**Hunterian Museum**

**An anatomical whodunnit? The Tiger Bronzes by Michelangelo**

**Tuesday, 8th November 2016**

**Please note that this is a draft text file originally provided for speech-to-text communication support purposes and is unchecked. It is not intended for further circulation or for public display on the internet and has no legal standing. It should be checked by the Hunterian Museum first.**

HAYLEY: Ladies and gentlemen, welcome and thank you for coming to our penultimate lecture. We're pleased to be welcoming back Professor Peter Abrahams. You may have heard his wonderful talk earlier this year on Da Vinci and medical imaging. He is back with another fascinating topic about another great Italian painter of that age.

I have cut this list about Peter to a few of the basics. He was Anatomist at University College London for many years. He is now the new chair of ‑‑ the chair post is new ‑‑ at the Warwick Medical School. Most importantly, for our purposes, his interest in art history is more than just an interest; it's a serious hobby of 30 years' standing. He taught for a decade at the Slade School of Fine Art, also at UCL, a course called Anatomy for Artists which runs to this day. His involvement with Fitzwilliam Museum in Cambridge, you will find all about today. It's Professor Abrahams.

PETER: Thank you very much. Let me tell you a story. I have a connection, as you heard, with Cambridge but this was nothing to do with it. We're talking Christmas Eve 2015. I get a telephone call. The telephone call says, "My name's Vicky. Is that Peter Abrahams I'm talking to?" I say, "Yes, what can I do for you?" It's Christmas Eve. "We're opening an exhibition on two beautiful statues. These two statues which have been loaned to the Fitzwilliam for the next year. The exhibition opens on 10 January. Someone suggested it might be an idea for us to have an anatomical opinion on these statues because nobody knows who has done these statues." I said, "I'm sorry. It's Christmas tomorrow. I'm doing things with my family. The only day I've got free between now and January 11th is actually New Year's Day." She said, "Fine. Although the museum doesn't open on New Year's Day, I will give you the opportunity to come and see them and see if you can help us."

So Lucy, my wife, and I went up to Cambridge on New Year's Day. We were the only two people in the whole of the museum because the museum was closed. I walk into a room and see these two statues. Well, if you knew nothing about anatomy, you would have to say, oh, my God, they are beautiful and they look very human. Please forget the pussycats; we will not talk about them until the end of the session! I looked at them and said, "Wow! Those are incredible. Were they done in the 1600s or the 1700s? They are unbelievably accurate, just looking at them with my experience of 45 years of teaching human anatomy." The person who was with me said, "Well, we've had them dated." When are they? 1680 or 1700, 1650? They said, "No, 1505 to 1508." I completely took a breath in. I will tell you why.

I know that there were no anatomy textbooks before 1543. As you can see, I will now take you through my rationale that makes me believe ‑‑ and not only I because, in fact, ten other professors of art history and directors of national museums now think they are by Michelangelo. I will now show you the proof. It isn't just my work but my work has been very instrumental on the anatomy. So this picture was seen by Professor Joannides, Professor of Art History in Cambridge, about two years ago, when he was thumbing through drawings by Michelangelo in Montpelier at the Fabre Museum in Montpelier. He suddenly realised that the pussycat, the tiger or the panther (whatever you would like to call it) and the position of the rider is very similar to the statues which were just about to be exhibited in Cambridge. He said, "Oh my gosh, this is a known drawing by Michelangelo of the cat and the man. I wonder if the actual statues could be by Michelangelo." Professor Joannides, by the way, has written half a dozen books on Michelangelo and is a world expert on Michelangelo.

