

The Musical Brain Conference 2014

Mozart and the Power of Music: Memory, Myth & Magic

Friday 24 October 2014, Senate House

TRANSCRIPT

Panel discussion – All speakers, chaired by Ian Ritchie

IAN RITCHIE: We want to hear again from our three performers this evening during the course of this session, but what we will do now to start with, just to get the conversation going, is have quick-fire summarised comments, important stresses on something that you have heard or spoken about today, from each of you. Just to get us started, a little summary of what you think and what you wanted to say today.

MICHAEL TRIMBLE: I will ask a question that relates directly to what we have just been talking about, the idea of the prodigies and genius. I'm a little bit confused whether people are talking about composers or players? There is clearly a distinct difference here, I believe, but in our discussions that distinction has not quite emerged. I'm talking from a point of view of ignorance. It seems possible, in the 19th Century, composers were also people who were virtuosic in some way or another. Is that still the same way today or is the genius or prodigy we are discussing somehow different? The 10,000 hours may well apply to memory, which relates, as we have heard, to practice and basal ganglia motor programmes. Composition, surely, is rather different in terms of the creative skills that emerge.

JESSICA GRAHN: I have a complete non-evidence-based thought on that, if that will do! If anyone else has an evidence-based or more informed opinion I would be happy to hear it. I think the 10,000 rule stands for performance but I think Jane is right, that yes, there is quantity but there also is quality and one of the key tenets behind all of that research is it was not that you sat down and mechanically and thoughtlessly played for 10,000 hours, it is that you deliberately practiced the things you were poor at, you focused and did not just try to accumulate time. I think, as far as we know, it probably does apply to composition and other things that seem at the surface to have less of a motoric component and creative component on top. We know a little. For example that chess players were always held up as a model of expertise, but we thought that moving the pieces around was not difficult, it was the strategies and thinking ahead. What they report being able to do is similar, I think, to what composers and performers certainly do - they think in terms of structures. When they look at the board they do not see the individual pieces, they see the patterns that frequently arise over the course of learning to play chess, and know what the options are to deal with those particular patterns. I think I will put it out there, I think it might actually be similar, in the sense that it is about learning what the rules and structures are, and then being able to use those.

STEPHEN JOHNSON: I have been composing myself again, I composed a lot when I was younger and went dry, but I have been composing for about 15 years and having lessons again. Technique is a very important part of composition too. There are things like the strange exercise of getting people to write Bachian fugues or illustrations that they make you do at university and you grumble about, but going back and looking again, it trains you to

think in two lines at once. Just as for the piano you have to be able to learn with two hands independently, after a while you move through the stages of what I think was called conscious incompetence: from unconscious incompetence to conscious incompetence, to conscious competence, to unconscious competence. The same thing goes through the process of learning to compose as well. Haydn himself had studied the counterpoint of Bach and gone back to the string quartet, which in those days mostly tended to be melody and accompaniment based textures. Haydn thought, oh, how can I actually bring Bach's ability to write several lines at the same time, polyphony, to the string quartet? Do I write fugues for the string quartet or incorporate my famous humour and sense of wit in some way? The result in trying this out was the incredible Opus 32 string quartets. Then Mozart goes through the long experience of absorbing himself in the Haydn, copying them out, and looking at them on paper before discovering he can think in the same way. When I was much younger, my aunt taught me to do cryptic crosswords. It was a curious example of looking over her shoulder and having a go and looking at what she had done, suddenly the light goes on and you find with time your ability to do it gets faster and faster as your brain gets habituated to it and the right kinds of connections are made up. That is as much a part of the learning process of composing as it obviously is of learning to play an instrument.

NIGEL OSBORNE: Certainly there is the topic of prodigy and music and there is an ABC for composers to learn, technical stuff. Then it goes further than that and this is where the 10,000 hours breaks down. Of course it is another journey, two more journeys, you are given a world and then you remake it. Most good composers do that. So there is that other bit you have to do. Then there is the bit about growing up and being with people and living and experiencing. There is a much bigger journey. I do agree totally with Stephen, for example, even at the technical level. I used to teach counterpoint and to console my 18-year-old students in their first year doing counterpoint studies in the style of Palestrina, I'd show them Mozart's attempt, when he was only 16 with Martini in Rome, and his three-part counterpoint, with bass and two tenors, was horrible because he gets stuck. He cannot get the second tenor away from the bass. I often say to my students, you solve this and improve it. Usually my not particularly bright students can do it better than Mozart and they are only two years older. I think that is really important not to sentimentalise this, and make the real achievement valued. But then he had to go on and become a real artist. Learning does not make you an artist, it makes you a performing chimp. After that you then become an artist who is reforming the world, rechanging it, remaking it, reshaping it, and you have to grow up to do that. That is why we do not have prodigy composers. Michael's other point was that performances are very important. It has been the natural thing for composers to emerge through performance. If you do not come through some performance experience, a deep one, at least at a professional level, you don't have much chance. I was a lucky generation that could get it in classical music but also in rock and roll. We're fine.

