



**ACADEMY OF MUSIC AND DRAMA**

## **The Search for Brilliance**

Understanding and developing key skills for orchestral flute auditions

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## **ABSTRACT**

This thesis is aimed at finding methods to improve performance quality in an audition setting through research on music performance anxiety, performance psychology, relaxation techniques and flute technique. Using my personal experience in real auditions and daily practice, I also provide examples of how I improved my proficiency as a performer through a portfolio of technical exercises that can improve skill levels as well as be a source of relaxation prior to an audition.

Key words: Auditions, Flute, Mock Auditions, Music Performance Anxiety, Orchestra, Practice, Technique Exercises, Sound, Articulation, Visualisation.



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## Introduction

When dealing with the challenges of preparing an audition for a job in a professional orchestra, there are a number of factors which influence the outcome of the process. What seems to be the common denominator between musicians, as in the most suffered problem during an audition, is Music Performance Anxiety (MPA). The objective of this thesis will be to determine why does MPA occur, what tools for controlling MPA can be used during preparation and in the actual performance of an audition, how to improve oneself and be more proficient in the practice room, how to reduce MPA through practice and mindfulness exercises and finally how to make auditions more successful. Perfection in the practice room is not enough, but at the same time sometimes not required in order to be able to perform during an audition day. For example, in an audition for the chair of co-principal flute at the Tampere Philharmonic Orchestra I was asked to play the entirety of the 4th movement of the Symphony no.1 "Classical" by S. Prokofiev; I hadn't practiced that excerpt for about a week prior to the audition day, out of frustration for my perceived incapacity of playing a few passages in the score. After finding out I had to play this excerpt in the second round, as I anticipated this moment would come and allowed myself to give up on the excerpt thinking there was nothing more I could do with it, I went back to my assigned practice room and played through the difficult passages of the excerpt very slowly, only focusing on keeping the best sound quality I could. When the moment of performing came, I surprised myself and played with no mistakes, I later came to know from members of the jury and the candidate who played after me that that was the best Classical Symphony they heard that day! This event made me realise two things: firstly, practice methods and problem solving are the most crucial topics a musician has to deal with and that all my practice of the mentioned excerpt was almost wasted time, because I was then able to perform after just a few minutes of slow practice; secondly, musical expression flourishes from a well understood technical foundation but the opposite can't happen.

Therefore, I will research reliable practice methods, problem solving and technical exercises aimed at helping with solving specific issues in the most perceivedly efficient manner. Progress and methods will be shown through the attached video files.



## Chapter 1

### 1.1 Performing under pressure

Music performance anxiety (MPA) and stage fright, are an everpresent problem for musicians and other performing artists. Nausea, trembling and hyperventilation are common symptoms even in mild cases, and can cause the premature end of a promising career. The topic has attracted several researchers, clinical psychologists and others concerned with the management of anxiety and stress-related disorders.<sup>1</sup> A wide range of solutions are in use, ranging from the strictly musical (Paderewski recommended musical analysis) to psychotherapy; alcohol, beta-blocker drugs, tranquilisers are also in use (according to Angelo Persichilli, ex principal flute at the Italian national orchestra and respected teacher, reknown Italian flautist Severino Gazzelloni used to have a shot of whiskey or cognac just before entering the stage).

But what is stage fright or MPA, really? Research suggests MPA is a fight-or-flight physiological response and "*although anxiety can function as an essential anticipatory response for physical protection, the threats that musical performers face today are rarely life-threatening. Nevertheless, anxiety can continue to mobilise the body for a fight-or-flight response. Conceptually, anxiety may be thought of in terms of two components:*

- *Worry or lack of confidence*
- *Physiologic reactions associated with autonomic nervous system arousal (emotionality)*<sup>2</sup>

Tension in performance has much to do with other fears such as fear of spiders or heights; in each case, the individual responds both physically and mentally to the feared situation. However, MPA does not only affect cognition and physiology but also behaviour: the presence of a spider in our room won't affect our ability to catch it and place it outside so much that we are not able to perform the action. In the case of stage

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1 Andrew Steptoe, "Performance Anxiety. Recent Developments in Its Analysis and Management", *The Musical Times*, no. 123 (1982): 537.

2 Quoted in Audrey-Kristel Barbeau, "Performance Anxiety Inventory for Musicians: A New Questionnaire to Assess Music Performance Anxiety in Popular Musicians" (Master Thesis, McGill University, 2011), 7.



fright though, since a performance is so dependant on a vast set of skills that is easily disrupted, consequences of stage fright can be tragic. The musician's case is particularly difficult because the physical systems that sustain the performance are also the most likely to be disrupted by excessive tension. Sweat gland activity, salivation, breathing and small muscle control are among the biggest indicators of bodily arousal, yet their functioning is vital to musical performance. In flute playing specifically, abnormally low or high salivation, tense breathing and loss of fine muscle control exacerbate the performer's weaknesses and can lead to really noticeable mistakes. As an example, the sound quality of a flautist depends only marginally on the manufacture of the instrument (assuming the instrument is properly adjusted for optimal working conditions), and it's very dependant from the ability to control one's lips, having a relaxed throat and air-flow control. Therefore, having a dry mouth and lips, tight throat and poor breathing can be very detrimental to sound quality, intonation and even articulation; furthermore, concerns about the performance's quality can exacerbate MPA even more, entering a self-feeding negative circle.

As a result of these statements, it's possible to separate MPA in two main linked components: excessive physiological arousal and maladaptive cognitive style. Since both of these aspects have implications for the management of stage fright, they must be described separately.

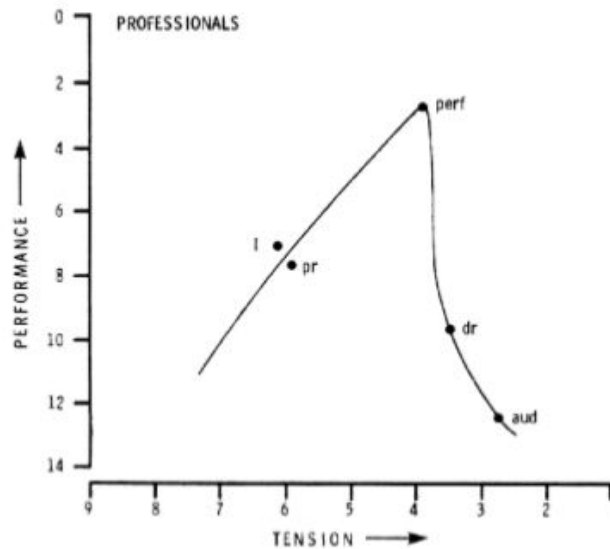
**1.2 Cognitive Arousal and performance.** According to a study led by Andrew Steptoe<sup>3</sup>, the perceived quality of a performance varies proportionally to arousal, following a curvilinear inverted-U-shaped pattern.<sup>4</sup> Therefore, performance improves as arousal increases at the beginning of the curve, but deteriorates as arousal becomes stress and decreases the abilities of the performer. Arousal can be monitored both physically (using recordings of pulse rate or muscle tension) and in terms of behavioural responses. It is influenced both by biological factors, such as lack of sleep, and by external circumstances. For example, a musician may be able to play a piece with good control when practicing by themselves, but see their skills fall apart when faced with the additional stress and agitation that comes with being on a stage.