Now, I just said to you when I saw these statues and someone tells me that they were made in 1506, i.e., within the first decade of the 16th century, I knew that it wasn't until 1543 that there was any textbook of anatomy which could possibly have been used to help the artists produce such accuracy. It made me think if this is 40 years before the first textbook of anatomy, who would have such good anatomy knowledge to be able to make statues that were so accurate? I'm giving you some idea. I couldn't expect all of you in this audience to know the anatomy but I have labelled some of the things that are very obvious. I will be talking about many of them during this presentation. I want you to look at the sartorius muscle label. In other words, this band that's going from the outside of the leg across and down to the inside of the knee. Now, what is fascinating about that band is that underneath that shadow or that groove that the artist has actually made on these statues, there is a muscle called sartorius. But the fact is that you cannot see that muscle on a living human because of the complexity of the movements, both at the hip and the knee, so you cannot see that on a live body. My brain began to think, well, if you can't see that on a live body, the person who made this statue must have been able to see below the skin, i.e., they almost certainly had dissected a human body. So this led me to do a little bit of research. When I say "a little bit", I'm talking about a year's work! I wanted to find out who in the whole of the universe had dissected the human body before 1543 that could possibly have made these statues.

Without going into huge detail, I want you to notice that many of these names are people that you know, particularly the two in red, which I know quite a lot about and I will talk about in a minute, but all of these other people are known artists of the period who had dissected or seen dissections of the human body. I want you to notice one very interesting thing here. I don't know if many of you have seen in the newspapers last week that a young Italian Count was killed on his bicycle somewhere in London ‑‑ I can't remember where ‑‑ he was run down by a lorry. That is his family, the Cosini family. In fact, Michelangelo dissected one of the Cosini family and was brought to court for doing so. His defence was, "I was doing it for my art." It was enough to get him let off! At that time, he was not very popular with the Cosini family that he had pinched their cousin's body and dissected it. These are all of the artists known ‑‑ if they're in brackets they're non‑proven ‑‑ but all of the artists of that period that are known to have dissected the human body.

Now, you may say, what about the medics, what about the doctors? The answer is that none of the doctors were doing detailed dissections until after this time. In other words, what I'm telling you is that the art world was ahead of the medical world in dissecting the human body in the first 20‑30 years of the 16th century. 1500 to 1530, there were very few medical dissections but all of these artists were involved in doing dissection.

So that got me thinking. Okay, it could possibly be any of these names who made those statues, they are the most likely. But the truth is (except for the two in red) all of these people only ever attended the odd dissection, did the odd dissection, we're talking of one, two or three dissections, whereas both Da Vinci and Michelangelo probably dissected between 30 to 50 bodies within their life and both of them did multiple, multiple dissections. In other words, they regularly dissected to learn about the muscles and how they work.

So I then started looking at the statues in great detail. You can see here the groove that I told you about for sartorius which does not exist and it is wrong on that statue. You cannot see it. However, you can see this drawing by Michelangelo. He shades in ‑‑ this is an original by Michelangelo. He shades in on this drawing the sartorius muscle, though you can't see it on a living model. And even more suspiciously, when I did serious research into all of the PhDs done on the anatomy of the 16th century, we find that in Michelangelo's books that this is a famous drawing in the book by De Tolnay. De Tolnay is, if you're in the world of Michelangelo, the major textbook that has all of his drawings in or facsimiles of all of his drawings. If you look at 163R, you can see that in De Tolnay's work that he collected of all Michelangelos, these little circles are on the drawing and put there by Michelangelo. Now, no one and I mean no one in the art world knows what these little symbols mean. But I'm postulating and I'm darn sure they're an aide mémoire that Michelangelo has made to put a drawing or a hollow or there is the shadow of the sartorius muscle. So much so, I will show you the middle a dissection that I personally did in my own textbook, number 19, is the sartorius muscle and you can see it going diagonally across the leg. Here are two known drawings by Michelangelo and in both of them he draws that shadow. Yet, it cannot be seen on a living body. Fascinating that he should have done it twice on two different famous drawings.

So then I looked at the rest of the statue. For instance, here is a drawing by Michelangelo and here is the actual statue and you'll see the obvious similarity but that's not what I want to note. Here we have the gastrocnemius muscle and here the soleus muscle, but he got it wrong. When you bend your knee, those muscles don't both contract. If you know the anatomy, the soleus muscle does not go across the knee and the gastrocnemius does. If you flex or bend your knee, your gastrocnemius does not contract, it goes soft. Very interesting that he drew that and he did the same thing on this statue.