IAN RITCHIE: Any more burning comments from the panel? I was actually also talking a little earlier with Anna, following on the discussion about music and dementia. Did you want to share with us your experience in that?

ANNA TILBROOK: It was just in response to the lady that asked the question earlier about dementia, and I just wanted to talk very briefly. For about 12 years I have done a lot of work with people with Alzheimer's and dementia and brain injury and things like that, for a charity. I have had some absolutely extraordinary experiences and responses to music and certainly the idea that Nigel was saying, about it being live, is something I have very much experienced

and also the quality of the live performance makes such a difference as well. I have done it with various instrumentalists and singers. With a singer performing the same aria singing exquisitely, or sung well, but not absolutely amazingly, on those beautiful top notes, I have really, really noticed the difference in the responses from people with dementia. It is very much dependent on the quality of that live music. What we do is hour-long concerts of interactive music sessions so our aim in every concert is to get some kind of participation, even if it is a blink of an eye or the tap of a foot from everybody in the room. Often it might take 55 minutes to get through to somebody, and obviously everybody's level of Alzheimer's and dementia varies, but it is the most incredible thing to do. We have had examples of people where you ask them their name at the beginning of the concert and they don't know but by the end of an hour's concert you can have a lucid conversation with them. It can be because of one trigger song and often can be something that they sang at Sunday school, or something like that. I don't know enough about dementia it seems to be the worse the dementia is, the further back you have to go to try to find that trigger song. It is extraordinary, how people that don't know where they are, who they are, or anything at the beginning of a concert can chat about their life at the end of an hour's concert, it seems to be like some kind of domino effect, that is my experience. We also had an experience with a gentleman who hadn't spoken for three years, I think it was, and very randomly we performed *Moon River* and he started singing along. There are lots and lots of examples like that. I just wanted to say that it can have the most astonishing effects. We have had relatives say, you know my mum came back to me for a few hours. I think, Michael, you were mentioning how long lasting the effects are and sadly, I don't think it lasts particularly long but it does seem to last a few hours, in a number of cases, that certainly is what relatives have said. You just think, if only in these homes and psychiatric units, they could have that stimulation for an hour once a day rather than once a month the difference would be extraordinary for people. That's what I wanted to say.

FLOOR: I just wanted to say one thing. 10,000 hours isn't very much. It is only eight hours a day for three years. It is not very much. It is not a huge amount of time. I was also thinking about what you were saying beforehand about composers, as a composer I might mention this. When you have prodigy composers, it is quite often people who have actually listened to a lot of music. They have been in an environment where they have heard lots of things. There are 10,000 hours spent accumulating all of that and thinking about it and pondering it. Therefore they can be very responsive. If you think about the people who produced superb works at 18, such as Prokofiev, Tom Addis, and George Benjamin, this is still going on.

FLOOR: I'm no expert musicologist but I wonder whether we have fully exhausted the nature and nurture debate about composers and performers from a family history type perspective. I think Jane made mention of John Sloboda's book and research about early development of parents and so on, and I think I understood that for the enthusiastic parents that were sort of encouraging their children to perform and practice, actually the kids did really quite well in some respects. I was wondering how much that theme of parental influence was relevant in the case of Mozart, was his father a plus or a minus? Benjamin Britten's father was a musical person. How much of these great skills are encouraging or inherited by family factors? That's a thought going through my mind.

JANE GINSBORG: Can I make a quick comment? I talked to John a lot about this in the early days and one of the things he pointed out was that very often it was the children of non-musician parents who flourished more than the children of musical ones. You can probably

bear us out on this, because the child in a non-musical family has the opportunity to feel special, to feel different, to have something of their own, without someone standing over them saying, "But it could be better than that, you could be like this." So there you are, a quick comment.