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<sup>3</sup> Steptoe, "Performance Anxiety. Recent Developments", 538.

<sup>4</sup> Yerkes-Dodson law; for mechanisms underlying arousal and stress responses, see Andrew Steptoe, "Sleep and Arousal" and "Emotion and Stress", in *Scientific Basis of Psychiatry* ed. Malcolm Weller (London, 1983).

The above mentioned research by Andrew Steptoe shows that when young classical and operatic professional singers were asked to rank the quality of their performance in different settings from 1 (extreme tension) to 9 (extreme relaxation), the best performance occurred at a medium level of tension; as stated above, when arousal is too high or too low, the performance suffers, as shown in the picture below.<sup>5</sup>



L= lesson, pr=private practice, perf=public performance, dr=dress rehearsal, aud=audition  
performance numbers are arbitrary, but lower scores indicate higher quality

Figure 1. Curvilinear inverted U shaped pattern from A. Steptoe, *Performance Anxiety. Recent Developments in Its Analysis and Management*. *The Musical Times*, 123 (1974).

Interestingly, the peak of quality coincides with the public performance in the sample interviewed by Steptoe, while the more relaxed occasions of private practice and lessons are associated with an average score, and in the dress rehearsal and audition settings the stress levels are too high to allow the performers to reach optimal singing.

It's not surprising that the singers in this study ranked auditions as their worst of all, as this is the situation in which MPA rises to the highest levels. Similar patterns have been found among organists using physiological measuring of tension instead of perception.<sup>6</sup>

Even professional musicians who report no special problems of performance anxiety are on a knife-edge when appearing in public, as the smallest disturbances can push the player towards the downward limb of the curve, where tension and anxiety reinforce each other, deteriorating the performance. I for one find myself in this group; after six years of professional freelance activity as a flautist in several orchestras, and being full

<sup>5</sup> Steptoe, "Performance Anxiety. Recent Developments", 538.

<sup>6</sup> Quoted in Steptoe, "Performance Anxiety. Recent Developments", 538.

time employed as principal flute, I do not experience MPA as I used to do as a student. But since unexpected events are among the strongest means of stimulating physiological stress reactions, I adopted a very rigid preparation schedule, in order to leave nothing to chance on the audition or performance day. It's also important to notice that these graphs only show perception and are not a representation of performance level in absolute terms. I have seen many times other flautists thinking of leaving the audition venue before getting the results of the first round because of the perceivedly low level of their performance; however good we might be at assessing performance as professionals, our opinions do sometimes differ from reality, especially when we are experiencing extreme stress levels.

It's also possible to have difficulties at the other end of the spectrum. A musician may feel unable to rise to the occasion, and give dull or flat performances because of lack of excitement. I have experienced this with repetitive appearances during the production of G. Bizet's opera *Carmen*; after 12 rehearsal days and with a total of 12 performances I struggled to generate enough excitement to give a personally satisfying performance. However, generating excitement isn't too difficult. It's possible to foster tension from irrelevant sources in order to improve performance. Looking at the sport world, the example of tennis player John McEnroe<sup>7</sup> comes to mind; when his games were becoming too easy he lost concentration and made mistakes, so he deliberately increased tension by bad temper and social confrontation, in turn shifting his performance back to a higher level.<sup>8</sup>

The link between tension and performance also accounts for the claim of some musicians that they '*need*' a certain level of anxiety, and that some degree of nervousness is crucial to a good show. But this belief comes from the mislabelling of general arousal and anxiety. In fact, the alterations in pulse rate, breathing, muscle tension and sweat gland activity are non-specific and respond equally to anger, anxiety, fear or desire.<sup>9</sup> "The arousal needed for a good performance is not anxiety, but a generalised state of physical and cognitive excitement".<sup>10</sup> An example I can provide from personal experience is my audition for the chair of co-principal flute in the Malmo Symphony Orchestra (MSO) in May 2015, where I followed such a rigid practice schedule during the preparation weeks that I couldn't wait to perform the program and to be able to move on to play something else. During the two auditions days, I was

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7 J. P. McEnroe Jr. (born February 16, 1959) is an American retired tennis player, often considered among the greatest in the history of the sport. He was known for his shot-making artistry and volleying skills, as well as his confrontational on-court behavior that frequently landed him in trouble with umpires and tennis authorities.

8 Steptoe, "Performance Anxiety. Recent Developments", 538.

9 Steptoe, "Performance Anxiety. Recent Developments", 538.

10 Steptoe, "Performance Anxiety. Recent Developments", 538.

actually happy to perform and couldn't wait for the results to come - I didn't win, but I made it to the final round out of 189 candidates!

However, that wasn't enough to land me a job! Analysing what did go wrong, and after talking with the principal flute of MSO, I understood that 99% of my audition was free of problems, and she liked me. I delivered a good, enjoyable performance but at the end of the Carmen Entr'acte (Act III) my long top G was "a little flat". Therefore, nothing can be left to chance. Auditions nowadays are similar to motorsport: the winner is just tenths of a second faster than who gets 2<sup>nd</sup> place and minimal improvements lead to wildly different results, and the rule of diminishing returns is hindering improvements.

But do I differentiate myself from the singers in Steptoe's study?

I decided to act as if I was a test subject of Steptoe's study and gave each occasion (practice, lesson, dress rehearsal, performance, audition) two scores: a score of perceived performance quality from 0 to 14 where 0 indicates the best performance level and a score of tension (MPA) from 1 to 9 where 1 indicates maximum tension and 9 indicates complete relaxation. I experience various levels of cognitive and physical arousal in the settings selected by Steptoe and I mostly fall in line with the results he published. My curve appears slightly different, as shown in the figure below.

