Dyslexia & Music

Research Documentation Project

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Background

Having being diagnosed with dyslexia in my second year of my undergraduate degree I have continuously battled with learning and memorising repertoire. I have tried numerous learning strategies to combat some of these issues more effectively and efficiently. This includes various issues with memorising music (a common dyslexic trait) for public performances, recitals, performance classes, full-scaled operas and having to learn a large amount of music in a short period of time.

I am continuously trying to develop and mature my learning strategies and ideas through the use of colour coding, highlighting, picture graphs, colours, images, shapes, slideshows, shapes, recordings, recording lessons, adding structure to a piece or role and visual aids such as slide shows and memory charts which include my own key charts and drawings (usually coloured shapes around particular words and notation). I will include my strategies and my findings within my own research identifying the pros and cons and what worked better.

My research will mainly focus on singers with dyslexia; this will incorporate the obvious barriers faced by most, which includes:

- Dealing with reading and singing languages such as English, German, French, Italian, Russian and Czech and how we overcome certain problems that many people with dyslexia face.
- Using phonetics, does this improve the reading of text or does it become more problematic if the text is difficult to begin with.
- Reading music.
- Sight-reading text and music.
- Memorisation/memory short and long term.

- Interpretation and performance (including all the factors listed above) and how as musicians we over come it.

I intend on interviewing other singers and instrumentalists to research their own practice and memorising methods and strategies. Eventually I will incorporate their ideas within my own practice to explore whether this has a negative or positive effect. There are of course many forms of dyslexia and my research includes those who have different forms and those that don't suffer from dyslexia at all.

I am also intrigued not only by singers with dyslexia but also how instrumentalists cope with learning new repertoire. I am interested in whether they could give any insight on both their practice and memorisations, inevitably helping singers explore new learning strategies.

What is dyslexia?

Dyslexia has many different forms some of which are still not fully understood to this day; research into the condition still continues. However, dyslexia as we know it was first described and documented in 1896 by W. Pringle Morgan, a British ophthalmologist who referred to:

> '…a fourteen-year-old boy named Percy, who despite receiving seven years of "the greatest efforts…to teach him to read," could read and spell only at the most basic level, even though his schoolmasters believed he "was the smartest lad in the school."'[1]

Dyslexia therefore doesn't mean that the individual is illiterate, cannot diverse in intellectual conversations and peruse an academic career with a prosperous future but that a dyslexic's brain works very differently to their counterparts, the non-dyslexic brain.

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[1] Dr. Eide, B.L & Dr. Eide, F.F. 2011. *The Dyslexic Advantage: Unlocking the hidden potential of the dyslexic brain* Great Britain: Hay House UK Ltd (p. 7)

For example even though a dyslexic brain faces certain obstacles some of the most influential people in history have overcome these in their own ways and carved fantastic careers that have influenced the world as we know it today. These include people such as[23]:

- ❖ Richard Branson (Virgin Owner and Entrepreneur)
- ❖ John Lennon (Singer & Songwriter)
- ❖ Albert Einstein
- ❖ Leonardo da Vinci
- ❖ Stephen Spielberg (Film-maker & Director)
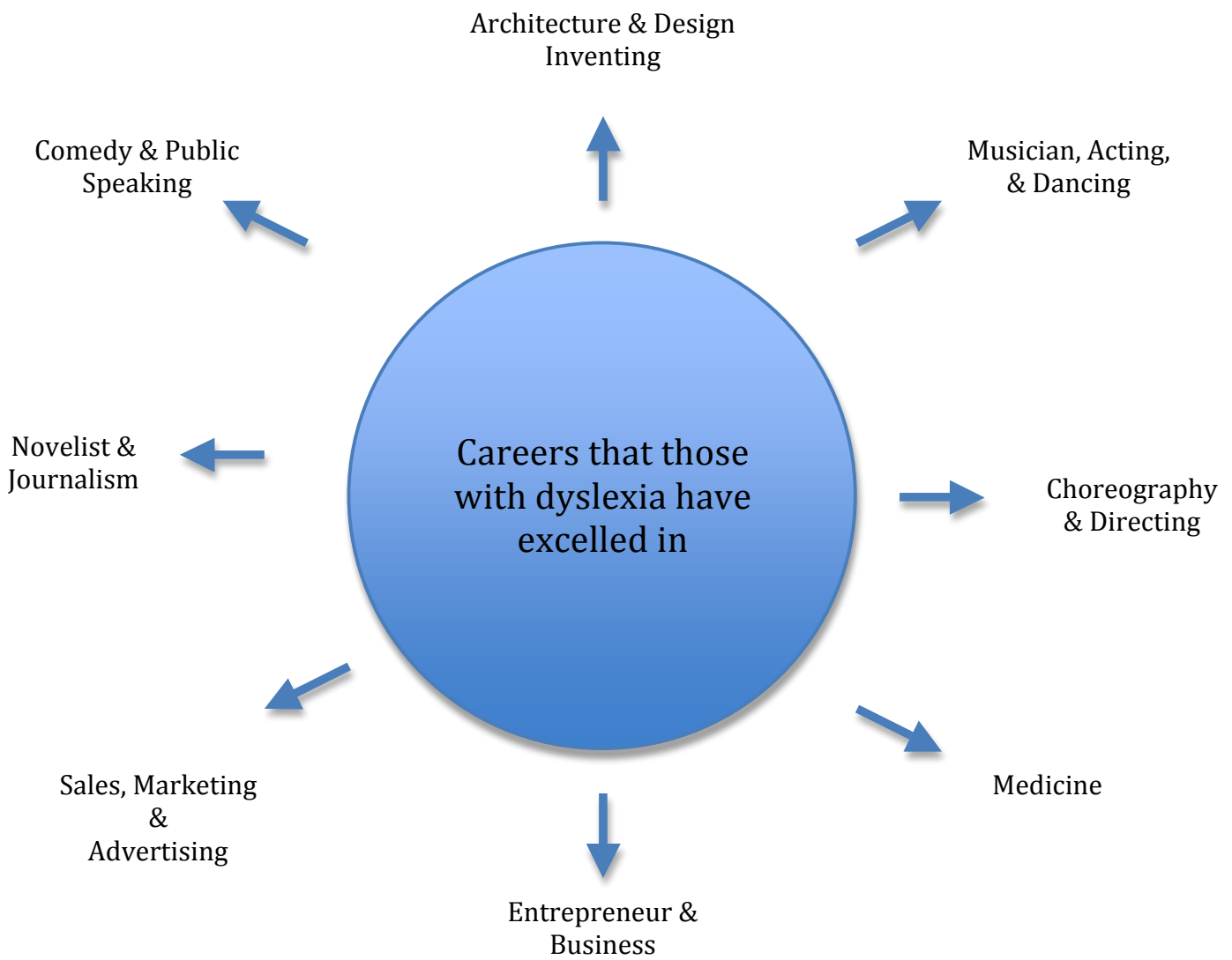- ❖ Pierre Curie (Physicist & Nobel Prize Winner)
- ❖ John Britten (Inventor)

Evidently this just proves that dyslexia isn't a disability or learning difficulty by any means but that the strength's of the individuals are used to their best advantages and heighten within their chosen field whether it be design, business, music or medicine.

Many dyslexic people relish in different fields depending on their type of dyslexia. For example some are proficient at problem solving and deciphering complex patterns, others are skilled and talented in a narrative and creative content and alternately some are practical and exceptionally good with their hands.