STEPHEN JOHNSON: I was going to say that in some cases it is positively a good thing for them to have someone to struggle against. Handel's blindness was almost certainly in part due to the fact that he had to copy out music in the attic at home because his father disapproved of his musical activities so strongly. Berlioz was put under huge pressure to go into medicine, it used to make him vomit every time he approached the operating theatre. There are lots of stories of people who have actually grown up in spite of their home environment, and that's something quite important too. We tend to take this idea that we must nurture at all costs and actually, sometimes a little bit of resistance isn't bad.

IAN BROWN: Could I come in here? My father was a fantastic musician and he was also my teacher from the age of 13 to 18. I think it was an absolutely wonderful thing and it was an absolutely terrible thing. It was both. I'm glad to say I think the good outweighed the bad, but there are great dangers in it, and you can end up taking some very difficult problems from it, and maybe even exaggerating the difficulties, or the less good aspects, of your father. I suppose we're just talking about parental guidance of any sort. But he was also a fantastic inspiration and gave me some incredible insight into music and playing, so I think it's both. Both are incredibly strong.

STEPHEN JOHNSON: I certainly argued before that I think that Mozart's telling his father to go away, politely, over the whole business of his leaving the archbishop of Salzburg's employment, because his father strongly disapproved of it and strongly disapproved of his marriage to Constanza, were important existential steps for Mozart. As I said, you can see another leap forward in his creativity, and his style after that, so I think it's quite important. Leopold definitely must have been inspirational as well, in the early stages, but there came a point where Mozart had to go through the classic Oedipal struggle and find himself.

FLOOR: I just wanted to tell you that when Etienne Vatelot, the luthier in Paris, was asked whether he had met any prodigies his reply was no, but I have met a lot of parents of prodigies.

FLOOR: I guess this question is more for Jessica just because she was presenting on the Mozart Effect this morning. I don't know if this is opening an entirely new can of worms or not, but have you read anything about epigenetic effects of mothers? I'm not necessarily buying into the marketing side of the Mozart Effect, but more or less just kind of dealing with the journey, if you will, to raise the best child that they can. I'm not sure if that's kind of going off on a massive tangent or not, but I'm just wondering if you have any thoughts on that, I suppose.

JESSICA GRAHN: So epigenetics is this idea that your environment doesn't just change you but changes your genetic code and carries on. What you're doing while you're pregnant is not just your genes and the environment, you might be changing the genetic structure of your child. It's pretty early days to know how big an impact epigenetics is really going to have and it's impossible to know at this stage how much the sound environment is having an epigenetic influence. I can tell you though that what we know from baby research is that when you play

these things to babies, which they enjoy, there are effects but sometimes they aren't the effects people think they will have. Sometimes you are culturing your baby sooner and we don't think that's so great for babies, to get into their own narrow field, language and musical experience, even earlier. So it's still pretty early days but I'm sure we'll hear a lot more about it.

FLOOR: Very closely related, I was simply going to ask about genetics. Have there been any genetic studies of musicians or should there be?

JESSICA GRAHN: There have been some traits and I'm sure other people might have looked at this even more, including Jane, so I'll just say a little bit. Yes, there seems to be some inheritability of some capacities but I wouldn't say at this stage that it looks complete. Once there is the idea that epigenetics is coming into play, that it's only genetics or only environment, it's already coming into question how useful that dichotomy is. The short answer is, pretty much, it's a bit of both, like for many things.

JANE GINSBORG: It's terribly difficult to disentangle them. You have to say, what chance did the little Bachs have of not growing up musicians? How many Lloyd-Webbers have you heard of who aren't musicians? It goes in families. It's so difficult to disentangle, unless you actually remove the child from the family and have them brought up in a completely different family, how would you ever know? It is very difficult to do twin studies with musicians and non-musicians.

IAN RITCHIE: You are probably realising that we are not going to manage to take every single strand through unbroken to its obvious conclusion. In fact, we are quite deliberately accepting that we are going in a number of directions because we have actually introduced a number of directions and I suppose that's the way we're going to have to leave it. Please don't worry if your question is again taking us in a different direction, but it will probably be the last question, and then we're going to talk about the concert tonight.

FLOOR: I have just a quick comment on memorising music and whether it's better to play with or without the music. The singer said earlier that an important function is communicating with the audience and that's easier when you're playing off the page, so I just wanted to say that again. I don't know whether any studies have been done that have looked at how emotions are felt and perceived by the audience when the person is playing with or without the music but that might be worth looking at.