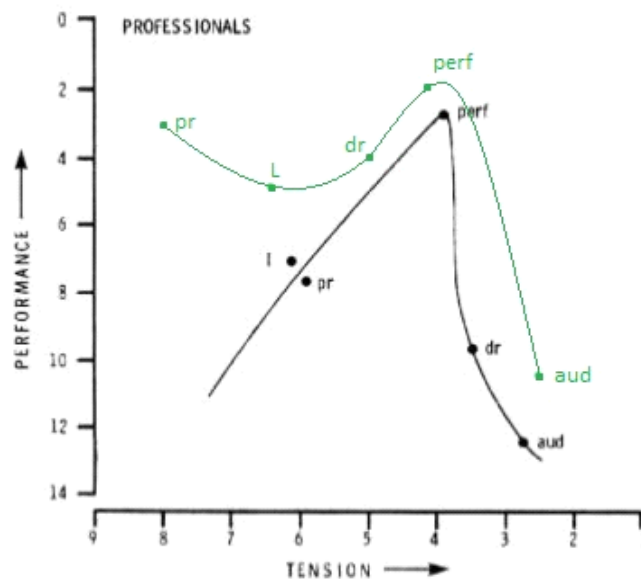


Figure 2. Curvilinear inverted U shaped pattern from A. Steptoe, *Performance Anxiety. Recent Developments in Its Analysis and Management*. The Musical Times, 123 (1974). The green line above expresses my data.

It is interesting to notice how there seems to be an optimum level of tension (between 5

and 4 on Steptoe's scale) required in order to achieve the highest performance scores, after which anxiety becomes too difficult to control and channel and it affects performance quality negatively.

Besides my perception of performing better in lessons and practice, the main observable difference from the singer's curve is the shift in position of the dress rehearsal setting. This could be surprising but it's explainable by taking into account the following two factors:

- I have been taking part in dress rehearsals on a weekly basis for years, so I have gained stress management abilities through **exposure** to the stressor. Exposing oneself to feared situations and stressors seems to be the best way to overcome the anxiety these circumstances cause, hence the difference in curve between me and the singers in the study.

- I normally perform from an orchestral chair. Obviously there are lots of challenges to deal with when playing a first part in the woodwind section (a person might have a bad reed, dry lips, a bad night of sleep and countless other factors that affect the ability to deal with intonation, articulation and sound quality; it's also not rare to have to play exposed *solo* parts where the whole ensemble is listening), but those are not as stressful as the experience of being a soloist like a singer is. Especially in the case of operatic singers, dress rehearsals do have spectators and they are the first performance of a production in front of the public. So I might speculate that the *perf* setting Steptoe is referring to is that of a concert with a well known music program that the soloist is accustomed to perform.

Given the above, I come to the conclusion that addressing cognitive and physical arousal during auditions can lead to making the difference between winning and losing. As an example, comparing two hypothetical players who show equal abilities in the practice room, when it comes to performing in an audition, the person who has been able to achieve better control of PA would perform 10% better than before, while the second player would see a decrease of at least 10% in their performance quality because of stress. Hence the gap between the two players will be much bigger than their actual difference in abilities would suggest.

**1.3 Mental Aspects of Performance Anxiety.** Performing in front of an audience is a really demanding experience, and requires a high degree of concentration. Ideally, thoughts are focused on expressing music, its meaning and emotional value, technique, dynamics, intonation and sound quality. This is what should dominate the mind of the performer, however other task-irrelevant thoughts often intrude our inner speech and disrupt the optimal mindset. Temperature, incorrect lighting, difficult acoustics or even traffic outside the hall can elicit intrusive thoughts – or they may be internally generated. A calm musician should be able to acknowledge those things as irrelevant and

dismiss them without becoming distracted from the task at hand. But performance is threatened if these thoughts are over-intrusive, interfere with concentration and become tinged with anxiety. Concerns about the quality of performance become clusters of anxiety-provoking thoughts. Worries of memory lapses and distraction, concerns about the difficult technical passages of a piece and fear of disapproval and failure can take the lead of the performer's internal dialogue. When this happens, it's extremely difficult to get out of the downward spiral. In the worst cases, intrusive thoughts reinforce each other, dragging the performer into an extreme state of anxiety, generating an almost complete loss of fine motor skills, a trembling embouchure, tense and slow hands and an upset breathing apparatus. "*People with stage-fright have a tendency to catastrophize, or exaggerate in imagination the consequences of a minor mishap. Thus a small mistake will be seen as ruining a whole performance, alienating the audience and critics, making friends or colleagues ashamed and damaging the individual's entire career prospects.*"<sup>11</sup> However, thoughts of this kind are not inevitable. Other individuals may naturally perceive the same incidents very differently (by virtue of nature or by the use of cognitive exercises such as *reframing*), viewing them as challenges and incentives to greater success rather than threats. It is also possible for a performer to switch between the two groups at any time, through training exercises I will explain in detail in later chapters, medicaments such as beta-blockers and through sheer force of will. I have transformed myself from being a trembling and audience-scared student into a professional musician who is mostly able to suppress intrusive thoughts, however I still suffer from physiological stress reactions (mainly a dry mouth). As the objective of this thesis is to understand self-improvement techniques and find ways to better my auditions, I will go on to describe how MPA can be alleviated or resolved.

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11 Steptoe, "Performance Anxiety. Recent Developments", 539.

## Chapter 2

**2.1 Techniques for the Alleviation of Performance Anxiety.** Stage fright may become severe enough to prompt professional assistance. Cases of professional musicians leaving the stage are not as unfrequent as one might think, and can be tied to MPA. Living under a constant state of anxiety and tension can affect individuals to the point that the very action of playing causes negative cognitive and physiological responses, possibly leading to disorders and illnesses such as Muscle Dystonia (MD). Dystonia is a neurological disorder that affects an estimated 1% of professional musicians, mostly male, of which 25% have family members with the same disorder. When MD affects musicians, it's called task-specific dystonia or *focal dystonia* (FD). Symptoms of focal dystonia are involuntary, abnormal twitchy movements occurring in different parts of the body only when carrying out certain actions, such as playing an instrument; embouchure dystonia and hand dystonia are the most common cases among musicians. Causes of the disorder are yet to be fully understood, but small, repetitive and fast movements such as embouchure adjustments and hand movements seem to be a cause for FD; however, "*dystonia is often seen in individuals with psychiatric disorders and/or exposure to psychological stressors*"<sup>12</sup> as well, suggesting a link between MPA and dystonia. It is therefore vitally important to find ways to reduce and control performance anxiety to accomplish success in auditions and achieve a long, fulfilling career in the field of performative arts.