Below is a small diagram listing some of the careers that those with dyslexia have excelled in:

2 Dr. Eide, B.L & Dr. Eide, F.F. 2011. *The Dyslexic Advantage: Unlocking the hidden potential of the dyslexic brain*, Great Britain: Hay House UK Ltd (p.4)
3 FAMOUS PEOPLE WITH THE GIFT OF DYSLEXIA. (no date) [Online] Available from: www.dyslexia.com/famous.htm (accessed 2/04/2014)

Architecture & Design
Inventing

Comedy & Public
Speaking

Musician, Acting,
& Dancing

Novelist &
Journalism

Careers that those
with dyslexia have
excelled in

Choreography
& Directing

Sales, Marketing
&
Advertising

Medicine

Entrepreneur &
Business

Opinions about dyslexia

After conducting an interview with a non-dyslexic student and some verbal conversations with other non-dyslexic students the generalisations around what dyslexia is, was that it was difficulties with reading words, letters and configuring symbols in the right order[4]. Although there is a lot of truth in this, dyslexia is far more complex and broader which doesn't necessarily revolve around the written word, though of course in many studies this is the case.

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[4] Appendix A: Interview with Fiona Flynn

Forms of dyslexia

As mentioned previously there are many forms of dyslexia and it affects every individual differently. Reading and writing are perhaps the two key factors to dyslexia. The trouble with reading for someone who has dyslexia is being able to construct, arrange the sounds of the words correctly and absorb information.
Writing is much the same, however it's usually constructing the sentence in right order, spelling and being able to write down ideas and thoughts onto paper; logically this is usually a reason why dyslexics can make accomplished public speakers because they can verbalise their ideas more comfortably and freely without the apprehension of having to write it down.

Even though verbalising ideas tends to be more comfortable for dyslexics, the long and short-term memory is usually effected. This doesn't just include memorising words for a script for public speaking but processing new information quickly, giving and taking directions and problem solving.

Processing information and problem solving are just a few of the symptoms of dyslexia and there are other elements that can affect individuals, these include:

- ❖ **Sight**: Letters can move on the page and vision can be impaired by the text going blurry.
- ❖ **Coordination**
- ❖ **Multitasking**
- ❖ **Taking notes and copying** efficiently and quickly
- ❖ **Organisation and Time Management**
- ❖ **Mispronouncing words and sounds**
- ❖ **Directions**- differentiating left from right

This doesn't mean that being dyslexic is a disadvantage; in fact research has proven that those with dyslexia 'use their right hemisphere very differently from their nondyslexic peers'[5] and that 'a different pattern of brain

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[5] Dr. Eide, B.L & Dr. Eide, F.F. 2011.*The Dyslexic Advantage: Unlocking the hidden potential of the dyslexic brain* Great Britain: Hay House UK Ltd (p.7)

organisation and information processing that creates strengths as well as challenges.'[6]

The difference between the right side of the brain and the left differ quite dramatically and the way either sides of the brain process and organise information. The example below taken from the website 'The Brain Made Simple'[7] shows the differences between the left and the right sides of the brain:
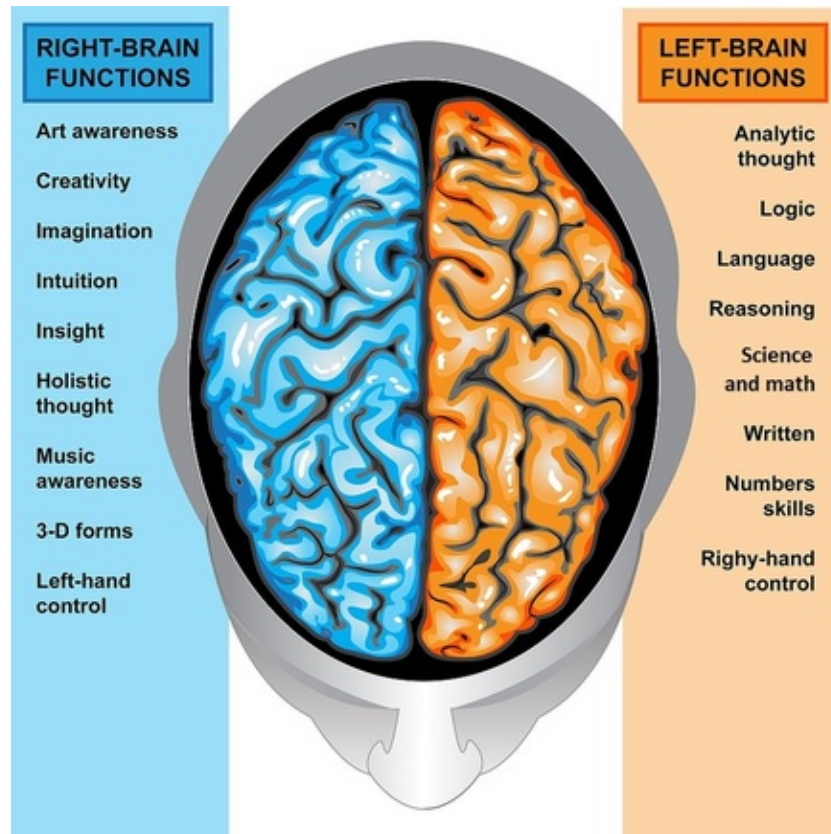
This diagram shows that the right side of the brain is more likely to use visual, creative and imagination to process and extract information, which has less logic and reasoning. This isn't to say that dyslexics cannot reason or use logic but that the mechanisms, processing and speed of the brain arrange new information differently. Dyslexics usually use a narrative context (includes the creative, imagination, insight and artistic parts of the

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[6] Dr. Eide, B.L & Dr. Eide, F.F. 2011. *The Dyslexic Advantage: Unlocking the hidden potential of the dyslexic brain* Great Britain: Hay House UK Ltd (p. 171)

[7] LEFT AND RIGHT HEMISPERES- MADE SIMPLE (no date) (Online) www.brainmadesimple.com/left-and-right-hemisperes.html (accessed 4/4/2014)

brain) or dwell on both physical and mental experiences to absorb and process new information[8]; something could I use more regularly within in my own practice and work.

My Dyslexia

Having dyslexia since my second year of my undergraduate degree I have created and found strategies to help with learning, memorising, processing new information and developing my reading and writing skills.

I have always struggled with words and numbers and trying to separate particular sounds of words when speaking out loud or reading to myself. Using these strategies has improved my own personal development and become less challenging. However it still does cause some problems especially when having to speak or perform text out loud for the first time.

I also found that occasionally my vision is impaired when reading music scores. It becomes blurred and the text and music move around on the page. I have again developed my own strategies to cope with this and I also have prescribed glasses to help with any visual difficulties or strains.

Another part of my dyslexia is the speed in which I can process and understand new information. As a young child I have always had a slight delay, my teachers generally thought it was because I was a little slow on the uptake but in fact it was part and parcel of my dyslexia. For example when a tutor first gives a task or I am simply receiving new information there is around a five to ten second delay before I can process and try and understand the information being given. Part of the delay is usually because the way the brain processes it, sometimes it's because the way the tutor delivers and communicates the

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[8] Dr. Eide, B.L & Dr. Eide, F.F. 2011. *The Dyslexic Advantage: Unlocking the hidden potential of the dyslexic brain* Great Britain: Hay House UK Ltd (p.123-126)

information or simply that information needs to be repeated, as short-term memory is poor.

