treatment for the sufferers of Post Traumatic Stress Disorder.¹²

About 25% of people involved in major traumatising events go on to develop long term PTSD symptoms ¹³

To better understand how EMDR works – and how the NGT may inherently share the same principles we need to define performance stress, examine what happens physiologically and why.

Performance stress

Performance stress is the term used to define the extreme effects of the human flight/fight reaction and the negative impact this has on an artist's ability to perform well. It does *not* refer to 'Eustress'¹⁴ – defined as positive stress that keeps us vital and excited about life-or the type of 'thrill' stress that we might experience at a fun fair or scary movie. The renowned opera singer Renee Fleming, interviewed in 'The Times' last October, talked about the 'self-sabotage' and 'the crippling effects of stage fright' that almost forced her to abandon her singing career:

⁸ Hereafter referred to as EMDR, For further information on Francine Shapiro : <u>www.emdr.com</u> (accessed 26.4.10)

⁹ Too Jung to Die, 'The Times', October 13th 2007

¹⁰ Alfred Wolfsohn 1896-1962. Information on Wolfsohn's life and work can be found at www.roy-hart.com (accessed 26.4.10

Thapiro ibid

¹² Hereafter referred to as PTSD. It is worth noting that this terminology was only coined in 1980.

¹³ Quoted from the Human Givens Institute page on Trauma and Phobias <u>www.hgi.org.uk</u> (accessed 26.4.10)

¹⁴ Further discussion on Eustress available from: http://stress.about.com (accessed 26.4.10)

We're not talking about the jitters, we're talking about deep, deep panic and that every fibre of your being is saying 'I cannot be on that stage.' 15

As someone who enjoyed a high profile career on both sides of the Atlantic, her breakdown was completely unexpected. In identifying the triggers, Fleming also coined the phrase 'Success Conflict' to define her performance stress, expressing her concern that many young performers are thrust into the spotlight far too early with insufficient technical means and an inability to deal with critical audience response. The British Opera singer Amanda Roocroft interviewed recently on the BBC Radio 4 programme 'Between Ourselves' 16, also talked candidly about the debilitating effects of stage fright that almost cost her her career.

It was a constant battle with my self-confidence. I stopped because I was in constant fear of making an ugly sound. I wanted to sing but I wanted to stop being fearful......I'd lost half my emotions.

Theirs is a theme that emerges again and again in such reportage – the internal-external struggle of the artist.

Robert J. Landy in his paper on using drama therapy to prevent PSTD in children who had witnessed the 9/11 attack on the World Trade Centre, ¹⁷ discusses the idea of the brain itself being a dramatic entity as it translates external reality into internal imagery – the Shakespearian notion of drama as a mirror held up to reflect nature. The recent discovery of mirror neurons – structures that link perception and action, explains how 'catharsis' - a moment of weeping when identifying with the tragedy of a protagonist - connects one person's feelings to those of another. It also explains why for some actors the journey to identify with their character may actually trigger performance stress. This is aptly illustrated in a conversation with the actor Daniel Day-Lewis noted for remaining in character both on and off set.

There's a terrible sadness – the last day of shooting is surreal. Your mind, your body, your spirit are not in any way prepared to accept the experience is coming to an end. In the months that follow you feel profound emptiness. You've devoted so much of your time to unleashing, in an unconscious way some spiritual turmoil and even if it's uncomfortable, no part of you wishes to leave that character behind. The sense of bereavement is such that it can take years to put it to rest. There is always a period before I start a film where I think 'I'm not sure I can do this again.' 18

A subsequent interview with The Sunday Times ¹⁹published two weeks later, also referenced Day Lewis's struggle in creating the character for his Oscar winning performance in the film 'There Will Be Blood', the harrowing epic drama that tackled major

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¹⁵ The Times October 2009

¹⁶ BBC Radio 4 'Between Ourselves' broadcast 9am on April 27th 2010

¹⁷ Landy, Robert J: 'Drama As A Means of Preventing Post-traumatic Stress following Trauma Within a Community'; Journal of applied Arts and Health Vol.1 2010

¹⁸ 'The New Frontier's man'. Published in the New York Times, November 11th 2007

¹⁹ Daniel Day-Lewis Gives Blood Sweat and Tears Published in the Sunday Times, November 25th 2007

themes in twentieth century American history. Cast as Plainview – the ruthless oil prospector whose obsessive pursuit of wealth destroys those closest to him-²⁰ Day-Lewis described how he began his process (as he always does), with finding the character's physical voice. For months he listened to old recordings of John Huston. Director Paul Anderson's comment that 'it would be great if that person (the film's protagonist) could leap off the page and be right there so I could talk to him – and then (with Day-Lewis) you have it', merely reinforces this level of commitment. The title of this particular article was, ironically: 'Daniel Day-Lewis Gives Blood, Sweat and Tears'; the piece is as much an account of one actor's pain as it is a pun on the film's title.