Another reason that made me think it certainly was Michelangelo because this is an error that he has shown twice, both on drawings and on the actual statues. There we have the labelled named muscles. You can see them there. I also labelled lots of other muscles. I have made a 3D film. Sadly, the college has not got 3D facilities for you to look at it, but if you are seriously interested I will arrange for you to have a viewing on our 3D system at Warwick if you want to have a look at it. So then I looked at all around the body. I literally spent one week feeling, photographing and actually looking from every angle at all of the bulges on these magnificent statues.

There is another very unusual thing that there is a little triangular hollow at the back of the shoulder blade which in medicine we call the triangle of auscultation. Why do we listen there with a stethoscope? The reason why we listen in that triangle is that there are no muscles. There is trapezius. There is the scapula and that little triangle and has no muscle covering between the lungs and the outside world, just the skin and the ribs. I say to myself, "Why would the person who made this statue leave a triangle there?" The answer is that if they had dissected the body they would have seen a little triangle with no muscles. Another indication to me that the person who made this statue had done a detailed dissection.

It wasn't until Vesalius published his book in 1543 that that little triangle was shown by anyone in any anatomy textbook. In other words, the first time that triangle appears is 1543. Yet, that triangle appears in 1506 on this bronze, almost certainly because the person ‑‑ and I believe it to be Michelangelo ‑‑ had dissected the body and seen the gap of nothing there and had put the little triangle there.

Now, recently, I was invited as a guest of the Director of the Uffizi to look at statues in Florence related to this project, because he is one of the other authors of a book that is coming out on this topic. I have written a chapter on anatomy. But there are ten other professors and directors of national museums who also think this is by Michelangelo and they have their own reasons. Mine are purely anatomical. I went to look at Victory, a famous statue by Michelangelo. It's in the Palazzo Vechio. Look what I find, that little triangle I've just shown you here... there's the triangle on my dissection and there's the triangle on these bronzes. Now look at a known Michelangelo statue done many years later, 1530, but before any anatomy textbook and here we can see the exact same little triangle between the scapula, the trapezius, et cetera. There is the little triangle. You can see it in different views, but you can see the triangle appears in a statue by Michelangelo, known to be by Michelangelo, 15 years before any publication of an anatomy textbook shows the triangle.

Now, being, if you like, a bit of a "detective" and this is anatomy being used as a detective tool, I looked at the toes. I suddenly realised if I looked at every art work in De Tolnay, the Bible of Michelangelo's drawings, guess what I found? Virtually every single toe or those that Michelangelo drew had the following facts. The big toe was shorter than the second toe. The second toe was abducted. In other words, it went sideways, rather as if the person had been wearing flip‑flops and they'd pushed their toe out and made a gap there. And it's not just one or two. It's virtually every toe that Michelangelo has drawn. You can look at all of these references if you want. I'm happy to send anyone the detail of the references. I can assure you that this is true. The toes he drew had a gap and the second toe was always longer than the first toe. Fascinating!

Now, we call that in the art world a Morellian trait. In other words, some artists do the little finger, the eyes or the toes the same. They get in the habit of drawing certain parts of the body identically in everything they make. I find it very suspicious that in this particular bronze that the toes of the bronze look exactly the same as David, look exactly the same as Moses, known to be by Michelangelo, and exactly the same as those in the Sistine Chapel, known to be painted by Michelangelo. In other words, this is a Morellian trait. Every time he does his toes, he does them the same.

Now, I then thought, "I wonder why it's called the Morellian trait." Guess what? Morelli was a professor of anatomy, like me, who, in middle life, gave up being a lecturer in Munich University and became an art historian and did exactly what I'm doing now. I didn't know this. I didn't know when I started on this project that Professor Morelli himself was a professor of anatomy before he went into the art world. He spent his life looking for traits of different artists that were specific.