These aren't the only reasons why my processing speed is slower, but part of having dyslexia is the fact we use a different part of the brain, as mentioned previously. Using the other side of the brain means that our problem solving mechanisms are different and that depending on the kind of dyslexia an individual has problem solving can cause small barriers such as:

- ❖ Too much information can overload the brain that inevitably causes panic and the information then becomes jumbled and unclear.
- ❖ Problem solving usually takes someone with dyslexia twice as long, resulting in a lengthily process.
- ❖ Vague short-term memory.
- ❖ Most with dyslexia record and document as much information as they can on paper in case they forget or misinterpret something. However, too much information on a page causes confusion and the brain is unable to process the notes taken. This usually happens when a document isn't evenly spaced, there is no colour paper and black text is printed on a white background.

Other parts of my dyslexia, which I have briefly touched upon, are my short and long-term memory. If information is given too quickly I often miss it or if information is given in such a way that I feel overloaded I can neither remember it or process it.

Although there are still a few issues that still need to be developed and addressed I have overcome certain aspects, which in turn have turned into strengths. Listed below are my strengths and my weaknesses that I have either overcome, developed or are currently a work in progress.

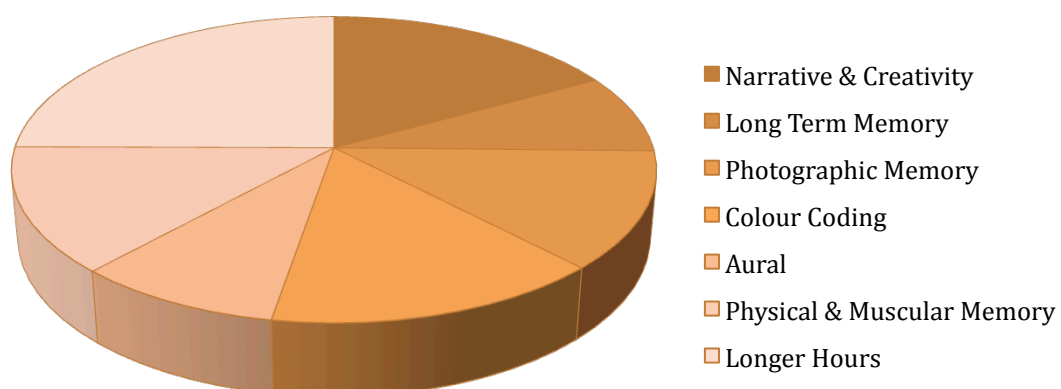# Strengths and weaknesses

Strengths

- ❖ **Long-term Memory**- once something has gone into my long-term memory it usually stays for a long period of time. I can usually re-visit something and my brain remembers the majority of it.
- ❖ **Narrative & Creativity** – using narrative to create a story for writing, reading and for memory purposes (visual imagery).
- ❖ **Photographic Memory**- this is usually enhanced by the colour coding work that I do both on my scores and in my written work. I also use pictures/photographs to create a slide show for a piece of text, script or aria to create a story line that aids me in my memorisation.
- ❖ **Colour Coding**- simply printing work or music off on a coloured paper (usually mint green or lemon yellow) allows me to see my work better visually; the brain also processes the information differently. Colour coding and highlighting text is also extremely useful as it separates word sounds, showing a clear translation to the original text and promotes photographic memory for public speaking or performance. (Please note that every individual with dyslexia will use different colours depending on their preference).
- ❖ **Aural**- I have found throughout the years that sometimes working aurally, for example repeatedly speaking or singing a phrase helps with muscular memory and combating any issues with processing information or separating sounds of words.
- ❖ **Physical & Muscular Memory**- making something physical (using your body) or making a sequence of moves to help with memory. A technique that could be commonly used with dancers, actors or singers.
- ❖ **Working Longer Hours-** having dyslexia I always find that my work whether it be singing, reading or written, takes me twice as long. I have realised this and I don't mind taking the time to work slower and longer hours so that the correct information is processed and learnt accuratley.
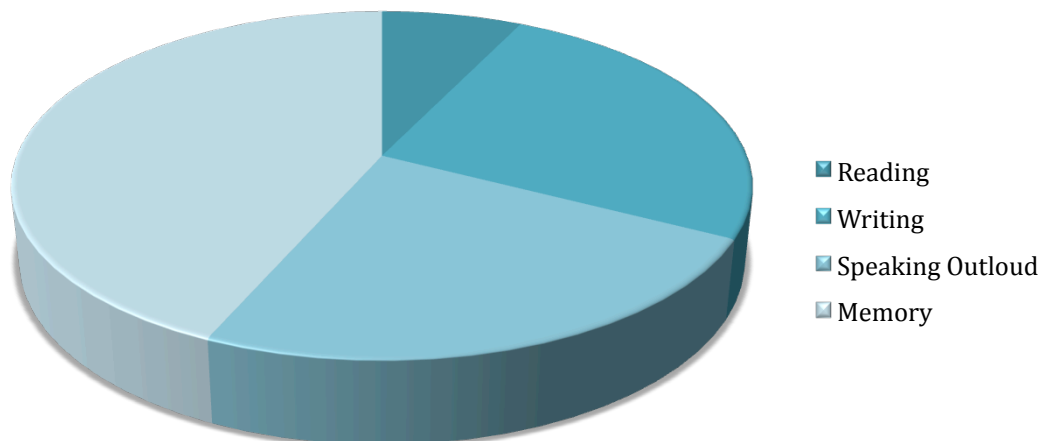
Weaknesses

- ❖ **Reading**- even though I enjoy reading, I find that occasionaly I have to re-read a paragrah or page to understand and process the information correctlly. My reading is generally slower than the average and having to read something outloud for the first time I tend to skip words or misprounce them as my brain see's the word formated differently.
- ❖ **Speaking Outloud**- I am usually extremely comfortable with speaking outloud but on the odd occasion I stutter as I loose the sense and sound of the word. Having to speak outloud without reading the text previously is again something I am not comfortable.
- ❖ **Writing**- writing is an ongoing development as I struggle structuring sentences and using grammar and punctuation properly. I do have to have a second pair of eyes to read over my work as there are many elements and mistakes that I miss. However, on the odd occasion I have picked up grammatical, structure and spelling mistakes after leaving my written work and coming back to it.
- ❖ **Memory-** as mentioned previously my short term memory is poor, which means that I tend to forget things shortly after they have been said, especially if I have to memorise text quickly. Though my long term memory is usually quite sufficient, however it does take a while for it to become part of my muscular memory.

Below are two pie charts representing my strengths and my weaknesses. The strength chart shows what I personally feel is my strongest attributes and similarly the weakness chart represents aspects of my dyslexia that need developing further.

Strenghts

- Narrative & Creativity
- Long Term Memory
- Photographic Memory
- Colour Coding
- Aural
- Physical & Muscular Memory
- Longer Hours

Weaknesses

- Reading
- Writing
- Speaking Outloud
- Memory

Even though I have listed both my strengths and my weaknesses there are aspects of my dyslexia even if they are listed as strengths that I need to develop further. Being a singer/musician and having to deal with text, language, grammar and memory on daily basis requires constant attention and development.

Musicians & Dyslexia

I have found that the majority of musicians that I have met throughout my studies and professional work have dyslexia. Although in today's world we receive extra help throughout most of our student lives I have discovered that most musicians do not have any strategies in place to help aid their dyslexia, potentially making studying and professional work more difficult than needed. Of course there are different forms and severities of dyslexia and some students do highlight and use coloured paper, however the majority do very little. This is subject to dyslexia being seen as something that effects writing, reading, speaking and processing information; generally academic.

I am not suggesting that these various elements aren't incorporated into music but as musicians we have to read music including numerous performance markings and tempo markings. On top of it all singers have to understand and memorise text that usually isn't their first language, while trying to maintain a real sense of understanding especially during performance.