JANE GINSBORG: There is, it is Aaron William and Kirsteen might remember the date, 1998, I think it was. It was a side project from his PhD research. He had a cellist, with a music stand, playing with the music, and the music stand was taken away, and she played without the music. It was the same performance and the audience preferred her playing without the music stand. I won't say anything more after this but the title of this day has the words "memory, myth and magic" in it and we've talked a lot about memory, but actually I think the most important thing is that we've done an awful lot of debunking of myths. That has been fantastic, but none of it has taken away the magic of the music that we have heard and are going to hear.

IAN RITCHIE: Thank you very much. I would very much like James to come up at this point, and Anna and Ian, by all means, join in. Do jump up if you've got something you wanted to add. James, the concert tonight, in a way, picks up my previous point about there

being several strands which we can't necessarily all bring together, but it would be rather nice to think that the music tonight will help to join up some of the ends and take them to a very nice musical conclusion. Just about the songs that we discussed and that you have chosen for tonight, what are the interesting potential traps that you are going to navigate so brilliantly we won't even notice, or what might we notice?

JAMES GILCHRIST: On that very last point, it did occur to me that this was a remarkably silly thing to do. I noticed that the conference was about memory, and so I thought I would put down a load of songs that I find rather difficult to remember, and that was just foolish, but basically the songs I have divided into two sections which I have called "prodigy" and "memory", and the prodigy set includes three composers whom we have really spoken about quite a lot, Mozart, Schubert and Mendelssohn. The Mozart piece, *An Die Freude*, he wrote when he was 11 and I think underlines a lot of what we have been talking about because it certainly is a beautiful little piece of music, but I don't think it's that special. It's not very complicated. It's a simple piece, with a delightful melody, and if I'm really honest, I can imagine quite a lot of 11 year olds writing that sort of piece, particularly in the classical style with its very clear rules and regulations. It's a very special piece still because it is by Mozart and it does have a little magic, and the shape of the thing, that he seems so well to understand, is beautifully put together.

The other two composers are writing later in their lives, as teenagers. Mendelssohn's works come from when he was probably around about 15 or 16, and again they are both absolutely delightful, but unlike we were talking about earlier, I would say he has actually written better songs and some of the songs that he wrote later in his life are really without parallel in the repertoire. These two are really fine and exhibit something of this young man at an astonishing age. Now, with Schubert, of course, we were talking about people listening to other composers and taking what they can from them, particularly in their less formed earlier years, and this *Der Jüngling am Bache* does show this. He wrote it when he was 17 and it's one of the first real lieder that he wrote. He had been writing a lot of works for voice and piano before this period but they were all mini dramas, something like a knight goes off and fights, and then this happens. This piece is a strophic song and he sets all the verses. I think it is a delightful piece, I really love it, but it is very unlike mature Schubert. It is very easy to hear the influence particularly, I would say, and Anna mentioned this as well, of Haydn. It sounds like a piece of late Haydn really and particularly the piano writing is very Haydnesque with lots of scales and delicate classically finished cadences, and it is fascinating.

I have deliberately tried to look for things that I find tricky in the memory side of things. And what are they? In general, I have two examples at the beginning, both by Schubert, of strophic songs, so we have a lot of words all to the same melody with endless pitfalls of repetition, where you come to the same cadence and think, am I in verse 2 or verse 3? There's a great many possible wrong turnings to make, and particularly the first one, *Abschied*, is a series of totally disconnected images. The first begins with a horse, he is waiting on his horse, it is all about going away from the town, and it is just about different bits of the town that he is going to miss. He misses the trees, and then he misses the brook, and the stars and all the rest of it. They are not really connected and I find that quite tricky. *Des Fischers Liebesglück* tells a story but underlines a slight problem that I find with memorising songs and that is rhyme. There is a very obvious and strict rhyming scheme in this song, and I notice that when I make a little slip, which I can guarantee I will, that I spend most of my time not thinking about what's coming next but thinking, first, oh, I've gone and messed up the rhyme so I'm going to

miss that, and I try to think of another word that might do, that would rhyme with the one that I mistakenly offered. I also do notice that I'm always thinking backwards, and that is not a good thing. Then Bernstein, *Plum Pudding* is just a patter song, dag-a-da-ga-rum. Unless it is firing quickly I'm lost, there is no time to think. The Finzi work I have chosen is because it has no rhythmic structure and the power of rhythm is important in influencing the way our bodies work and it can be helpful in all sorts of cases. I literally have to remember this work by saying, that note is three beats long. I can't remember it any other way. I have to say that note, da-da-da, three beats long, and finish. I cannot just remember it, I have to remember the pattern, the actual grid underlying it. For the Ravel piece, the last one, in some ways the words here help the music. Musically it is tricky but the words describe a peacock strutting around and glorious bit of mini-drama. I'm forever taking a wrong turn musically, but if I think, this is where it goes on the stairs and stands on the roof, and then I have got it! The other pieces I hope illustrate other parts of what we have been discussing this evening, and perhaps the pianists would like to come and talk about this.