The most rapid way to suppress physiological arousal is with drugs. The use of alcohol and tranquilisers, even though still in use in some environments, can be catastrophic to a performance; although these substances reduce anxiety they also impair intellectual function, which is extremely vital to a successful performance. When a person is under stress, "*the sympathetic nervous system produces adrenaline-like chemicals that attach to beta-adrenergic receptor sites of the body. These sites produce physiological responses in heart rate, skeletal muscles, blood vessels, and bronchioles of the lungs and, in essence, prepare the body for a "fight or flight" reaction*".<sup>13</sup> The group of drugs known as beta-blockers have been found to be beneficial to reduce or eliminate the physiological symptoms of anxiety.<sup>14</sup> By competing with the adrenaline-like chemicals produced by the body, beta-blockers inhibit the sympathetic nervous system ability to

12 "'Functional Dystonia', Dystonia Medical Research Foundation", accessed September 10<sup>th</sup> 2019, <http://dystonia-foundation.org/what-is-dystonia/types-dystonia/functional-psychogenic-dystonia/>.

13 Jacquelyn Slomka, "Playing with Propranolol." *The Hastings Center Report* 22, no. 4 (1992): 13. doi:10.2307/3563017.

14 quoted in Steptoe, "Performance Anxiety. Recent Developments", 539.

produce a *fight-or-flight* reaction and its effects.<sup>15</sup> High pulse rate, excessive tension and tremor, dry mouth, tunnel vision, sweating and nausea are reduced after ingesting the drug.

It's important to notice how beta-blockers do not act at the cognitive level (in fact they are not psychiatric drugs) and yet they can have a big impact on how a performer feels during an audition. Body and mind are extremely connected, and if the body is not sending *fight-or-flight* signals to the brain, the consciousness will also calm down. By eliminating a layer of distraction, the internal dialogue won't be disturbed anymore by intrusive thoughts such as "my hands are tight, I can't breath, my mouth is dry and my sweaty hands can't hold my instrument". Adding personal experience, I have worked for long on my psychological fears, such as fear of not being liked, but I have yet to manage control of physiological reactions to stressful situations. One way of doing so could be the use of beta-blocker drugs.

However, I find there's serious ethical and practical implications to the use of drugs for the sake of performance enhancement. And it's also arguable that the absence of physiological arousal in a performance can be disturbing and detrimental (as explained above: total lack of arousal is considered undesirable by some musicians). Consequently, I will explore alternative ways to develop self-control over physiological and cognitive processes, such as systematic desensitisation, positive visualisation, mock auditions, learning relaxation.

**2.2 Systematic Desensitisation.** One of the methods favoured by clinical psychologists is Jacobson's progressive muscle relaxation.<sup>16</sup> This method teaches relaxation as a skill in muscular control, with secondary effects on the brain through the reduction of sensory inputs. Dr. Edmund Jacobson invented this technique in the 1920s as a way to help his patients deal with anxiety. Still cited today as means of reducing anxiety, and associated with breathing techniques, this is how PMR works:

Set aside 15 minutes to complete the exercise, find a quiet place and remove your shoes. Wear comfortable clothes. If possible, use a reclining chair or lay down on a firm bed or hard surface such as the floor. This can be done right before the example of 3h practice session I provide below.

Take time to notice your posture. Don't correct your position unless it feels uncomfortable, but keep your feet slightly spaced and perpendicular to the ground. Notice how your body moves as you breathe.

While keeping posture as relaxed as possible, apply tension to a specific part of the body, such as the right hand. Focusing on the selected muscle group, take a slow and deep breath as you squeeze your muscles as tight as you can for about 5 seconds. It is important to keep focus on the feeling of tension, which may cause shaking and

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<sup>15</sup> quoted in J. Slomka, "Playing with Propranolol." *The Hastings Center Report* 22, no. 4 (1992): 13.

<sup>16</sup> Steptoe, "Performance Anxiety. Recent Developments", 540.



discomfort. Next, slowly exhale and release tension. Notice how the right hand now feels heavier.

Remain in this relaxed state for about 15 seconds, and then move on to the next muscle group. Repeat the tension-relaxation steps. After completing all of the muscle groups, take some time to enjoy the deep state of relaxation.

This method is in my experience seldom sufficient by itself, but once integrated with cognitive factors it has provided great success in a carefully controlled study of performance anxiety in advanced piano students.<sup>17</sup>

The study's subjects learnt a brief relaxation technique such as PMR, and then constructed a graded hierarchy of progressively more disturbing images associated with performance. A low-ranking item might be entering a concert hall building before an audition, while coming on stage would elicit greater anxiety. Subjects then imagined each situation while carrying out the relaxation technique they've learnt, only ascending the hierarchy when lower items could be imagined without fear.

The combination of relaxation techniques and cognitive visualisation I just described, also known as *Systematic Desensitisation*, was compared with musical analysis and performance rehearsal (ex. Mock auditions) and a no-training control group. Following treatment, the systematic desensitisation group performed at lower perceived anxiety levels, exhibited lower pulse rates and made fewer performance mistakes than the other two groups.

The musical analysis and rehearsal group also showed fewer errors (allegedly due to performance practice effects), but anxiety and physiological responses were the same. I have unknowingly used systematic desensitisation for years thanks to the suggestions of my parents. They are both accomplished classical musicians and when prompted to help me deal with anxiety they have both suggested progressive muscle relaxation as a means of overcoming body tension, and cognitive visualisation to deal with my fears. As a result, I don't feel massive cognitive stress related to auditions at the moment of the performance or immediately before it. However, as stated above, the only instance when I didn't suffer from physiological stress was the Malmo audition (May, 2015), which suggests that systematic desensitisation must be used in conjunction with an extremely strict practice schedule to avoid the flight-or-fight body response.

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17 Quoted in Steptoe, "Performance Anxiety. Recent Developments", 540.

## 2.3 Positive Visualisation

**Visualisation:** *The action or fact of visualising; the power or process of forming a mental picture or vision of something not actually present to the sight; a picture thus formed.*<sup>18</sup>

In recent years, researchers have been studying the power of visualisation as a tool for performance enhancement. Several studies reported on tangible performance improvements depending on visualisation alone<sup>19</sup>, making the act of visualising oneself performing an action a really powerful tool. Logically, visualisation alone is not necessarily positive for a person's performance. Intrusive, negative thoughts (negative visualisation) do have a negative effect on a person's life.<sup>20</sup>

Positive visualisation works by imagining and visualising a life objective or the act of successfully performing a difficult action. For example: imagining the day of the audition, or the moments preceding a performance, and associating positive emotions to the event such as winning said audition. Maintaining a positive attitude towards one's future has been proven to have a substantial influence in performance in general.