There really isn't any formal way of approaching music like what we have in place for academic work; it tends to be a very individual process. However, if musicians had more of a basic structure in place to help with dyslexia when approaching music we would benefit as performers as it would enhance our development and growth as artists.

There are also other contributing factors if musicians used strategies within their music preparation. These would include learning, practice and performance such as promoting development with long and short-term memory, learning the text correctly, translations, interpretations, narrative and musicality.

So what are the some of the dilemmas and advantages we face as singers with dyslexia when approaching or learning music?
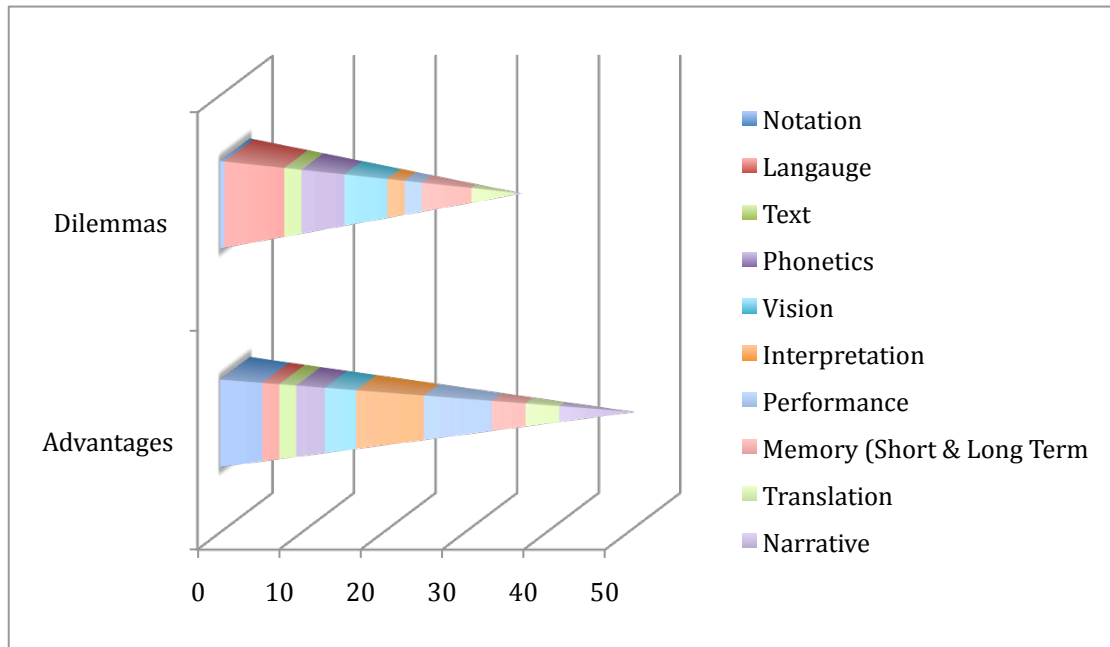
As you can see from the pyramids above, the colours represent the different degrees of advantages and dilemmas, such as memory, text, and phonetics or narrative. A musician with dyslexia either one of these areas could be advantage or a dilemma that could require more attention and development.

This isn't to say that everyone with dyslexia has the same degree of advantages and dilemmas but rather it was an overall calculation made by general knowledge, my own development and conversations with other musicians who have dyslexia.

Strategies

As mentioned previously there are many strategies in place to help develop or aid those with dyslexia. However, this generally tends to be for reading, writing and visualisation purposes. I have been told previously to use

coloured lenses and coloured paper depending on my preference or to use software provided by the DSA (Disabled Students Allowance) that reads back my work verbally.

Although I have used this fantastic piece of software regularly for my written work to develop my aural skills further it doesn't seem to have any mechanisms that would allow melody to be apart of it. There are other programmes that will read text in different languages to help with pronunciation but no real software that incorporates aural, text (French, English, German etc), colour (highlighting or colour coding the different text) for visual purposes or some sort of melody that would help with preparation and memorisation of music.

By melody I mean that a simple melodic line should be played (on the piano) both slower and then at tempo so that the individual can speak the text out with the melody underneath to absorb both the text and the melody. This is a strategy that I have used in the past by recording myself playing the vocal line on the piano. Firstly I would speak the text slow then at tempo before even attempting to add pitch. However, I am concerned that if text isn't in my first language that I am pronouncing the text incorrectly and working it into my muscular memory wrongly inevitably making it harder to correct.

Having mentioned earlier about software not including melody and spoken text, perhaps it's something that musicians, especially singers could develop further (even those without dyslexia) to create a new piece of software that would aid learning new music and languages. This software would also support those who struggle with pronunciation and those that rely heavily on recordings to learn their vocal melody.

Others & Their Strategies (Approaching Music)

I gave interviews to two people, one of the interviewees didn't have dyslexia and the other had been diagnosed

with dyslexia like myself in their second year of their undergraduate degree. The interviews were based on their own individual approach to learning repertoire and if there were any personal developments or problems that occurred during this process.

After interviewing both participants there were very similar in they're approaches despite one having dyslexia; this also depends on the kind and the degree of dyslexia. Both participants said that they make their own markings on their scores with a pencil on a white background. This would include they're own personalised phonetics to help with pronunciation or words that they continuously mispronounced. Other markings included circling anything that is either inaccurate or a regular mistake made during lessons or rehearsals.

There was no mention of using different coloured paper or highlighting their own vocal line, unless it was for choral or chorus work or a handwritten score where their vocal line wasn't clear.

As far as strategies for memorisation of text and melody go, in both questionnaires there was a recurrent theme to learning music through repetition in lessons and rehearsals. There was no mention of any memorisation strategies.

I found both had no real structure in place to enhance their learning process and neither had really tried to develop one either. Generally this is due to the individual, some can learn text and melody very quickly and have an excellent short-term memory and require no extra help. While others may benefit from a little structure and devising some strategy to help rather than take twice the amount of time to learn a piece.

Before I started experimenting with various strategies to help with learning I would just simply mark in my translation with pencil on a white background and mark up with my own phonetics. I found that the text merged in together and I couldn't really focus on both the translation and original language of the text, which in turn affected my memorisation. It also affected the clarity of the words and I would often find myself

mispronouncing and not being able to remember the words clearly because of the lack of distinction between the vowels and consonants

Essentially this is how I started experimenting with different learning strategies and developing the different ways I approach new repertoire.

My Own Strategies (Approaching Music)

As mentioned previously some of my own strategies used to be very similar to those that were interviewed above. However, due to numerous attempts to keep things simple it resulted in my work taking me twice as long and occasionally I didn't learn my music and text as precisely as I'd like.

My structure and my strategies are listed below. They explain what works, what was effective, what wasn't, why I chose to use these particular kinds of strategies? Have I had positive or negative results and what needs to be developed further?

❖ **Photocopying & Taping Music**

Once I have chosen a song or an aria many of my colleagues can simply work from the original score making very little notes other than some adjustments to their pronunciation or performance markings.

I start by photocopying every page of the song/aria, occasionally if the text and music are particularly hard to see or handwritten I will copy the piece onto colour paper (mint green, yellow or hot pink). Copying onto coloured paper enhances the way the text is seen visually, especially for someone who has dyslexia. It also makes the learning and memorising process that much easier.