IAN BROWN: Yes, certainly, it is interesting. I'm terribly sorry I can't remember which speaker mentioned the Bach cantata, but in John Elliot's book about the choral music of Bach, he says that Charles Rosen, the pianist and writer, that talked about the importance of the cantatas in Bach's output, had said it was exaggerated and actually the centre of Bach's work were the keyboard works. I suppose he was a pianist, so he would say that, but he was not that superficial. Anyway, it is nice to start this evening with Bach's C major Concerto for Two Keyboards. Obviously it was presumably for harpsichord and it was one of those pieces written with strings but you can play it without. They do vary, sometimes you really want the strings and think, I'm really missing something, but actually very often you don't and this movement we are playing tonight, the first movement of the C major, has such a bouncy rhythm and full texture and the idea passing from one piano to the other, I feel in this movement particularly you do not miss the strings. Then the Mozart, the two piano sonata is a very great work, I think. It is all the same things in the sense of the conversation between the two pianos, and so one piano will have say the second subject and the other piano will answer and then it turns around and the other piano has the question and the answer comes from the other side. It is very much a conversation, isn't it Anna? Obviously, the emotional centre of the piece is the slow movement, and it is one of his really, really beautiful slow movements. It has got a wonderful flow to it, as well as having an incredible sort of tranquillity. It's come up in my mind a lot today, this balance between the performance or performer and everything, the balance between the intellectual and the instinctive. I think this is a wonderful example, both in Mozart's getting this balance absolutely right and in our attempts to get it right in performance. That is, to me, one of the most interesting things about playing music of any sort, getting this balance between the thinking about it and the feeling about it right. If you can get that right, you might just begin to express something of what Mozart meant. And then there is a wonderful sort of champagne last movement.

ANNA TILBROOK: I have just a very quick little thing to hopefully add to your entertainment this evening. I just wanted to say quickly that my job accompanying strophic songs can be very interesting. It has happened many times and I'm sure it won't happen tonight, but obviously when you have seven verses of a song and, as James says, it is the same tune, it obviously happens sometimes that the singers will get the verses the wrong way round. It is always fascinating for me. I think, now they are doing verse four, will they go back to verse three or are we just going to miss that verse out? I love it and I love the

challenge of it and of thinking now we're on verse seven but he hasn't done verse two, are we going to do it? You can see if you can witness anything like that tonight.

JAMES GILCHRIST: I will just quickly say, actually Anna and I have worked together quite a bit and over the years we have developed a little scheme, because you will notice we don't have a prompter. If I'm absolutely stuck and have the dreadful open hole before me, I just turn around and look at Anna and she is so brilliant, while she's playing, she mouths the next words. It is very, very helpful. I hope we won't need to use that this time, too many trade secrets coming out here.

IAN RITCHIE: Here is another trade secret. Kiri Te Kanawa who had the unfortunate lapse, great singer though she was, when I have seen her quite a lot in the opera houses since that time, she always had a prompter who spoke the lines. Even in the very familiar operas ever after, you could actually hear the words of the prompter in the audience. There was always quite a big raised bit and somebody standing there during her shows. I think probably that was necessary to maintain her confidence. I suppose it is very good that there is somebody that can actually whisper the words to you.

First of all, the Mozart piece has to be in there because that is the one which sort of set the whole ball rolling on the "Mozart Effect" and has been much used and talked about. Bach is a very interesting. There are many stories I suppose that one could say. Many, many years ago a very important figure called Michael Swallow was head of neurology in Northern Ireland and he was an amateur musician as well. Years ago in clinical practice he had a patient who was suffering from Parkinson's, who at the end of the session simply wasn't getting very far with being able to get his clothes back on, and Michael just went over to the piano in the corner of his consulting room and started to play Bach, at which point this patient immediately pulled up his trousers and strode out of the room as if there was nothing wrong. That prompted him to commit a lot of his future time to music therapy, which actually in its very early stages at that point, and a lot of good came from his own discovery that his music and medical practice came together in that way. Bach was the music he used and so Mozart is not the only great music that can really make difference. So it is fitting to start with some lovely Bach at the beginning of the concert.