As voice teachers, we know that vocal artistry is often the first casualty of performance stress. Last year's BVA research day on 'The Emotional Voice', included personal testimony from an actress/director and her speech therapist ²¹ who recounted the destructive experiences of her drama school training and the subsequent battle to rebuild her vocal confidence and ability. The audience recognition and sympathy for this unnecessary trauma was palpable as was a sense of this account being an all too familiar story. Dr. Mark Cariston Seton in his thought provoking article 'Post-Dramatic Stress; Negotiating Vulnerability in Performance'²² refers back to an editorial published in 1992 in the journal 'Medical Problems of Performing Artists',²³ in which Dr. Alice Branfonbrener wrote about the lack of attention being paid to the well being of actors. Seton finds it significant that few articles since, have addressed the psychological hazards of the theatre, suggesting that:

Possibly one reason for the neglect of embodiment is that the craft of acting is predominantly regarded in terms of mind/body dualism, where the body is commodified and generalised....or seen as a signifying medium......constructing character from the external to the internal. Reasserting the importance of embodiment in actor training requires significant reframing of how the experience of acting is ontologically narrated.

I would like to highlight Seton's deliberate and frequent use of the word *embodiment*, because this concept is at the heart of the NGT. Embodiment provides the connection between the physical and the psychological – the bridge between our internal and external realities.

It puts the body and voice, rather than the head at the centre of the acting process and rehearsal period, redresses any imbalance between them and re-connects both in the act of speaking itself. ²⁴

²¹:Chinn. C A Journey of Discovery. Presentation made to the BVA research Day 2009 on 'The Emotional Voice'...

²⁰ 'There Will Be Blood' 2007 written directed and co-produced by Paul Anderson

²² Seton, Mark Cariston: 'Post-Dramatic' Stress; Negotiating Vulnerability for Performance'; proceedings of the 2006 Conference of the Australian Association for Drama, Theatre and Performance Studies.

 ²³ Brandfonbrener, Alice: 'The Forgotten Patients' in 'Medical Problems of Performing Artists'. December issue 1992
 ²⁴ Steen, R Helena, Hitler and Heartland, Steen.R, pp 43-58 in Shakespeare Around the Globe, Voice and Speech Review, Rees.M (ed)2005

The tradition of actor training in British Drama schools is rooted in the affective memory approach of Stanislavski, requiring the actor to recall personal memories experienced in situations of similar emotional import to that of their character. Much of our theatre literature from the Greek tragedies to the National Theatre of Scotland's highly acclaimed 'Black Watch'²⁵ demands the actor explores some of the darkest territories of the human psyche and re-live some of its most brutal experiences. Seton argues that:

It is our responsibility as educators to provide our acting students with the interpersonal resources to incorporate the experience of a performance in a resilient manner²⁶

noting wryly that an acting teacher is rarely a trained psychologist. Cheryl McFarren's doctoral thesis: 'Acknowledging trauma/Re-thinking Affective memory', ²⁷ also interrogates drama techniques where hyper-arousal and dissociation - two key responses to stress - may neither be recognised nor processed safely. Certainly much of what goes on in the rehearsal room appears uncomfortably similar to the 'Target assessment phase' of the EMDR protocol. ²⁸ If we accept the opening statement from David Grand and the observation from Seton that the art of acting itself can be profoundly traumatic, then scrutinising the role of voice in current actor training is paramount to our becoming 'responsible educators'.