Photocopying my music ensures that I can make any notes without worrying about damaging original scores. I have however coloured coded and made vast

notes on my own operatic scores such as *La Clemenza di Tito* (Mozart) after covering the role of Annio for the Opera School. There are pros and cons with using this approach. It means that if you were to ever look and revisit the role again with a different director and company some of the notes made may conflict one another, even though you would never have to translate the opera again if it was the same edition.

After photocopying I tape my music together, much like a pianist or accompanist would if they received single sheets. This brings structure to my learning because the music appears to be more like a score. I have no concerns about turning pages or getting them in the wrong order and finally arranging the pages in such a way encourages the brain to structure the music thoroughly; even promoting photographic memory for performance purposes.

❖ **Researching the Opera and Composer**

Researching the opera and composer may seem like a very standard thing to do. However I found throughout my studies that most would research the opera but have no background knowledge on the composer.

The composer is as vital as the opera because it displays the style in which the composer writes his music. There also may be some background knowledge on why the opera/song was first written. Was it first composed due to political reasons? Did the composer want to push the boundaries? Or are there any musical aspects that need to be portrayed within the piece or the opera?

After researching the piece and composer I write my notes onto a separate sheet of paper and attach it to the back of my music. Attaching this to my music means that I can look back at my notes at any given time if I am struggling to remember the plot, style or any general information.

This is an extremely useful and positive thing to do, as during the rehearsal period we tend to loose some of the background information and style of the piece because we become so engrossed in the production elements. Attaching the additional information performers can also add to this throughout rehearsals.

❖ **Translations (word for word, poetic, phonetically), Colouring Coding & Performance Markings**

Most performers will do a literal translation of the piece, although they will rarely do a word for word, poetic and phonetic translation in one.

My approach is simply to start with a word-for-word translation as occasionally poetic translations sometimes miss out fundamental words, which ultimately change the context and meaning of the piece. Other poetic translations couldn't stray further away from the actual subject resulting in the performer interpreting the piece entirely differently.

A word-for-word translation ensures that if the performer isn't singing in their first language they know exactly what each word means. They then can begin to experiment with the emphasises and stresses of the language correctly; resulting in a authentic performance of any given language.

I begin by writing the word-for-word translation onto the photocopied music, usually below or above the original text in a different colour. In some cases the word-for-word translation usually isn't clear because of the structure of the text. Therefore on a separate sheet I write down the word-for-word translation and try to make sense of it by creating my own poetic version. (In some cases editions provide both the word-for-word translation and a brief poetic one for performance use). After creating the poetic translation I either place the poetic

version in brackets (in another colour) above the word-for-word translation providing there is enough space on the score or I write it on a separate sheet with both the English and the word-for-word translation (all in their selected colours).

In some cases a phonetic translation is required for pronunciation. As mention previously in the interviews neither interviewee used actual phonetics. Both interviewees created their own personalised phonetics because they were confident enough in particular languages or that they found phonetic symbols confusing and awkward.

I have to use phonetic symbols especially for French as I struggle with the language to the point that I actually cannot read the language without using phonetics.

Below are a few examples that show my translation and phonetic symbols in different colours. You will also see that from the examples there are other colours and markings that indicate various performance elements and some of my own personal markings to help with memorisation, learning and clarity.

Ex.1[9]

[9] Debussy, C. (1999) *Mandoline*. The Art of Song Vol.1. Edition Peters. London: Hinrichsen Edition, Peters Edition Ltd. (p. 97- bars 14-17).

Ex.2[10]

Ex.3 [11]

The examples above are taken from Debussy's song
Mandoline from *Fetes galantes*, no 15 by Paul Verlaine.

[10] Debussy, C. (1999) *Mandoline*. The Art of Song Vol.1. Edition Peters. London: Hinrichsen Edition, Peters Edition Ltd. (p. 97- bars 6-9).

[11] Debussy, C. (1999) *Mandoline*. The Art of Song Vol.1. Edition Peters. London: Hinrichsen Edition, Peters Edition Ltd. (p. 100) (bars 52-60).

Ex.1 shows the phonetics written in purple below the original text (in French) and both the word-for-word and poetic translation are above in pink. As you can see there are other markings in both colour and pencil. The parts that are highlighted in orange represent reoccurring mistakes, usually the to do with the pitch or rhythm. Highlighted in a lighter pink are the performance and dynamic markings, in this example the *decrescendo*. The circular pencil marking around the word *'C'est'* is to further emphasise a reacquiring mistake, which you will see throughout many of the examples.

Ex.1 also highlights the original printed text in a light turquoise colour to make the distinction between the phonetics and the word-for-word translation. There is a darker blue box around the tied note *C*; this is to highlight the rhythm clearly and to discourage any future mistakes during practice.

Ex.2 has the same colour structure Ex.1 however the after translating majority of the sentence word-for-word it still wasn't very clear. The writing is still in pink but bracketed to show that it's a poetic translation.

Ex.2 displays several pencil markings, a circle around part of the phonetics to indicate a mispronounced word and a couple of notes to reiterate long and open French vowels.

Ex.3 again is very similar to the two examples above, however the blue box that was seen in Ex.1 that represented a rhythmic aspect is used differently in Ex.3. The blue boxes have been segregated into smaller boxes, which show both the rhythm and *'la'* sections. This indicates to the performer where and when the *'la's'* take place both pitch wise and rhythmically because they are repeated. (This is shown in Ex.4 below). I decided to do this, as it was area within the piece that I was struggling to memorise. Sectioning each *'la'* helped me learn the various pitches and rhythms correctly, inevitably helping my memorisation of the piece.

As you can see in Ex.4 there are circles with numbers inserted in the middle of them. Instead of writing out *'1,2,3,4,5'* I decided that it was far more efficient and

clearer visually to calculate the ties and place them in a shape that I could remember. I was placing the piece into sections and creating a narrative through counting as apposed to trying to count everything individually as 4/4 bars.

Ex.4[12]

[12] Debussy, C. (1999) *Mandoline*. The Art of Song Vol.1. Edition Peters. London: Hinrichsen Edition, Peters Edition Ltd. (p. 100- bars 52-70).

The use of the colours help me separate the pitch, rhythm, the phonetics and performance and tempo markings. It also promotes photographic memory because your brain becomes accustomed to the colours and specific shapes. Therefore resulting in the brain processing the colours during rehearsals or performance, adding more structure to music.

Below are a few more examples where the colours have changed and represent different parts of the piece whether it is phonetics or word-for-word translations. For example I do not have the same colour or key chart that structures all my colours or highlighting patterns but rather I choose what I feel is more suited to the piece depending on the style and the gradient of difficulty.

Ex.5[13]

[13] Messiaen, O. (1930). Pourquoi?: *Trois Melodies: pour chant & piano*. Paris, France: Edition Durand (p. 3) (bar. 8-15).

Ex.6[14]

Ex.7 [15]

[14] Messiaen, O. (1930). Pourquoi?: *Trois Melodies: pour chant & piano*. Paris, France: Edition Durand (p. 3) (bar. 17-18).

[15] Messiaen, O. (1930). Pourquoi?: *Trois Melodies: pour chant & piano*. Paris, France: Edition Durand (p. 4) (bar. 19-23).

Ex.6 and Ex.7 show large green lines that represent the change in the time signature. For example in this particular part in the piece it starts in 3/4 and changes to 4/4. The example below shows the whole page and where the time signatures change. I began to do this in more complex and complicated pieces because it became near impossible to remember where the signature changed and how many beats there were per bar.

Ex.8[16]

[16] Messiaen, O. (1930). Pourquoi?: *Trois Melodies: pour chant & piano*. Paris, France: Edition Durand (p. 4) (bar. 19-25).