Having tried both systematic desensitisation and positive visualisation, I feel they have helped me greatly in reducing MPA and increasing confidence, as well as making my practice more efficient by decreasing negative and intrusive thoughts. In particular, I have tried visualising myself playing the program I am practicing just before falling asleep every evening, and I noticed substantial improvements the next day during practice. I also used this technique in order to reduce MPA associated to auditions by pairing positive thoughts to stressful situations. For example: imagining the day of the audition, or the moments preceding a performance, and associating positive emotions to the event. Some things I find to be positive about going to an audition are the following:

1. I get to see part of a new city or country;
2. I get to meet some friends who live far away and I only see at auditions;
3. I am already doing better than 90% of graduate flautists by just trying to actually

18 Oxford English Dictionary, s.v. "Visualisation", accessed January 31<sup>st</sup>, 2020, <https://www-oed-com.ezproxy.ub.gu.se/view/Entry/224008?redirectedFrom=visualisation&>.

19 Jennice Vilhauer, "3 Effective Visualization Techniques to Change Your Life", Psychology Today, accessed January 31<sup>st</sup>, 2020, <https://www.psychologytoday.com/us/blog/living-forward/201806/3-effective-visualization-techniques-change-your-life>.

20 "New To Visualization? Here Are 5 Steps To Get You Started", Forbes, accessed January 31<sup>st</sup>, 2020, <https://www.forbes.com/sites/bhaligill/2017/06/22/new-to-visualization-here-are-5-steps-to-get-you-started/>.

- get an orchestral job;
4. I get to try my sound in a real concert hall;

These facts helped me reduce MPA associated with orchestral auditions. However, there's a more practical technique which also provides great improvements in fighting MPA: performing mock auditions.

**2.4 Mock Auditions.** Perhaps the natural follow-up to systematic desensitisation, mock auditions are a great tool to improve self control under stress. During my studies at the University of Gothenburg, I have taken part in nine mock auditions as part of the curriculum (six during the master in symphonic orchestra performance and three more during the interpretation for orchestral instrument semester, which I attended just before relocating to Finland) with the aim of being able to satisfyingly perform in front of a screened or unscreened jury, but also to get used to MPA. I found these exams to be very useful in learning to quickly prepare a set program and I also noticed my MPA decrease over time. So I got into the habit of regularly performing in front of other musicians, friends and colleagues whenever possible, and I often also played orchestral excerpts I had not seriously practiced beforehand in order to better control MPA. As a matter of fact, I've seen a decrease in performance anxiety in real auditions as a result of this experimentation. My understanding is that voluntary exposure to certain stressors can reduce the physiological response to the stressor itself, basically normalising stressful situations.

**2.5 Stress Managing techniques.** In the life of the auditioning musician, stress related to the intrinsic nature of the profession can become overwhelming, also outside of the practice room. I sometimes allow negative thoughts to dominate my inner dialogue, but I found help in the above mentioned techniques (such as positive visualisation). However, there are more tools available to deal with stress that are not connected to musical practice, but have been proven effective in several studies<sup>21</sup> in recent years. Following are three strategies to reduce stress I selected that improved quality of my practice and performance.

- **Reframing:** When dealing with a stressor or a negative emotion (such as fear of failure, low appreciation of our own playing, unsuccessful previous auditions and competitions) it is easy to get wrapped in negativity. Reframing is a mental

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<sup>21</sup> Ryan Niemiec, "10 New Strategies for Stress Management", Psychology Today, accessed October 10<sup>th</sup> 2019, <https://www.psychologytoday.com/intl/blog/what-matters-most/201701/10-new-strategies-stress-management>.

activity that involves taking a negative emotion or stressor and explaining it to oneself, or looking at it through a different angle. For example, by using critical thinking to reframe a past unsuccessful audition we can see many of its positive aspects, despite its negative outcome:

- all the practice time used to prepare that audition is still ours, we learned the repertoire the best we could at the time and overall improved our playing and ability to prepare a program (next time those pieces will come up, we will be at an advantage because of our previous practice);

- we have faced our fears and travelled to the venue, walked on stage and performed at the best of our abilities, gaining experience. Analysing what went wrong and taking action to fix it gives us a new objective, since there is no improvement without failure. As human beings, experience is vital in our learning process: the circle of experiencing an event, analysing the outcomes and coming up with new solutions is at the base of all human progress. As much as failure provides us with negative emotions, not facing our problems cannot lead to self improvement.

- **Planning:** having a schedule, mental or (even better) written down lifts us from the burden of seemingly monumental tasks such as preparing big auditions (20+ excerpts). Waking up in the morning and having a detailed practice plan to follow will keep our mind busy and less prone to producing negative thoughts. Assessing the level each excerpt is at and dividing the practice time accordingly is key to achieving the best possible performance, without feeling overwhelmed by the amount of music we have to play especially when having to prepare long programs in a short time. Wasted time will be massively reduced, and we will experience a sense of pride and accomplishment from hitting our daily goals, perhaps starting a virtuous cycle. In other words, the brain is a simple machine, and it must be fed simple, practical problems to solve.

- **Developing a forgiving style:** According to the New York based online magazine Psychology Today:

*The strength of forgiveness has been shown to have a powerful buffering effect on stress. Those who are highly forgiving of themselves and others have a far less chance of having a mental illness. One team of researchers, led by Loren Toussaint, explains that forgiveness takes the bad connection between mental illness and stress and makes it almost zero. Without forgiveness, we experience stress in a more raw, unblocked way".<sup>22</sup>*

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22 Psychology Today, "Ten New Strategies for Stress Management"

Translating this concept to one's playing means trying to be more accepting of one's own mistakes and shortcomings and acting like an adaptive perfectionist rather than a maladaptive one. I used to beat myself up over small mistakes and imperfections, experiencing a great deal of stress which was preventing me from finding the solutions I needed to improve myself. I also had to understand that forgiveness does not equal to approximation, and that in order to gain the most from it I had to maintain a very attentive and critical attitude towards my playing. The most noticeable difference in my practicing, after adopting this method, is that I take mistakes as an opportunity for improvement rather than a setback: using this different approach has helped me be more productive in my practice sessions, as the attached video recordings show. Now when I make a mistake I take a breath and start over, instead of getting annoyed at myself, and I more easily relax and improve.