Now, just to prove something that is quite extraordinary. Many of you will have been to see this beautiful sculpture in Florence Cathedral by Michelangelo. There is no doubt it is by Michelangelo. It is a stunning pietre. So Dr Schmidt, the Director of the Uffizi, took me and my wife and we went looking at statues in Rome, to see if we could see relationships between the bronzes and the statues in the Uffizi. We went to the cathedral. I said, I accept that's by Michelangelo but I want to tell you something ‑‑ this is the Director of the Uffizi. I said, "I will lay you a bet of a thousand euros that Michelangelo did not carve that foot." He looked at me with a huge smile and he said, "I won't challenge your bet because I know who did that foot." What actually happened with this statue was that Michelangelo chipped a bit off and was upset and deserted the statue in his older age. The lower part of the statue was carved ‑‑ all of this part up here was carved by Michelangelo but the lower bit of the statue, including those feet, was carved five or ten years later by another artist after Michelangelo had died. I have staked a thousand euros with the Director of the Uffizi that no way had Michelangelo carved that foot! I've never seen a Michelangelo foot that looks like that anatomically. It was interesting that that is absolutely true. That was the guy that carved that particular foot.

Now, this shocked the art world when I showed this at a conference on these statues. You may have heard of development. We have what are called Tanner Scales in medicine that tells us about the development of the testes and the penis and pubic hair. The drawing was done by a medical artist who is also a plastic surgeon. Thank you, Julia. But what you are looking at is the Tanner Scale from a paper by Marshall and Tanner, a scientific paper. I want you to notice how the pubic hair looks. So I sentenced that the pubic hair in these bronzes is unusual. I thought, well, I better go and research pubic hair... to the horror of my artists' colleagues who thought I was kinky! One of them who you may know was Martin Kemp, Professor of Art History at Oxford. I wrote to Martin and said, "Please send me everything you know about pubic hair in the art world." He sent me back a wonderful porno book that had been published about five years ago with three exclamation marks saying, "I hope you enjoy it." But I did find one paper by a lady called Jill Dyer about 18 years ago. There is very little written about pubic hair. The Greeks early on did it like a little triangle. We will come back to this later, but this arrangement of pubic hair with three little forks like a Trident was done in the Greek period. But then from 500 or 550BC, all statues had the pubic hair in an inverted triangle with a line shaved across the lower abdomen. That was the style that the Greek athletes used. From then on, for 2,000 years, with all statues pubic hair in the male was done like this. This is from the bronzes. Yet, there are some statues that have the pubic hair going up to the umbilicus in the correct way that it should do in the human.

But these are not humans. These are Satyrs. It was explained to me that Satyrs, as many of you will know, are half‑man, half‑beast and that they always have their pubic hair done wild and differently. These are two actually from the Uffizi, but they are Satyrs with different pubic hair. We now look at Michelangelo's David. You will see instead of the triangle being pointing down in between the crutch, the triangle in David is pointing up towards the umbilicus and the hair is what I would call "coiffured and blow‑dried". I have to say I've had to fight in the textbook to get those words included. All of the professors of art history who think that I'm being rather facile. I don't think I am because when you look at the bronzes, just look at the distribution and the way that the artist made the pubic hair. Not identical but not very far different from Michelangelo's David, which by the way we think was done within the same three‑year period as these bronzes. There's certainly a great similarity between those two pubic hairs.