The Trauma Response

The human brain recognises fear in less than two hundredths of a second, faster than any other emotion.²⁹ When incoming information is perceived as threatening, it activates a series of survival mechanisms. The Thalamus - which would normally 'talk' to the hippocampus - (the area responsible for rational analysis and processing of the situation), instead by passes it, directly transferring the information to the Amygdala. The amygdala is at the core of the limbic system – it assigns emotional content to incoming information and then activates the body and the rest of the brain in response to how that stimulus might threaten survival. It can and does operate outside consciousness. An immediate aggressive-defensive response occurs, switching on the autonomic and parasympathetic systems. The autonomic nervous system creates internal visceral movements (increasing heart rate, blood pressure, sweat rate and releasing the stress hormones adrenalin and cortisol), while the parasympathetic system allows the voluntary motor pathways to orient and begin activating for external movement – fight or flight. Once these stress hormones flood the system, they feed back to the amygdala, reinforcing the 'fear' alert and further preventing the hippocampus from intervening and adjusting our response. When the amygdale over-reacts, The Broca's area of the brain - crucial for language and speech shuts down. As a result we are 'struck dumb' and unable to express our experience verbally. This is disastrous because the formation of words often acts as a delaying

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²⁵ Black Watch', written by Gregory Burke and directed by John Tiffany was the flagship production of The National Theatre of Scotland, first performed at The Edinburgh Festival in 2006. Clips of the play subsequently filmed by the BBC, can be viewed on: www:nationaltheatrescotland.com. The NGT was an integral part of the rehearsal process.

²⁶ Seton *ibid*

²⁷ McFarren, Cheryl Kennedy 2003 'Acknowledging Trauma/Rethinking Affective Memory: Background, Method and Challenge for Contemporary Actor Training, University of Colorado.

²⁸ For explanation of the Target Assessment Phase in EMDR please refer to p.7 of this article

²⁹ Naish J Have We Worried Ourselves Sick? The Times March 13th 2010

function, giving the brain time to recall data that would help in processing difficult emotions. John Ratey in his excellent book 'Understanding The Brain'³⁰ describes the effects of fear brilliantly, pointing out that

when the emotional response can be tolerated, then words can come. When the problem is known and can be named, it becomes less terrifying.

Further physiological shifts occur including dissociation (memory failure) and severe visual disturbance, all of which can have a drastic impact on the actor who needs to remember his words, speak his lines and negotiate a stage set.

The emotional part of the brain (amygdala) effectively swamps the processing part of the brain (hippocampus) locking the trauma into our system. Trauma can then be triggered by the smallest of stressors causing hyper-arousal and predicating an emotional reaction in which the body constantly resorts to the 'flight/fight/freeze' response. This is the definition of Post Traumatic Stress Disorder where the victim re-experiences painful sensory fragments of the initial trauma, the pathological dissociation referred to here by Grand:

Performance in front of an audience requires the capacity to adaptively and creatively dissociate – the problem arises when creative and adaptive dissociation are infiltrated by pathological dissociation – this is usually the cause of most intractable performance anxiety – and of course these phenomena source from earlier profound trauma, often in the endeavour where the performance is undermined'. 31

The inability to verbalise emotional impact, is a common side effect of performance stress. Piaget felt that the failure of semantic memory resulted in a somatosensory organisation instead, leading to complete dissociation of the inner activity from the external world.³² Dissociation, first described by Pierre Janet in 1889,³³ is the central issue in trauma. Memories of what has happened cannot be integrated into our general experiential core. PTSD sufferers fail to experience what Freud termed 'thought as experimental action', 34 In layman's terms, this is the ability to define their emotional needs and meet them with appropriate action. Instead their 'internal world becomes a danger zone'. 35

Bessel Van der Valk ³⁶ identified the core problem of PTSD as being the failure to integrate a difficult experience into autobiographical harmony. Having championed several research projects that use drama and theatre to prevent PTSD Bessel concludes that an embodied dramatic approach is critical.

³⁰ Ratey, J A Users Guide To The Brain p210 ISBN 978-0-349-11296-1

³¹ Grand ibid

³² Piaget, J Play, Dreams and Imitation in Childhood, W.W. Norton New York, 1962

³³ Janet , P *Les Medications Psychologiques* Janet pioneered the field of dissociation and traumatic memory.

³⁴ Freud, S Introduction to Psychoanalysis and the War Neuroses. Trans. Strachy, London Hogarth Press.