## Chapter 3

### Technical Exercises

**Introduction.** After exploring some of the available cognitive methods of dealing with MPA, I reflected on possible practical methodologies to apply to my own practice. Firstly, I identified three main issues that are, in my opinion, the foundations of flute playing: sound, finger accuracy and articulation. Then I came up with specific exercises aimed at improving each one of the mentioned issues. It is in fact important to notice that self-confidence is tightly linked to several of the problems a musician can face in their career, and that finding ways of improving it is vital to a performer's well-being. Musicians face constant criticism (positive or negative) from audiences, colleagues, panels in addition to having to deal with their own personal expectations as artists. Obviously, each musician has to find a way of constantly feeding its own confidence in order to be able to weather critics and survive in their profession. What I have found is that refining my own technical playing, therefore performing with less imprecision and mistakes, is what allows me to experience the most self-confidence. Following is an explanation of several technical exercises I have used for dealing with each of the above mentioned issues.

**3.1 Sound Quality.** In order to help flautists study and improve sound, legendary performer and pedagogue Marcel Moyse published a book of exercises titled *De La Sonorité*<sup>23</sup>. I identified five exercises that work best for my problems and modified my routine to include them at the start of my practice sessions. These exercises are focused on improving quality of sound, as well as flexibility through different registers, and are appropriate for obtaining homogeneous air emission especially in passages such as *Prelude à l'après midi d'un Faune*<sup>24</sup> and *Daphnis et Chloé*<sup>25</sup>. The exercises go as following (Video1):

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23 Marcel Moyse, *De La Sonorité* (Paris: Alphonse Leduc, 1934).

24 Cristoph Dürichen and Siegfried Kratsch, *Orchester Probespiel* (Frankfurt: ed. Peters, 1991), 8.

25 C. Dürichen and S. Kratsch, *Orchester Probespiel*, 18.

Music example 1. Moyses, *De la Sonorité*, exercise number 1.



Respiration expressive, son clair, bien lié  
*Expressive breathing, clear tone, legato*  
 Ausdrucksvolle Atmung; klarer, gut gebundener Ton

Progressively extending the width of the intervals (figure below) while still repeating each interval twice (Video2). Repeating the intervals is important because it gives the player the chance of fixing possible mistakes right away.

Music example 2. Moyses, *De La Sonorité*, exercise number 3.



And then moving up the registers (Video3) as notated in the figure below (music example 3). I only play the first four bars.

Music example 3. Moyses, *De la Sonorité*, exercise number 1bis.

A travailler dans une nuance *mf*, | To be practised *mf*, with a full, broad | *mf* zu üben; grosser, breiter Ton.  
 son ample, large. | tone.

Once I went through these exercises with the most attention, I moved on to practicing embouchure flexibility using the following etudes.

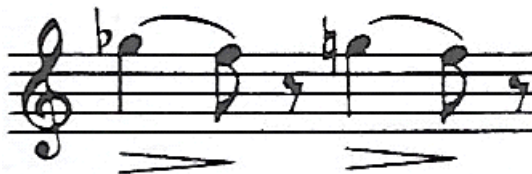
Starting on the note C and hitting every note above it, chromatically (C-Db, C-D, C-D#...) (Video4, where I start the exercises from note F)

Music example 4. Moyse, *De la Sonorité*, exercise number 1, attack and slurring of notes.



Then doing the opposite (Video5, where I start from note Gb), all the way up to C7.<sup>26</sup>

Music example 5. Moyse, *De la Sonorité*, exercise number 3 attack and slurring of notes.



As shown in the recordings of me practicing *Daphnis et Chloé* (Video 6 and Video 7), where I apply the above exercises to the initial scale and first two bars of the excerpt (Video 8), *De La Sonorité* grants us a way to improve stability of sound colour, as well as intonation and overall tone quality. Furthermore, when hitting the "sweet spot", I need less air to produce a nicer sound, which means being able to close the distance between what I would like to accomplish phrasing-wise and what I am able to do with one breath. This also helps in executing Ravel's *expressif et souple* (expressive and flexible) indication at the start of the excerpt.

Music example 6. M. Ravel, excerpt from *Daphnis et Chloé Suite no. 2* (Dürichen and Kratsch, *Orchester Probespiel*, 18).

<sup>26</sup> I will follow the International Standards Organization (ISO) system for register designations. In that system, middle C (the first ledger line above the bass staff or the first ledger line below the treble staff) is C4. An octave higher than middle C is C5, and an octave lower than middle C is C3.



As written above, Moyses's exercise also applies to *Prelude à l'après midi d'un Faune* (Video 9, music example 7). By using this method I can relax my throat muscles and find the correct way of playing each note, with the best tone I can produce and in *legato*. It is interesting to notice how relaxation links to sound quality in flute playing, as well as intonation and breath capacity (Video 10 after practice). It seems that the more relaxed I am the longer phrases I can play, with a better sound and more control over interval width.

Music example 7. C. Debussy, excerpt from *Prelude à l'après midi d'un Faune* (Dürichen and Kratsch, *Orchester Probespiel*, 8).



**3.2 Finger accuracy.** Certain excerpts include particularly difficult successions of notes. When researching how to resolve certain passages so that I can play them "on demand" and with confidence, rather than depending on luck and external factors, I understood that identifying the root of the difficulty is the first step towards solving my problems. Excerpts such as *Sinfonia Domestica* by Richard Strauss<sup>27</sup> (Video 11, music example 8) are very difficult to play because they include fast successions of notes that require so called "fork fingerings", highlighted in the picture below. To achieve a clear execution, this excerpt requires perfect hand control: no finger should be later or earlier than the others, or the resulting effect will be the loss of sound as shown in the Video 12.

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27 Dürichen and Kratsch, *Orchester Probespiel*, 27.

Music example 8. Richard Strauss, excerpt from *Sinfonia Domestica* op. 53 (Dürichen and Kratsch, *Orchester Probespiel*, 27).

In order to fix this problem, I resorted to "fast-slow" practice, as well as practicing scales in thirds (especially in the flute's third octave, intervals of thirds are played with fork fingerings). Fast-slow practice consists of executing a passage with dotted rhythms as shown in the Video 13.

It's interesting to notice how effective this method is. After just under a minute of fast-slow practice I was able to solve the technical problem and perform the passage in a satisfactory way (Video 14 and 15). My understanding is that for our nervous system there is no difference in executing the excerpt at its tempo or with the dotted rhythms (as long as the dotted notes are played for their whole length), in fact my hands do the exact same movements, at the same speed, but there is more time for my brain to "organise" the action between each "packet" of notes. I think this exercise helps to reduce confusion and clarify the movements we have to execute, which leads to really noticeable improvements once the melody is played once again at its original tempo and rhythm.