Some pieces are more problematic and intricate than others, especially da capo arias where ornaments are required or arias that consist of coloratura phrases. An excess of notes on one single page can cause the brain to panic, as there is an influx of information squeeze into several bars.

Since delving into this kind of repertoire I have had to change my approach by using colour to separate the coloratura phrases into parts. This approach has helped me learn each phrase comfortably and without difficulty because my brain has made the distinction between the notes and the rhythmic phrases.

The examples below show the way I have marked my coloratura phrases into workable sections. Markings shown in Ex.10, 13 and 14 show faint orange boxes around coloratura phrases and other small markings where double constants and rolled *'R's* are required. Other coloured boxes depict the difficulties I have had with the phrases during practice and lessons. The boxes mentally prepare me for the upcoming phrases which in turn works it's way into my photographic memory.

Ex.9[17]

[17] Rossini, G (1954) *Una voce poco fa (Il Barbiere di Siviglia): Operatic Anthology- Celebrated Arais, Selcted from Old & Modern Composers for Mezzo-Soprano & Alto* (Complied by Kurt Adler). Vol.2. New York: G. Schirmer Inc. Hal Leonard. (p. 9) (bar. 23-28).

Ex.10[18]

Ex.11[19]

[18] Rossini, G (1954) *Una voce poco fa (Il Barbiere di Siviglia): Operatic Anthology- Celebrated Arais, Selcted from Old & Modern Composers for Mezzo-Soprano & Alto* (Complied by Kurt Adler). Vol.2. New York: G. Schirmer Inc. Hal Leonard. (p. 12) (bar. 56-61).

[19] Rossini, G (1954) *Una voce poco fa (Il Barbiere di Siviglia): Operatic Anthology- Celebrated Arais, Selcted from Old & Modern Composers for Mezzo-Soprano & Alto* (Complied by Kurt Adler). Vol.2. New York: G. Schirmer Inc. Hal Leonard. (p. 12) (bar. 62-67).

Ex.12[20]

Ex.13[21]

[20] Rossini, G (1954) *Una voce poco fa (Il Barbiere di Siviglia): Operatic Anthology- Celebrated Arais, Selcted from Old & Modern Composers for Mezzo-Soprano & Alto* (Complied by Kurt Adler). Vol.2. New York: G. Schirmer Inc. Hal Leonard. (p. 13) (bar. 68-72).

[21] Rossini, G (1954) *Una voce poco fa (Il Barbiere di Siviglia): Operatic Anthology- Celebrated Arais, Selcted from Old & Modern Composers for Mezzo-Soprano & Alto* (Complied by Kurt Adler). Vol.2. New York: G. Schirmer Inc. Hal Leonard. (p. 13) (bar. 73-78).

Ex.14[22]

Ex.15[23]

Most repertoire requires this much depth and detail in order to learn the following: to learn the text clearly with a real sense of the meaning, rolled 'R's, nasals, double

[22] Rossini, G (1954) *Una voce poco fa (Il Barbiere di Siviglia): Operatic Anthology- Celebrated Arais, Selcted from Old & Modern Composers for Mezzo-Soprano & Alto* (Complied by Kurt Adler). Vol.2. New York: G. Schirmer Inc. Hal Leonard. (p. 14) (bar. 79-83).

[23] Rossini, G (1954) *Una voce poco fa (Il Barbiere di Siviglia): Operatic Anthology- Celebrated Arais, Selcted from Old & Modern Composers for Mezzo-Soprano & Alto* (Complied by Kurt Adler). Vol.2. New York: G. Schirmer Inc. Hal Leonard. (p. 17) (bar. 112-113).

constants, remembering performance markings such as *piano* or *forte*, time signatures, coloratura, ornaments and promoting photographic memory for memorisation purposes.

More work does go into repertoire that isn't in my first language, however this isn't to say that I still don't colour code and use similar strategies as those used in my French, Italian or German repertoire. For example Ex.15 and Ex.16 shows that I use the same strategies as before such as highlighting the vocal line, performance directions, tempo markings and time signatures.

Ex.15[24]

[24] Elgar, E. (1899) *The Swimmer: Sea Pictures for contralto & piano Op.37*. Reduction for voice and piano, new edition, 1998. USA: Boosey & Co. Ltd. (p. 3) (bar. 10-11).

Ex.16[25]

Learning Melody & Text

Learning both melody and text as efficiently as one another is perhaps the most troublesome for singers, as we generally tend to be better with one than the other. I struggle with text, as it requires me to go into great depth to ensure I have both the pronunciation right and the words in the correct order.

I start by speaking out the text slowly. Although this is a lengthily process it ensures that the pronunciation is clear and I gradually become more accustomed and confident with the text. After I have familiarised myself with the text I set a metronome to the marked tempo and begin to speak the text out loud at tempo. Speaking the text at tempo, especially with faster repertoire encourages muscle memory and ensures I can speak the text in time before even attempting to sing it.

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25 25 Elgar, E. (1899) *The Swimmer: Sea Pictures for contralto & piano Op.37* . Reduction for voice and piano, new edition, 1998. USA: Boosey & Co. Ltd. (p. 3) (bar. 14-17).

After familiarising myself with the text I focus on the vocal melody of the piece by simply playing the single melody line repeatedly on a piano. Without even having to vocalise the melody, your brain becomes accustomed to the tune without having to sing a single note; in turn saving you a lot of time. I have also found that speaking while playing the melody line also familiarises you with both the tune and the text.

Of course playing the vocal melody and speaking out the text at the same time can be quite tricky due to complicated rhythms or text. Recording the melody both slower and then at tempo on a devise that allows you to play it back means that you can speak the text effortlessly and freely without worrying about getting the right notes or rhythms.

After speaking the text with rhythm and pitch and I feel confident that I've learnt both, I then begin to vocalise the piece. I sing each individual phrase or several bars at once repeatedly so that it becomes part of my muscle memory. Obviously there are only so many times as singers we repeat this before coming vocally tired.

Memorisation Strategies

There are many memorising strategies in place for singers and it depends entirely on the individual and how they learn. The interviewees memorise through repetition usually during rehearsal periods and take very little time to memorise their repertoire.

However, there are individuals such as myself that have to take longer because our short-term memory is poor. We have to feed any information into our long-term memory, which takes time.

I have devised the following strategies for myself:

- ❖ Speaking the text out loud repeatedly.
- ❖ Write out the text repeatedly while consciously vocalising the text in your head.

- ❖ Listening to the recording of the melody line and vocalising the text quietly so that the voice doesn't tire.
- ❖ Singing small phrases repeatedly before gradually putting them together.
- ❖ Narrative- creating a storyline or a journey using the text. For example in an aria the character may start by describing their surroundings, then how the surroundings make them feel emotionally and finally reiterating how they feel in more detail.
- ❖ Visual images & Slideshows- This approach is very similar to creating a narrative only with images. Visualising images or a slideshow as you sing that relate to the piece as it helps follow a journey, which essentially enhances the performance. Even pasting an image onto your score for a particular phrase that you continuously struggle with is a great idea because your brain will remember it and become accustomed to it.
- ❖ Recordings- I try to avoid this approach, as you are likely to pick up habits and stylistic elements from the singers on the recordings rather than making it your own. However, I do encourage listening to a few recordings to accustom you with the shape and feel of the piece before sitting down to learn it.
- ❖ Physical Memory- making something physical or choreographing a simple movement can help aid in memorisation process because it becomes part of the individual's muscle memory. For example a simple hand gesture or a shuffle forward in practice during a challenging phrase can benefit the memory. I am not suggesting that this should be practiced during a performance, unless there is a real intention or motive to move during the piece.