³⁶ Van der Valk, Bessel: *Approaches to the Treatment in PTSD* Behavioural and Social Sciences vol.80 1995

The goal of any treatment is in finding a way in which people can acknowledge the reality of what happened without re-experiencing the trauma. The memory needs to be modified, transformed and re-integrated'.³⁷

The EMDR process does exactly this and so, it would appear, does the Nadine George Technique.

EMDR Protocol - and how it works.

In 1989 Francine Shapiro – the originator of EMDR, noticed that the emotional distress accompanying personally disturbing thoughts disappeared as her eyes moved spontaneously and rapidly from side to side. Subsequent case and controlled studies supported her theory that eye movements were related to the desensitisation of traumatic memory and that engaging bi-lateral stimulation 'unlocked' the processing part of the brain so that it made sense of, evaluated and moved on from the trauma. ³⁸ EMDR, is now the preferred treatment for Post Traumatic Stress Disorder. The technique is usually implemented as follows:

i) The Calming Installation

Prior to treatment, the therapist will establish a 'safe place' for the client. This will be a strong mental image of a personally experienced physical place where the client has been genuinely happy and in control of their lives. The 'safe place' mechanism can then be invoked in order to 'stabilise' the client, should they have difficulty in reducing their SUD score.

ii) The Target Assessment Phase

The client will then be asked to identify the traumatic memory and record any related emotions and body sensations. Two rating systems are then introduced by the therapist in order to evaluate the process. These are the *subjective units of distress* which is used by the client to assess their stress levels during the process with 0= no stress and 10=highest possible stress and *the Validity of Cognition Scale* which sets up a rating used to estimate the value of positive cognition with 1=completely false and 7= completely true.

lii) The Desensitisation Process

During this next phase the client is asked to hold the image of the trauma in their mind (for approximately 15-20 seconds) whilst their eyes follow the therapist's two fingers as they laterally track back and forth. The therapist will then ask the client to pause, take a deep breath and report the images, emotions and physical sensations that have emerged, giving them an SUD rating. Using this feedback, the therapist will re-direct the client to new sensations and images. The process is complete when the client reports an SUD rating of 0. Once this score has been achieved, the therapist moves on to the final phase.

iv) The Installation Phase (reprocessing).

The desired positive cognition – the recognition that the trauma was not the sufferer's fault - is then focused on, using the eye movements, until a Validity of Cognition rating of 7 is

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³⁷ Van der Valk ibid

³⁸ Francine Shapiro first reported her findings on EMDR in 'The Journal of Traumatic Stress' 1989

achieved. The positive, desired cognitive state is then linked to the original traumatic issue whilst the Therapist checks for any return of negative body sensations. The number of sessions required to effect recovery varies dependent upon the initial trauma and the individual's needs.

The Nadine George Technique – and how it works.

The following outline of the Nadine George technique relates to the process taught by George herself and by my colleagues in The Centre for Voice. Our students are encouraged from the very beginning of their training to incorporate this work into their daily practice. The core principles and vocabulary of the technique are also applied to their singing, accent and dialect work, and in rehearsal, facilitating a true integration between class and performance.

i) Floorwork : Internal connection

The technique begins with floor-work. There are two warm-up sequences and actors work in pairs.

- Warm-up one: Actor A lies down on their front. With their eyes closed, they begin to access the internal connection, focussing on the deepening breath as they inhale through the nose and exhale on a slow release using the vowel shape /aw/. Actor B warms Actor A up and down the length of their body using vigorous hand movements and then engages in a series of firm massaging actions from the base of the spine horizontally along the rib-cage, moving upwards on each breath to the shoulders. They then massage down the sides of the upper torso moving back along the spine to the shoulders. Throughout the warm-up Actor B will synchronise the hand movements moving only on Actor A's exhalation, facilitating their partner's internal connection and deep relaxation. The warm-up continues with Actor B using a vibratory action on the buttock and thigh areas and then massaging the calves and soles of the feet. Actor B then takes their partner's ankles and raises the legs upwards, shaking the legs as they are lowered back to the ground. At the end of this warm-up Actor A is asked to open their eyes and refocus to the external connection.
- In the second warm-up, the actor lies on their back in the supine position, with their eyes closed and continues to release into the deep breathing work. Actor B engages in working the neck, head and shoulder areas to open up the chest area. Gentle exercises to release the lower back and pelvic area will also be used.³⁹ At the end of this sequence, the actor is instructed to open their eyes and transfer their attention from the internal connection to the external focus. The actor then moves into a vertical position using a spinal roll and stands for several minutes maintaining spatial awareness and dramatic focus.