**3.3 Articulation.** Tonguing, or articulating a passage in the correct way, presents a series of challenges. First of all: how short should a note be, in order to sound at the right length for a listener twenty, thirty or even a hundred meters away from the performer? How can I play *staccato* with the same sound I can achieve when playing *legato* in

excerpts such as *Voliere* from Camille Saint-Saëns' *Carnival of the Animals*?<sup>28</sup> A way of improving articulation control is to practice exercise no. 7 from P. Taffanel and Ph. Gaubert's *Grandes Exercices Journaliers de Mécanisme pour Flute*<sup>29</sup> as shown in the Video 16.

Music example 9, Taffanel and Gaubert, *Grandes Exercices Journaliers de Mécanisme pour Flute*, exercise number 7.



By practicing this etude slurring two notes and articulating the successive two I am able to study the sound of the middle register (rather difficult to play with the same depth as the low register or brightness of the high register) while at the same time training my tongue to be faster and more precise. After noticing improvements coming from this exercise, I decided to apply the same thought process to *Volière* (music example 10, Video 17).

Music example 10, C. Saint-Saens, excerpt from *Carnival of the Animals*, *Voliere*.

Moderato grazioso [♩ = 84]

20 DUTCHEN AND NITSCH, *ORCHESTER FLOUESPIEL*, 25.

<sup>29</sup> Paul Taffanel and Philippe Gaubert, *Grandes Exercices Journaliers de Mécanisme pour Flute* (Paris: Alphonse Leduc, 1923), 28.

By slurring the first two notes of each quadruplet (Video 17, music example 11) I manage to relieve my tongue from half the work it would have to sustain by articulating all notes, while still practicing the main difficulty of the excerpt.

Music example 11, C. Saint-Saens, excerpt from *Carnival of the Animals, Voliere*.



At first sight, in fact, one might think that the challenge of performing the *Voliere* lies in its fast articulation, but I think being able to highlight the jumps between octuplets is what makes the difference between good and great in this excerpt. A clear execution requires these intervals (C-G, F-D, C-G, F-D) to be crystal clear and I discovered that by practicing this detail I collaterally improved the overall articulation greatly (video 17, ending). Perhaps this is another example of the need to clarify difficult passages and avoid indecisions and small hesitation, rather than finding an actual mechanical limitation in my body.

## Chapter 4

**4.1 Developing a method of preparation.** After addressing the psychological and physiological sides of MPA discussed above, as well as the technical exercises I used to improve my playing, there is another way of dealing with nerves and self improvement. Specifically, my experience tells me that my level of anxiety during a performance decreases proportionally to the time I have spent studying the program. Furthermore, addressing and calming the anxiety I experience during the preparation period becomes easier the more prepared I feel; the more I study and reach my daily objectives, the more confidence I build up leading to the audition day. Obviously there are still random factors that can affect a performance (lack of good sleep, fatigue due to long travel times and health conditions are out of our hands for the most part), so we must do the best we can to mitigate the negative effects of those random occurrences through practice. In order to try and receive more gratification from practice, and after learning the importance of planning and structuring sessions, I came up with the following scheme. This is an example of 3h30m practice schedule I used:

- 20 minutes technique exercises (scales, long tones, harmonics, ...);
- 25 minutes Mozart concerto<sup>30</sup>, play through and practice exposition or development of the first movement alternating every day;
- \* 15-minute break \*
- 45 minutes playing through the list of excerpts, separating the ones that need to be worked on from the ones that are already sounding good;
- \* 15-minute break \*
- 45 minutes working on the excerpts selected earlier to fix difficult passages;
- \* 15-minute break \*
- 30 minutes, play through "good" excerpts again and take notes on what to do the next day;

Sticking to this plan has provided me with great results, consistently reaching the final

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<sup>30</sup> The two Concerti written by W.A. Mozart for flute and orchestra (K313 and K314) are part of the standard audition program for flautists. Normally, an audition program will include the first and second movement of one of these concertos to be performed in ensemble with a pianist, as well as a list of orchestral excerpts from the standard repertoire.

round in almost all the auditions I have taken part in in the last three years. I find that combining the techniques of reframing and positive visualisation with practice, it is possible to start a self feeding positive cycle that will improve practice time by a sizeable margin.

- Reframing (I'm not only going to perform, I will see a town I've never been to before);
- Positive visualisation (I am going there to realise my ambitions and dreams);
- Finding recordings of the repertoire that inspire me in a positive way (I want and will be this good vs I will never be able to achieve this);
- Separating sheets with "good" and "bad" excerpts, seeing the "good" pile grow every day (seeing the fruition of our work);

In order to maximise preparation, I have combined the above methods to mock auditions. Playing in front of friends, colleagues or loved ones can induce the same fight-or-flight body response as stepping on a real stage, and it is a useful tool to check at what stage of readiness a musician is at in a given moment. It is, in fact, common for musicians to experience the feeling of performing at a level lower than their average once they experience MPA and to think the cause of their imperfect performing is just the nerves. I, however, realised this is not entirely true.

While anxiety certainly has an effect on performance, it is not entirely negative and it can only show at what level of preparation really one person is. In fact, since MPA cannot and should not be completely eliminated but rather controlled, a musician should practice up to the point of being so well prepared that MPA does not represent a force strong enough to dominate their mind. In my experience, mock auditions are a really good tool to find out at what stage I am in my preparation. The insurgence of MPA in a controlled environment helps me make the mistakes that would otherwise happen in an audition, before the real performance arrives. I can then assess what needs to be practiced better and act accordingly.

Besides scheduling and mock auditions, I have studied and tested other ways to better my overall audition readiness and found, also by talking to colleagues who have sat in audition panels, that a major factor separating most good players from the best ones (who actually win auditions) is the degree of knowledge of the basics of their own instrument playing. Due to the way music is taught (often starting with the study of

sound and scales at an early stage and then moving to etudes, difficult repertoire and orchestral excerpts) it is not uncommon for students at the master level and young professionals to only maintain one or two warm-up exercises in their routine. Only the most thorough musicians keep on practicing the very basics of flute playing. I made this mistake in the past few years, especially whilst being Principal Flute in the Jyväskylä Symphony Orchestra, when I had to play and perform a lot and felt "in shape": by only practicing a few scales as a warm up exercise, I did not realise I was "surviving" on what I learnt before becoming a professional and actually somewhat eroding at my skills. It all became obvious at the end of my contract: once I didn't **have** to play hours and hours every day and I slowed my life down, the absence of base study became all too obvious with loss of sound quality and embouchure control, as well as more difficulty in executing really demanding technical passages. Therefore, I did what my previous teacher Patrick Gallois once told me: "once you feel like you can't play anymore, go back to what you did as a child". The technical exercises explained in Chapter 3 focusing on sound quality, finger accuracy and articulation are the things I have found to be most helpful and appropriate towards combating MPA and being prepared enough to not let MPA take over. In fact, studying the technical details of an excerpt and the *finesse* of flute playing is, in my experience, something that enables not only a higher level of performance but also higher confidence at the end and during the preparation period.