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Conclusion

I found throughout my research that some of my approaches have matured to the point that they are extremely effective. Others need developing further and some simply haven't been beneficial.

Since marking up my scores with colours, phonetics, highlighting and translations it has helped both my

learning and my memorisation process. For example colour coding the original text differently to the word-for-word translation, phonetic symbols and poetic translation has given my work structure and enabled my brain to process the information in a creative and narrative way.

However, when I first started marking my scores in such a way the page became extremely jumbled and I overloaded myself with colours and information that wasn't essential. Over time I have developed this strategy though occasionally I do overload the page with information, usually after a rehearsal. This is due to feeling overwhelmed during the rehearsal because of the constant direction and constructive criticism; I then feel the need to write everything down.

I have suggested to a few singers about colour coding at least the melody line, the translation and the performance markings. Each singer has told me that they have benefitted from this as it separates and determines the original language from the translation and the performance markings appear more distinct and clear.

Occasionally I would find single words difficult to pronounce especially in a different language. I would struggle to separate the words sounds and breaking the word down into its components, consonants and vowels. For example I would break a word down into its syllables such as 'Ro-sen-ka-va-lier' and repeat the word until I was comfortable enough to say it fully.

Researchers have also suggested that '…most languages skills require the constant, rapid and effortless application of rules and procedures, including differentiating one word sound from another; correctly articulating word sounds and correctly pronouncing words; breaking words down into component sounds'.[26]

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[26] Dr. Eide, B.L & Dr. Eide, F.F. 2011. *The Dyslexic Advantage: Unlocking the hidden potential of the dyslexic brain* Great Britain: Hay House UK Ltd (p. 26)

This proves that those with dyslexia require numerous strategies and detailed procedures when approaching different languages, even if it's their first language. I think this should even be applied to those who don't have dyslexia, as working with numerous languages, melody and additional performance elements can be problematic.

Colouring coding has also promoted photographic memory as I relate and remember the colours and their structures during rehearsals and performances.
Also creating a narrative helps aid the learning and memorisation process through the use of colour or images.

I plan to work on my memorisation further because writing out the text repeatedly is time consuming. Speaking the words out loud can I only do so much and singing repeatedly eventually tires the voice.

Researches have also proved that 'most individuals with dyslexia favour episodic over semantic memory, most will remember information about things they've *experienced* (or image scene-based experiences) better than abstract or non-contextual facts'.[27] I have used this briefly in arias where the character is experiencing a certain emotion such as sadness or love and used it to enhance the characters emotions. I have drawn upon experiences such as loving someone or loosing someone that is dear to try and engage with how the character is feeling at the time, however I haven't used it in such a way that it helps me retain memory.

I have also recently discovered that those with dyslexia learn better if they are interested and engaged. This is evident in my studies, as when I am disinterested in a subject or piece I cannot process the information effectively resulting in loss of understanding and my memory is ultimately affected.

My research project has shown me that people without or with dyslexia learn individually whether it's the way they memorise, learn and process the information. However,

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[27] Dr. Eide, B.L & Dr. Eide, F.F. 2011. *The Dyslexic Advantage: Unlocking the hidden potential of the dyslexic brain* Great Britain: Hay House UK Ltd (p. 174)

there are elements within my own strategies that can be used to others advantages when approaching new repertoire.

(I have attached a step-to-step guide that I have developed and produced for both myself and any other singers that might be interested in taking a different approach).

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Kamilla Dunstan- Documentation Project 2014
Questionnaire/Research- **Dyslexic**

As you know my research project focuses around those musicians with dyslexia and I am documenting not only my own personal practice/learning strategies but also others who either have or don't have dyslexia. At the end I plan to compare my research to my own strategies, even try some strategies of others to see whether it makes a difference in my own.

If you could answer and document your learning process on one piece you've started learning or previously learnt I would be most grateful. My email address is provided below if you need any further correspondence.

Name: MATTHEW ███████████
Year/Programme/Degree: MMusOp1
Age: 25
Instrument: Voice - Tenor

1. Being diagnosed with dyslexia what are your day-to-day problems you face with text, sight, processing information and memory (short and long term)? Do you use any aids? (E.g. coloured lenses, larger text etc)

I was diagnosed with dyslexia in my second year of undergraduate study at Durham University. Although this was an entirely academic course, I did not change my approach to using, reading and comprehending texts or music, as my parents, over many years, had helped me develop and learn my own strategies to increase to my maximum potential, the abilities that I had. I did use some coloured overlays, which are useful when I am tired, but I use a complex system of marking scores with pencil, and also my own Anglicised phonetics to help with foreign language pronunciation, as the IPA system often confuses me. I otherwise have found that being exposed to large amounts of music and signs-reading have caused my problems to incrementally diminish, but this does not negate the fact that I still have a slow auditory processing speed.

2. What happens when you first pick up a new piece? For example do you have any issues with plain black text and a white background; can you read efficiently without making any notes?

Yes, and no….. Yes, I have learnt to read effectively, I do occasionally mark things, particularly in more difficult scores, and when alignment is an issue within a score. I however, generally become more inaccurate the increasingly more tired that I become!

3. How do you prepare your music/score? (e.g. colour coding, writing out the translation near the original text, using phonetics)

I prefer my own phonetic symbols and notation for prounounciation. I write translations in full rarely as they clutter the page and make it more difficult to read. I never use colour coding in my own scores as I do not wish to ruin them!!

4. Could you possibly take a few pictures of your new piece? (Please send to ██████████████████ or copy and paste here) (Phone pictures are acceptable to send to my mobile via WhatsApp (████████))

TO BE DONE AT A LATER DATE

5. Do you use phonetics? If so do you find them harder than making your own personalised notes concerning languages?

In a sparing way, however, reading a line of phonetics is for me a useless thing, as I don't gain any sense of meaning or understanding from it, so I prefer my own phonetic symbols.

6. Is there anything that you do differently once you've begun to learn a piece?

I don't believe so

7. Do you find melody or text harder to learn?

TEXT ALWAYS

8. **Memorising Strategies**: please list below (e.g. writing out the words continuously, picture diagrams, photographic memory).

Repetition, and getting an understanding of the lilt of a text and its poetic phrasing often helps with memorisation.

9. If you find memorising difficult, what do you find hard about memorising a piece?

Occasional inversion of words, or replacement of syllables or specific vowels/consonants or inversions of vowels or consonants. Otherwise working from a translation to get the sweep of the meaning often helps my understanding and learning of a piece.

10. Please take another picture of the same score or an older score to show new markings and notes

    TO BE DONE AT A LATER DATE

11. How do you prepare for a final performance of a piece?

Nothing in particular. It depends on the style of the work involved, oratorio or opera or song.

12. How do you cope with learning multiple pieces at a time other than prioritising?

Leaving plenty of time for learning. Leaving enough time, to leave a score and come back to it, so that there is some time for the relevant points to 'sink' in.

13. How do you structure your learning?

Because I have been employing certain strategies for years, I wouldn't say that I have ever needed to structure how I work more vigourously than those who are not dyslexic. Working in a slow, methodical and measured way often helps overcome many of the shortcomings which I often may display.

If any of you are interested in trying some learning strategies of mine please let me know and I can forward them to you. █████████████████████ .

Please also forward me your learning techniques, so that I can try them and use them within my own learning practice.