It was when I opened my eyes that I really noticed a difference. I was all of a sudden in my body, heavy weighted and grounded with a high energy heated

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³⁹ Both warm-ups are detailed in George's article My Life in Voice on www.voicestudiointernational.com

sensation in the stomach. I especially find a deep and intense connection through the eye contact. ⁴⁰

Something really connected in me after the first warm-up. I had this mad desire to cry and cry I did. I released a barrel load of pent-up emotion...I had no idea how much sound I had in me, how much power. It was one of the most liberating and invigorating sensations.⁴¹

ii) Circle and Walking work: external connection

The technique then engages the actor in a series of moving exercises with continued focus on increased breath and energy connection, with the eyes wide opened at all times. Standing in a circle focussing the breath and energy forward from themselves, the arms are raised above the head on the in-breath and lowered sideways on the out-breath, first in focus forward and then making deliberate eye contact around the circle with the peer group. Following this, the actor walks purposefully around the rehearsal space, maintaining energised breath and working with their energy. They breathe out, with the energy connection first in focus forward and then into an expanded focus engaging peripheral vision. This is called the horizontal plane by George. Then at a given signal, the actor finds a partner and synchronises their breath, holding the partners arms at the wrists and raising their arms together on the out-breath, lowering them again on the in-breath. Finally, at a signal, the actor embraces their partner, making full body contact and again breathing in sequence with them.

Once Nadine helped me to open my eyes, I started processing all my emotions and sounds: they became more grounded in my daily work. 42

The exercises really take you to a different place, both emotionally and physically.⁴³

I do the deep breathing to calm and centre myself, whilst using the eyes to turn my nerves into excitement and energy.⁴⁴

Ros Steen describes these exchanges between actor and actor and between actors and the work space as mirroring

the energy exchanges that take place among the cast and between cast and audience in performance.⁴⁵

The continued visual focus using the horizontal plane and maintained through all these exercises, parallels what Shapiro describes as 'the dual focus of attention' approach which

⁴² ibid

⁴⁰ These and subsequent quotes are taken from the target cohort's Reflective Performance Journals.

⁴¹ ibid

⁴³ ibid

⁴⁴ ibid

⁴⁵Steen, R Helena, Hitler and Heartland ibid

refers to maintaining an optimal balance between a focus on the traumatic material and a sense of not being part of the trauma. ⁴⁶

In 2006, an Australian study researching the this dual focus of attention as the most active ingredient in EMDR concluded that

The dual focus of attention in the desensitisation phase, is an important part of the therapy'

hypothesising that

bi-lateral eye movement facilitates the inter-hemispheric interaction which then improves the processing of trauma related memories. ⁴⁷

In Nadine George's technique, the use of the horizontal plane, the energised walking and synchronised breathing, all facilitate the processing of the spatial and emotional environment the actor will be working in. Using this as integral to their warm-up prior to live performance, the actor is able to 'map' the performance space and appropriately match their vocal energy to it. In doing so, they remove 'the fourth wall' – the perceived barrier between actor and audience.

iii) Four Qualities of Sound

Stage three of the NGT employs sustained vocal energy released through sung pitch in four qualities which are, in her terminology, the deep male, the high male, the deep female and the high female. ⁴⁸Although it is tempting to match them to the traditional Soprano, Alto, Tenor and Bass categorisation of singing terminology, the four qualities are about human energies, not voice types and the sound produced – breath vocalised on a single vowel and pitch- is not an aesthetic interpretation but an exploration of imagination and vibration. Each quality is explored on a specific sung vowel sound guided by the piano playing notes in the scale of C major. Pitches are sounded in full voice for the length of the breath and any change in quality and dynamic of the vibrated note is actively encouraged. This sound is then released into text to enable transference of the vibrated energy into language.