Now, I looked at the rest of the body and without going into too much detail anatomically, this muscle here is called rectus abdominis. It has bands across it which are called intersections, tendinous intersections. There is an extra band between the umbilicus and the pubis. So I said, "Wow, that's a bit unusual. In my whole career as an anatomist working on human bodies and as a medical doctor examining human bodies, I've only seen it three times in my whole career." In other words, it's quite a rarity. It does exist but it's a rarity. There it is on an actual dissection. Instead of having what we call a six‑pack, you can have an eight or a ten‑pack, because there is an extra little band (where I've put the yellow markers). This bronze has got the abnormal or the anomalous rectus abdominus. I looked at the statues now in the same way with the toes and, guess what, we have Michelangelo's statues and numerous Michelangelo drawings, known to be by Michelangelo, that have got this very unusual anomaly in the abdominal musculature. Just think what it means. There are five different pictures there, exactly the same, very rare thing that we've got on the bronzes, and I can promise you that I've scoured the whole of that period of the Renaissance and we have found one other statue by Donatello with that same arrangement but that's the only one we have managed to find. If you want an interesting game, look through all of your art history books and see if you can find someone with that extra band between the belly button and the pubis. There is an extra groove or an extra band. To illustrate it, Julia very kindly took the statues and we put on all of the muscles that can actually be felt on the statues. They are so accurate, it is uncanny. I mean that. I've been around anatomy and human anatomy for all my life and these bronzes are so accurate, it is very, very unusual to say the least. And there you can see that we have shown the triangle and we have shown all of the muscles that are there. We have not done anything except just highlight where the bulges are on the actual bronzes.

Just to summarise, purely scientifically anatomy, I'm not interested in style, shape, attribution or anything, just anatomically, they are pre‑Vesalian anatomy, before 1943 and there are no textbooks. They are 95% perfect. The knowledge of the actual dissection is very likely in the case of sartorius, the auscultation and the gastrocnemius. There are also these Morellian details, like the toe, the pubic hair and the rectus abdominus that point to one artist and that is Michelangelo.

What I'm now going to talk about is the word of ten other teams that have been involved in this. I take no credit for this. But I think it will help you understand that my work fits in beautifully with what other people have found in completely different areas. We had a Michelangelo Discovery Symposium, what is called in the art world an Attribution Symposium. The statues were taken to the Rijksmuseum in Amsterdam and the bronze was analysed and not X‑rayed. They had to be neutron scanned because they are almost solid bronze. They said these statues are 1505 to 1510, fitting in with everything we have said so far. They wanted to work out how they were made. Well, all statues in those days were made by the lost wax method. I don't want to go into all of the details because I'll not an expert on the lost wax method. But they were all made by the direct lost wax method and you can see these little plugs on the actual statues where the plugs were used and they analysed how that was done. They weren't very well finished. One of the statues is beautifully finished and polished. But they were not very well done and the Rijksmuseum suggested that the bits that weren't well done were the original terracotta and probably moulded in terracotta and then made into bronze, showing this sort of thing. They thought, well, I wonder if we can reproduce them. The summary from the Rijksmuseum was this. This is not my slide. This is a slide from the Rijksmuseum; they're experts on bronze analysis. So what we did, we got one of the few people in the world who actually recreates Renaissance bronzes to make a new set of these, to test the theory from the Rijksmuseum. This is Andrew Lacey actually remaking these bronzes. You may say, well, how did you get the original model to remake these bronzes? That's him actually remaking the bronzes and, if you like, copying them.

How do you copy bronzes perfectly? This is where my team in Warwick came in because I do a lot of anatomy in 3D. One of the latest things that I'm doing is actually printing the human body in 3D. So we scan and this is the scanning, we're scanning the actual statue. You may notice that the statue has a big thing between its legs, that's where it goes into the printer. We scanned it in 3D and printed it in 3D thanks to Pinewood Studios. You can see here it has been cleaned up. It cost a lot of money. There is an absolute replica of the statue made with the same method in bronze made from a 3D scan of the original statues. You can see that the musculature is amazing. It's hyper musculature. In other words, it looks slightly as if the gentleman was on steroids. In fact, his models ‑‑ this is true of much of Michelangelo's work ‑‑ his models were all guys who were lifting heavy stones, they were labourers, builders. They were, if you like, people that would be in a gym pumping iron these days, except they did it for their work in those days. Here is an absolute replica made by Andrew Lacey from a 3D scan of the actual bronzes. You can even see the hollow of the sartorius going down there. You can see the extra bump of the eight‑pack and the beautiful pubic hair. And those of you who do not know 3D scanning and 3D printing may not realise that when you have the database of the statue, of whatever it is, you can either print it at actual size or you can make a shrinky‑dink for your children! It's a lovely thing. I haven't got it but one of the people involved in this has got the shrinky‑dink version from the 3D scanner. That costs about £100 but the big one costs £6,000. This is all on the web in an article about the 3D scanning of these.