Kamilla Dunstan- Documentation Project 2014
Questionnaire/Research- NON-Dyslexic

As you know my research project focuses around those musicians with dyslexia and I am documenting not only my own personal practice/learning strategies but also others who either have or don't have dyslexia. At the end I plan to compare my research to my own strategies, even try some strategies of others to see whether it makes a difference in my own.

If you could answer and document your learning process on one piece you've started learning or previously learnt I would be most grateful. My email address is provided below if you need any further correspondence.

Name: Fiona █████
Year/Programme/Degree: MMus Perf1
Age: 24
Instrument: Voice

1. What do you think dyslexia is?

Difficulty in reading words/letters/symbols in the correct order.

2. Do you face any problems when you first pick up a score? (E.g. do you struggle with reading text on a white background? Do you have to make separate notes? Would you prefer coloured paper or text?)

Not usually. Perhaps if the score was handwritten or very small then yes, but usually I don't have any problems.

3. What do you do first when you pick up a new piece or score? (E.g. do you photocopy the score, colour code, highlight, translate, and write in a separate text or translation?)

Photocopy the score. If it is a choral score, I would highlight or mark my part. If it is a solo score, I wouldn't highlight anything. I would then write in IPA and a translation of the text beside each word.

4. Could you possibly take a picture of your score after the very first time you've made your changes to help your learning process? (Please send to ███████████████████ or copy and paste here)

Will email you it.

5. Do you find melody or text harder to learn? Why?
Usually the text is harder to learn, especially if it is in a different language.

6. During your learning process what changes do you make to your score? Do you make notes continuously within your score? Colour code parts that are problematic?

I would circle parts that are incorrect or re-write any mispronunciations after I have been corrected by a coach or teacher. I would also write in any ideas that were suggested to me to help me to remember to do them in my own personal practice.

7. How do you memorise music? Is this through repetition? Do you find words or melody harder to memorise?

Mainly through repetition. I usually find that if I practice something a few times, have a coaching session and lesson on it, then it just goes in automatically without having to sit down and actually try to learn the text.

8. What are you learning strategies? Please list below?

I am not sure what you really mean by learning strategies.
If you mean how do I learn…
I try something myself.
Take it to a teacher/coach for corrections.
Try and put that into my own personal practice.
Take it to a performance/audition class and try and get other people's opinions on how to make it better.

9. Please take a picture of your final score?
   Will email it.

10. How do you prepare for a final performance of a piece/role?
Go over and over all markings in the score to try and fully commit them all to memory. Watch how other performers sing the same repertoire for any further ideas. Perform it as many times as possible in class to ensure that I am totally confident before a final performance.
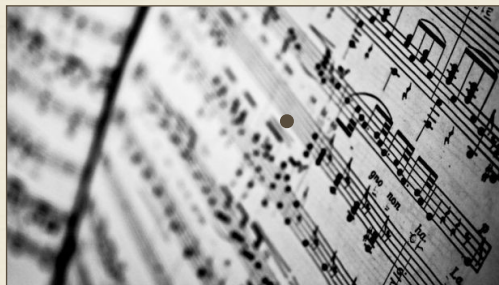
11. Finally, how do you cope with learning multiple pieces at one time other than prioritising? How do you structure your learning?

I try and put them into an order. I will learn a few pieces at a time, trying not to overload myself with music. I will prioritise the pieces that are coming up in performance first and focus on them in all lessons, coachings and performance/audition classes and then set them to one side and move on to the next set of music. I will obviously re-visit pieces in my own practice and will then take it to a final lesson before the performance to make sure I have everything correct.

If any of you are interested in trying some learning strategies of mine please let me know and I can forward them to you.

Please also forward me your learning techniques, so that I can try them and use them within my own learning practice.

HOW TO APPROACH NEW REPERTOIRE

A step to step guide for singers approaching new repertoire

KAMILLA DUNSTAN
Royal Conservatoire of Scotland
2013/2014

STEP BY STEP GUIDE

OTHER MEMORISATION TECHNIQUES

Once you have learnt the text, rhythm and melody to a point that you feel confident enough to sing it in a rehearsal room, take out a pen and paper. Begin by taking a small section of the piece and write it out repeatedly, you will discover that you will sing the melody internally as you write. Once you feel you can copy the section down without having to look back at the score add the next part of the text and do exactly the same. After you have finished the whole piece take the score away and see whether you can both write and recite (out loud) the entire piece, repeat this until you feel confident enough to speak and then sing it off copy.

Another technique is to sing one bar of the piece repeatedly before take another bar and joining it onto the first bar. Do this until you can sing an entire page of the music before attempting the second page.

Creating a narrative and story throughout the piece will help you place the song into sections and will essentially help your interpretation of the piece during rehearsals and performances.

Lastly, select images that created a slide show of the entire piece and as you sing work the images into your photographic memory. This will enable you to visualise an image or background as you sing, therefore enhancing your performance.

PHOTOCOPYING & TAPING YOU MUSIC

Once you have chosen a suitable aria or song it's vital that you photocopy you music from the original score. Photocopying ensures that you can make notes and colour code what you feel is necessary for your own development and practice. Taping music ensures that during a rehearsal and practice your are less likely to get the pages mixed up; it also works more like a vocal score.

RESEARCH THE PIECE & COMPOSER

This may seem like the most obvious thing to do but it's quite surprising how many singers don't research both the opera/song and the composer. Of course most of us research the opera, our character and where the aria occurs within the opera. However, we can tell a lot by a piece by finding out background knowledge on the composer.For example, it can tell you a lot about the style of the piece, how one should approach the style and was the piece written for political reasons or particular event etc.

LISTEN TO THE PIECE (A FEW TIMES ONLY)

As singers we rely heavily on listening to learn pieces, however I have found in the past that listening to the same piece too much by the same artist we start to mimic and copy what that singer is doing vocally and expressively. I suggest listening to the piece a few times by different artists to gain a feel for the style, shape and form before sitting down to learn it yourself.

HIGHLIGHT THE VOCAL LINE&PERFORMANCE MARKINGS

Highlight your vocal line especially if it's a choral or chorus work. This ensures that you determine the vocal line from the accompanist, orchestra or other voices. Highlight performance markings such as tempo, time signatures, crescendos, ties, pauses etc.Your brain remembers colours better than pencil markings.

TRANSLATE WORD-FOR-WORD, POETICALLY,PHONETICALLY

If the piece isn't in your first language, translate the piece word-for-word then do a poetic translation so that you can really get a feel and understanding of the text. If you require phonetics write them above the original text so that you have them as close to the text as possible. Mark all of these in a different colour so that your brain can differentiate each translation.

ORNAMENTS, COLORATURA & OTHER MARKINGS

Ornaments and coloratura phrases should be highlighted into sections. For example a coloratura phrase can be sectioned by highlighting 4-5 notes one colour and the other 3 notes a different colour.This enables the brain to process both sections separately and clearly so by the time it comes to performance you brain has learnt all the notes more efficiently. Use a highlighter to draw a box around any recurring mistakes or harder phrases so that your brain can prepare you physically and mentally before you approach it.

RECORD THE MELODY & SPEAKING THE TEXT OUT LOUD

Start by slowly speaking the text out loud then speak the text at tempo as if you were performing the piece (no singing). Once you have done this, play the vocal line on the piano (if possible) recording it slowly, then make another recording at tempo. Now speak the text over the recorded melody before taking it at tempo. This familiarises you with both the tune and text before even attempting to sing it.

MEMORISATION

There are many ways to memorise a piece of music or text but the most obvious is through repetition of both the text and the melody.

However, this can be tiring on the voice so I have suggested various strategies to memorise music on the back page.