This part of the NGT demands an enormous amount of concentration, physical effort and commitment to what often feels like extreme vocalising – working the voice to its utmost limits with maximum body support. This is the point at which students will often report physiological sensations that mirror the traumatic response. Hyperventilation, sensations of heat, the body shaking, 'tunnel vision' and emotional release (through laughter, tears) will often occur. Continual observation of students who encounter an emotional block has shown that symptoms of distress appear to be triggered at pitches specific to the individual rather than to a voice type i:e two students who might be labelled as 'soprano' are unlikely to react at an identical pitch. It has also been noted that if the student does

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⁴⁶ Shapiro ibid

⁴⁷ Lee, Taylor, Drummond: *The Active Ingredient in EMDR: Is It Traditional Exposure or Dual Focus of Attention?* pub. Wiley InterScience 2006.

Further explanation on: www.voicestudiointernational.com

experience some form of trauma response, this will occur in one particular voice quality only, not across all four energies.

I was voicing the upper male sound and I was coughing, spluttering, had tears streaming down my cheeks but felt amazing! It was like there was energy racing round my body at a million miles an hour, but I was so focussed. 49

I was crying or laughing hysterically all the time (at the start), but the use of my breath and core allows me to sustain focus and settle the body's heart rate.⁵⁰

It is amazing how much you open up from just a simple breathing exercise into different parts of the body. I cried like a baby; it wasn't even as if I was sad, I just had waves of emotion coming and going.⁵¹

The return to calm is always very quick - usually before the end of the session and students will talk about how positive and grounded they feel. Discussion of the actors experience occurs after the experience of working on all four qualities allowing silent discoveries of emotional/vocal blocks. As confidence and understanding of the work progresses, the actor is encouraged to extend into different areas of their vocal range and move beyond what is perceived as possible. The intensely, vibrated physical and vocal energy released into embodied sound is then taken forward into:

Voice into text.

Lastly the now embodied voice is connected to the acting impulse using text predominantly (although not exclusively) from the Shakespearian cannon. In the early experience of the work, the actor will use 'full voice' - George's term for maximum vocal energy when speaking. As the actor becomes more familiar with the relationship between the text and their own vocal possibilities they will adjust the energy levels and move between the four voice qualities instinctively.

Throughout stages ii, iii and iv, the eyes remain wide open, maintaining the visual field and processing emotions as they are released. Again, discussion happens after the acting and is a platform for the actor to verbalise their physical responses to, and the impact of, their experience. Although observation might be made about their character, the discussion is NOT an intellectual interpretation of the text but a recording of the actor's psychobiological reaction through the language of their character, mirroring the pattern of Desensitisation in EMDR.

Preliminary practice-based research into George voice work and EMDR.

I have observed Nadine George's work for over fourteen years and engaged with it on a personal level incorporating it into all aspects of my vocal practice and teaching, for the past five. After reading 'Too Jung To Die' (and having convinced my colleagues of the argument), I began to explore the relationship between EMDR and the Nadine George technique using the following approaches.

⁴⁹ Student reflection as above

⁵⁰ ibid

⁵¹ ibid

- Confirmation of the theory began by interviewing four psychologists⁵² each of whom used EMDR in their practice. These conversations reinforced the supposition that the NGT use of the visual field had major implications not only in developing vocal technique but in engaging the student actors in some deeper experience.
- Identifying, establishing and following a target cohort of students. It was decided to track a group of 14 students (7 male, 7 females aged between 17-21) who had enrolled on the new BA Musical Theatre programme. The decision to follow this particular cohort was taken for two specific reasons. As the first intake for an entirely new course, there would be no previous student experiences to unduly influence their engagement with the technique. We were also extremely interested in observing the impact of the NGT on the development of both their spoken and sung voices. This cohort will be tracked across the three years of their programme.
- A two part questionnaire was issued to the target group. The questions were designed in accordance with EMDR identification of trauma protocol⁵³. Part 1 was structured in accordance with the four stages of the NGT and asked students to detail any physiological response that occurred when engaging with the process and to identify where in the process this had happened. Part two required students to evaluate their previous performance history how well they performed and noting any symptoms of stress that might have adversely affected those past performances. Two out of the fourteen students scored on the EMDR trauma response scale, identifying previous traumatic experience.
- Commentary was also taken from the students Reflective Performance Journalslog books that record the student's personal journey across all aspects of their training.
- Continued observation by myself and an EMDR psychologist of the target group as they engage with the process with particular focus on the emergence of any trauma symptoms and their resolution within the process itself.
- Analytical conversations with Nadine George on the evolution of her work.
- Personal experience of the EMDR technique
- The referencing of published research examining the efficacy of EMDR in PTSD.