At the attribution conference we had, we had all of the world experts on Michelangelo and Renaissance, which includes Sir Nicholas Penny, the Director of the National Gallery, we had the national director from galleries around the world. All of the art world came together, 300 of us, for an attribution conference in Cambridge last year. One of the experts ‑‑ look him up on the web ‑‑ he has published more books on Michelangelo and on Renaissance art than I've had hot dinners ‑‑ and you can look up the collection there. He was trying to work out what were the statues. One of his ideas and the idea was that they were actually two of the people that were involved in the setting up of Athenian democracy called the Tyrannicides. Originally, people thought these were to do with Bacchus, the God of drink. It's possible that what they were holding in their hands was swords for killing the tyrant and setting up Athenian democracy. For about a year, most people thought this was probably true but people weren't that convinced. But during the last year, a new theory has come forward of what they were for or what they were to do with the Golden Age. A lot of people have been working on this and here is a painting by Signorelli (1490). This is Pope Julius's Golden Age. The horses are roaming freely. It is all about Arcadia but the fascinating thing is ‑‑ I want you all to look at this ‑‑ Michelangelo has 40 pairs of nude males, an old and a young, in the Sistine Chapel. Now, who would have thought there would be 80 nudes in pairs in the seat of the Pope's palace, if you like, in the Sistine Chapel? So Michelangelo was definitely into nude pairs of guys. It's very suspicious that the Sistine Chapel has got 40 pairs of nudes in the ceiling. It wouldn't be too far in the same five‑year period that he might make a couple of nude bronzes for the same sort of reason. At the moment, people feel that this Golden Age at the beginning of the 1500 was to do with Pope Julius. We know that Michelangelo made a wonderful bronze of Pope Julius in 1504. It was melted down into a cannon a few years later. We knew he was working with bronze cannon makers.

Many of you will recognise Michelangelo's Tondo, which is wonderful. There are two or three tigers' faces in this Tondo if you look carefully. It is another area of research that's going on at the moment. In the mid‑ground are all of these male nudes. Yet, here, we have a classical biblical scene. So Michelangelo, in the period he was doing this and this was 1503, was again very much into putting male nudes in his art work. It isn't inconceivable that at the same time he would do bronzes of male nudes to represent the Golden Age of Pope Julius. I don't want to spend time on this because it's an unanswered question. In fact, this is a known sheet by Michelangelo and you can see the similarity particularly of this pussycat, whether it's a panther or whatever, and the Director of the Washington Gallery, the Washington museum, came over to the conference. It's very interesting that her take on those is actually that they aren't Bacchian and that they aren't actual panthers but that they're actually a chimera of the panther. Everyone said, "Why would they do that?" These are Etruscan, from the National Gallery of Art in Washington. These are Etruscan pussycats. You can see immediately the similarity between the Etruscan pussycat, which is actually a chimera. It's a mixture of three or four cats and from the time of the Etruscans 2,000 years ago it was a common art symbol. At the moment, that's where we stand on where the pussycats come from. In fact, they wanted to show that in the Golden Age man and the beast were as one. The wild cat did not need reins and did not need a saddle and it would let man ride on. Those cats are, in fact, chimeras of the feline variety and that is very much like the actual face you see on the bronzes. At the moment, this is thought to be the origin of those cats, that they were part of the Etruscan origin in art. They're not correct for any cat. Veterinarians have looked at the pussycats and say they're not correct for any sort of art.