## Conclusion

The fundamental outcome of this thesis is that I changed my attitude towards preparation of an audition program and being a musician in general. The methodologies I have found to be most useful have mainly been the practical ones such as the mock auditions and technical exercises, although positive visualisation has also provided me with benefits, as expected after reading about previous research by other authors.

On the contrary, PMR and the methods described in chapters 2.2 and 2.5 such as Systematic Desensitisation, having a forgiving style as well as planning and reframing, have had the least impact on me, however I cannot exclude they could serve as important tools for other musicians looking to improve their way of dealing with MPA. In fact, I cannot express complete approval or a specific preference for any of the methodologies explored during the writing of this thesis. Since I constantly change the way I play and practice and my state of mind varies by the hour, there is not one specific method I can use to combat MPA or better prepare myself. Indeed, it seems that a combination of several methodologies that change overtime can represent a good way of dealing with MPA and effective practice, and that a musician must explore said methodologies on its own in order to be able to identify what is best to use in given circumstances.

In retrospect, before I started writing this thesis my practice was fairly disorganised and too dependent on chance rather than being structured and sharply aimed towards clear goals. In fact, not structuring my practice meant I needed much more time than I do now in order to fix difficult passages, to improve my sound and even to understand how to interpret a piece of music in a convincing way. I did not even know what it actually means to be convincing, even though this has been a concept often talked about during my masters at individual lessons, mock auditions and sectional rehearsals. I now think I understand this concept: the most important thing about being "convincing" is that one should be convinced. Being convinced of what you are doing, being able to defend your interpretation and to be truly satisfied of your own playing is the first step towards convincing someone else that you are a good colleague, a good and intelligent musician. In fact, when playing in front of a panel or any audience, a true musician has to present something: an interpretation. Perhaps the only way of achieving a good interpretation is to take responsibility for what we do, because that means looking at music through a different lens: we must deeply understand the score, have a profound understanding of ourselves and what we choose to express during a performance. This realisation changed everything because it seemed obvious to me that I was never going to achieve what I set myself to do without freeing myself of self-doubt and stress, without structuring my practice to be as efficient as possible to avoid fatigue and have enough time to bring every excerpt to the desired level of interpretation. Hence this thesis came to be. Specifically, the technical exercises in chapter 3 and their application onto



excerpts has opened my playing to new possibilities. I have found that using dotted rhythms and practicing articulation and sound using the exercises found in Taffanel & Gaubert and Moyse's books has a great effect on practice efficiency, which is then reflected in a reduction in MPA. The technical improvements can be heard in the attached video recordings: those methods often immediately solve technical problems. In addition, having well practiced and understood a difficult passage will mean that when MPA occurs one can still perform well as the passage has been profoundly memorised.

It was especially illuminating to understand the psychological and physiological functioning of MPA, and then exploring ways of coping with it, since MPA and practice are so tightly connected. All the methods I mentioned in chapter 2 benefited me at different levels. For example, PMR linked with positive visualisation has helped me release tensions before and after practice sessions, as well as making me have a better attitude towards auditions. Mock auditions have been useful towards building a stronger control of MPA, however the most beneficial thing for me has been the act of regularly performing in front of someone rather than analysing their personal opinions afterwards.

Ultimately, as I wrote in the introduction, perfection is not enough because delivering a high level performance is not about perfectly playing an instrument, but using every tool at our disposal to present what Claudio Monteverdi called *affetti*<sup>31</sup>. A professional musician worth their name must convey emotions to the audience and gift the listeners with a moment that if not unforgettable should be at least memorable. At that point, choosing a person over another for an orchestral job becomes little more than a matter of taste. That is, something out of the realm of what a performer can control and therefore irrelevant.

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31 Renowned Italian musician and composer Claudio Monteverdi (1567-1643), his Theory of Affections influenced music composing till today. Monteverdi believed that vocal music had to express human affections or emotions through text rather than harmony, and that the harmony of a piece should follow the emotions portrayed in the text.

## Bibliography

- Barbeau, A.K. 'Performance Anxiety Inventory for Musicians: A New Questionnaire to Assess Music Performance Anxiety in Popular Musicians'. McGill University, 2011.
- Bhali, Gill. 'New To Visualisation? Here Are Five Steps To Get You Started'. Forbes. Accessed 31 January 2020. <https://www.forbes.com/sites/bhaligill/2017/06/22/new-to-visualization-here-are-5-steps-to-get-you-started/>.
- Dürichen, Cristoph, and Siegfried Kratsch. *Orchester Probespiel*. Frankfurt: Peters, 1991.
- Dystonia Medical Research Foundation. 'Functional Dystonia', 10 September 2019. <http://dystonia-foundation.org/what-is-dystonia/types-dystonia/functional-psychogenic-dystonia/>.
- Moyse, Marcel. *De La Sonorité - Art Et Technique*. Paris: Alphonse Leduc, 1934.
- Niemiec, Ryan. 'Ten New Strategies for Stress Management'. Psychology Today, 10 October 2019.
- Slomka, Jacquelyn. 'Playing with Propranolol'. *The Hastings Center Report* 22 (August 1992): 13–17. <https://doi.org/doi:10.2307/3563017>.
- Stephoe, Andrew. 'Performance Anxiety. Recent Developments in Its Analysis and Management'. *Musical Times Publications Ltd.*, no. 123 (August 1982): 537–41.
- Taffanel, Paul, and Philippe Gaubert. *Grandes Exercices Journaliers de Mécanisme Pour Flute*. Paris: Alphonse Leduc, 1923.
- Vilhauer, Jennice. 'Three Effective Visualisation Techniques to Change Your Life'. Psychology Today. Accessed 31 January 2020. <https://www.psychologytoday.com/us/blog/living-forward/201806/3-effective-visualization-techniques-change-your-life>.