My voice felt more rooted in my body than it has ever felt; I felt incredibly calm, warm and happy – it feels to me to be the most perfect state because you are internally aware as a person⁵⁴.

My voice feels released – stress has prohibited my vocal expression but after completing Nadine's process I feel a natural power in my voice that is real. It is MY voice.

I really feel that the work has changed my life. It has allowed me to achieve things I never knew possible I feel I can take on anything.

⁵² Dr. Richard Mitchell of The Harley Street Trauma Centre, Dr. Alisdair Wilson from Gartnavel Royal Hospital, Richard Casebow from the Edinburgh Alexander Centre and Marilyn O Connor from the Notre Dame Centre, Glasgow. ⁵³ EMDR identification of trauma scale; an assessment tool used to determine type and severity of trauma.

⁵⁴ This and the next four quotes derive from the target cohort's Reflective Performance Journals

My body felt slightly exhausted at first but a couple of hours after class I felt taller and much more womanly, not a little girl. Through the months I have started to feel much more comfortable in my own skin. My voice and its potential excites me.

It is a releasing technique for me as a person but I am now fully understanding how it can be a connecting technique for me as an actor

Initial Findings

After analysis of the data elicited through from the target cohort and discussion with colleagues, the following hypothesis has emerged on the relationship between the NGT and EMDR and the use of this technique in the prevention of performance stress.

Stage 1 with its focus on the internal connection, slow exhalation and guided physical release, identifies where the 'body response' to the trauma is stored and prevents dissociation. Van der Volk observed how 'the body keeps the score'; ⁵⁵ hyper-arousal and dissociation - two key aspects in the psychobiology of post traumatic stress- are stored in our body. EMDR requires the sufferer to identify the bodily sensations linked to the trauma as part of the desensitisation process; the warm-up sequences in the NGT also help to identify where extraneous tension is being held in the body, whilst the deep breathing allows the actor to remain in the calm ensuring maintenance of the processing mechanism. Breathing is one of the few actions that resides in both our somatic nervous system and our Autonomic system. The fact that we can consciously control the former means that we can use breath as a bridge – by slowing it down, we de-escalate the primal fear response and regain control of autonomic actions such as heart beat and pulse rate. The internal focus is also about connecting to the release of the breath and creating a sense of space within the body in preparation for the vibrations that will be experienced in the four qualities work of stage 3.

Stage 2 engages the dual focus of attention used in EMDR, maintaining the processing mechanism of the brain. Stage 3 is the stage at which the actor is most likely to experience some form of stress; the extreme effort required in vocalising the four qualities can act as the trigger for past trauma; whether it is the vibration of the sound being released that resonates with the 'body response' identified at stage 1 has yet to be proved, but this would seem the most logical explanation. The fact that the visual focus is maintained throughout the vocalisation appears to accelerate processing, as all students report a return to a calm grounded place, cessation of symptoms, feelings of 'release' and positive energy within minutes of completing this section of the work.

Stage 4 allows true embodiment – trauma has been located, processed and can now be

harnessed to serve the actors intentions.

⁵⁵ Van der Volk B. *The Body Keeps the Score: Memory and the Evolving Psychobiology of Post-Traumatic Stress* The Harvard Review of Psychiatry 1994

Studies suggest that challenge and feedback are necessary to maximise learning. The brain is exquisitely designed to operate on feedback both internal and external.⁵⁶

Conclusion.

It is safe to assume that some students come to higher education with previous experience of trauma. That trauma often declares itself vocally. The classroom provides a controlled 'safety net' – experienced teachers and a supportive peer group relationship encourage complete engagement with the voicework. Previous trauma may surface but can also be processed through re-establishing breath and energy, the internal-external connection and the constant attention to visual focus. The technique allows the actor to embody the characters vulnerability whilst processing concomitant emotional demands. The philosophy of Daily practice and the Reflective Performance Journals allows the student actor to take immediate ownership of the work. It is not some mysterious idea contained within the classroom context but a constant part of their development as creative artists. The core stages of the technique are repeated, deepened and embedded during the three year training.