So all of these different people have looked at different aspects and, sadly, I can't give you the reference because it's not out but a dozen of us have written a chapter each on a book on this which will probably be coming out in about January. It will be the Michelangelo Discovery. I've given you effectively what is in my chapter and a tasting of what are in the other chapters. The art world is pretty certain that the attribution is to Michelangelo himself. Some of you are saying so what? Yes, of course, Michelangelo's a wonderful artist and they are wonderful statues. Well, if they are by Michelangelo, they are the only bronzes by Michelangelo in the world because the other bronzes that he did, including Pope Julius, have disappeared or been destroyed. So they would be invaluable in the sense of money, I'm not interested in their value, but they will be the only bronzes in existence by Michelangelo.

These are the people I have to thank. You will recognise many of these names. Andrew Butterfield was in the news two weeks ago because he has just proved that some Bernini statues in New York are by the father and not the son, which has put their value up by 50‑fold or something. I can't remember. I noticed an article by him. Particularly Paul Joannides, Professor of Art History at Cambridge and Martin Kent, Professor of Art History at Oxford ‑‑ all of these people have given me help in trying to sort out the anatomy that I think shows that whodunit was Michelangelo on purely anatomical grounds. Ladies and gentlemen, thank you. I'm very happy to answer questions. I'm not an artist but I'm a medic.

HAYLEY: If you could wait until I come around with the microphone.

FLOOR: Did the artist suffer any pains in the sartorius or on the triangle?

PETER: Pains in what sense?

Very good. No. As far as I know ‑‑ you may know that Michelangelo lived until nearly 90. I think he was 89 when he died. He was complaining that it was hard chipping away at the rock. The one statue that I bet hadn't been done by him with the feet, that was when he was 80 and he went chip one day and a crack appeared right across the statue. He threw down his tools and left them. I have not seen any record of him commenting on anything that attributed to those two areas. He complained of being old and his muscles being stiff. The sartorius is called sartorius because you know we use the words sartorial elegance, meaning somebody who is dressed beautifully. A tailor will sit like that. I'm using my sartorial muscles. I'm flexing my hip and knee and turning my legs towards each other, that is sartorius. It's an interesting muscle but you don't see it. The reason you don't see it is because the fascia is over it goes tight when you go in that position. It's covered by a band of what is called fascia lata. No, I haven't read anywhere that he commented on that. I honestly believe that he took those features from what he had seen on his dissection and thought that they looked pretty, I will put them in my bronzes. That's honestly what I believe.

FLOOR: Who are the bronzes actually attributed to?

PETER: Michelangelo.

FLOOR: They've always been attributed to him?

PETER: Good question. Now, the art world is attributing to Michelangelo. The book will come out called Michelangelo Discovery, An Attribution by... and I'm one of the 12 authors.

FLOOR: I understand that.

PETER: I will tell you something interesting about them. They're called the Rothschild Tiger Bronzes. Let me go back. Why are they called the Rothschild Tiger Bronzes? Because the only person we know for certain who owned them was Adolphe de Rothschild in about the 1850s. In fact, his wife bought them. We have since traced that his wife bought them for the equivalent today of £4 million! In fact, it was 40,000 euros, that was in the 1860s. We do not know who owned them beforehand. Martin Gayford is writing a chapter on who he thinks it was. We think they were not written in against Michelangelo because when this guy died, Michelangelo didn't want to be associated with them and probably did them for a lot of money but didn't want to have his name associated with them. That's a good reason not to have it. No‑one knows for sure. There is no little thing in a book that says Michelangelo made them. But all of the art history world at this big conference came to the conclusion that they almost certainly are originally Michelangelo.

FLOOR: So when Rothschild ‑‑ when did the family buy them?

PETER: We don't know.

FLOOR: You have no record in 1840, who did they think they were spending £4 million on?