The best way to get the brain to perform under stress is to repeatedly run it through rehearsals beforehand.⁵⁷

In addition to developing a healthy responsive vocal instrument, the NGT provides a strategy that allows the student to cope effectively with the (often cruel) stresses of an industry that demands they are brilliant, beautiful, dedicated to their art, never get ill and can survive on fresh air when the going gets tough. As Ros Steen explains:

Part of what this voice-work does, I believe, is to go straight to the heart of the body and the fear and work on both in a climate that allows the actor to go into them step by step....... The value and importance of this work for young actors – actually all actors – was that it quickly and simply helped them to confront and accept their own particular body and voice in order to develop its use. At the same time it directly addressed how they worked, that is, what it was that facilitated or limited what they permitted themselves to accomplish. The technique holds young actors – at an often insecure stage in their lives as artists and people – within a clear, safe structure.⁵⁸

The next stage of our research on the NGT will be to examine how the component parts - physical release, breath, connection to energy, the use of the eyes in developing spatial awareness and communication and extending vocal parameters - impact on performance stress *in isolation*. A recent study carried out in Sweden ⁵⁹ looking specifically at the Eye Movement component of EMDR, discovered that the sympathetic drive decreased and the parasympathetic influence increased resulting in a lowered heart rate, increased finger tip temperature, decreased skin conductance and a slower breathing rate. These are all

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⁵⁶ John Ratey: 'Understanding the Brain'.

⁵⁷ (Lazar Sara W et al: NeuroReport 16 Nov. 28th 2005)

⁵⁸ Steen, R *Teaching Voice in the New Millenium* International Centre for Voice, Central School of Speech and Drama 2006

⁵⁹ Elossohn, Scheele, Theorell, Sondergaard; 'Physiological Correlates of Eye Movement Desensitization and Reprocessing'. Journal of Anxiety Disorders 2008

indicators 'that the effects of the eye movements are beneficial' - further proof that the hypothalamus can be re-activated to start processing the trauma. Robert Stickgold in his research ⁶⁰also posited that eye movements

kick start the innate memory processing system in the brain, activated during REM sleep

a hypothesis supported by the decreased difference between core and peripheral temperature, known to occur in REM sleep. The physical responses recorded by our students in their RPJ's, the evaluation of the questionnaires and the observations by myself and the EMDR psychologist would suggest that the parasympathetic response is also activated in step 3 of the NGT. Indeed Shapiro's comment below implies that the EMDR response is hard-wired into human existence – if only we knew how to access it.

In order to facilitate EMDR processing, we're bringing together the various fragments in terms of the image (trauma), the verbalisation and the affect and the physical sensation. What we're doing is activating an information processing mechanism that is inherent in us all.⁶¹

This empirical evidence now needs to be measured and it is hoped this can be achieved using a similar model to the 2008 Swedish study on the physiological correlates of EMDR. ⁶² Neuroscience will be the key with which to unlock this particular door. Insofar as recent research has proven that people who meditate regularly increase the thickness of pre-frontal cortex tissue by 5% ⁶³, and that stroke patients are still able to sing even when the act of speaking has been destroyed, the possibility of re-wiring neural pathways to prevent severe trauma seems entirely possible.

The Nadine George Technique has its origins in the First World War. Alfred Wolfsohn a young German soldier was sent to fight on the Eastern Front. Critically injured twice, he survived the carnage of the trenches and after the war, resumed his legal training. But the agonised cries of his dying comrades continued to haunt him and he abandoned his career, returning to his first love – singing

because I was 'cured' from neither the mustard gas poisoning I had received in the trenches, nor the combat trauma – on the contrary, it was because there was no further treatment that the doctors were able to offer me. For the next ten years I struggled with this appalling state of being. One of the first means I sought for refinding my health, was to try and re-find that lost voice of mine'. 64

Wolfsohn was, quite simply, developing his own therapy for post traumatic stress disorder.

62 Elossohn ibid

⁶⁴ Quote by Alfred Wolfsohn taken form an article by Marita Gunther www.roy-hart.com

⁶⁰ Stickgold R: EMDR: a putative neurobiological mechanism of action. Journal of Clinical Psychology 2002.

⁶¹ Shapiro ibid

⁶³ Ripley A *The Unthinkable. Who Survives when Disaster Strikes – and Why* Random books 2008