PETER: I think they thought they were buying Michelangelo, probably. Why would they spend £4 million? But we've not yet managed to get into the vaults of the Rothschild family, who are being very secretive about it. Three or four of us have tried different ways but that branch of the Rothschild family kept those statues for 120 years in a Swiss villa and they were only sold when the great grandfather of the person who bought them died and his young playboy Rothschild, who is now in his 50s, needed money so they sold them at Sotheby's. They were sold at Sotheby's ten years ago to an Englishman who mortgaged his house to buy them. Nothing to do with Rothschild or Michelangelo. He was a bronze collector who has immense knowledge. He is 60 years buying for the National Gallery and the Getty Museum, et cetera. He is one of the world's most knowledgeable bronze experts. He loved them and thought they were so beautiful. When he got them in his house and owned them, he said, "Who could they be by? They look like Michelangelo's work." He lent them to the Fitzwilliam for a year. At that time, Paul Joannides was in Montpelier and saw the picture of the pussycat and thought they were by Michelangelo.

FLOOR: What did he buy them for?

PETER: Under two million. One million 700 thousand or something.

FLOOR: He got a good deal!

PETER: Well, if the world recognises it as Michelangelo, my guess is that they will go to somewhere like Qatar National Museum for 300 million ‑‑ I've no idea! They are worth hundreds of millions if people recognise it.

FLOOR: So when you went on that first day to look at them, did you have in your mind that they might be or had you heard anything about this?

PETER: Nothing.

FLOOR: Where are they now?

PETER: Good question. When I went up on New Year's Day with my wife, I was taken into a room in the Fitzwilliam Museum, only the second time I had been there. I was taken in the back entrance by the head curator of the museum, taken into a back entrance, walked into a room and there sitting on the floor were these two statues. I looked at them and said, "Oh, my God, they're beautiful." I wasn't meaning beautiful aesthetically, they were beautifully anatomically. It sounds horrible but I've spent so much of my life looking at the human body so when I go into a gallery, I will look at a painting and say, "That's horrible. But it's a famous Rembrandt!" I will tell you one that is horrible to me. What is the name of the two brothers by Rueben?

FLOOR: Jape Brother.

PETER: The two brothers painting. Cain and Abel by Reubens. It's a great painting. It was exhibited in the National Gallery not long ago. When I look at it, it's the most disgusting painting because the anatomy is completely wrong! It's got movement and it's got one brother killing the other brother, but it's just anatomically looking terrible. My art appreciation is ruined by my anatomical appreciation. When I saw them, I was taken aback immediately. I spent the next few hours photographing them and running my fingers over the bumps. You can't see them on this picture but everything I looked at was anatomically perfect. When they told me the date, my mind started working in overtime because they couldn't be from a textbook. They couldn't be from anything that had previously been published. They had to be from a dissection or from a human body standing there doing that. That's when I started thinking about reading up on who did this. I can promise those eight or ten artists have been scouring ‑‑ I have spoken to every single one of those artists and spoken to people who have done their PhDs on that artist and all of them ‑‑ most of them hadn't used dissection ‑‑ those in brackets have done their PhDs on Verechio. He used models but didn't see inside the body. Whereas Da Vinci and Michelangelo had that experience. He was still dissecting in his seventies or eighties. It was something he got... it said in his biography by Condivi that he got a lot of pleasure from it.

FLOOR: I will try and phrase this but I will struggle slightly, but the hallux and the muscles in the stomach, if he didn't dissect until he was 18, would he have been drawing for a certain amount of time, the likelihood that he had these traits, the rectus abdominis that you mentioned, sorry, so he would have started with those because he would have known those best and isn't hallux related to Greek civilisation...

PETER: It was drawn longer by the Greeks. It's known as the Greek ideal, this bigger second toe. The fact all of his toes are like that is weird. I showed you 25 different toes there out of 60 pictures that he did of people nude with feet showing and there's two I can find that aren't but all of them are like that.

FLOOR: So it's possible...

PETER: Did I think he had it? Not necessarily.

FLOOR: Maybe when he started drawing, someone might have influenced them.

PETER: I think the anomaly on the tummy, the rectus abdominis anomaly, I think that was one of his models and he used that model and then like that shape, he gave it a long looking abdomen, particularly in the pietre where you want the droopy look! You do want that. He must have had a muse, a workman or one of his models who had the anomaly. But the fact that in the whole of Renaissance art I can find seven occasions of that being drawn or sculpted and six of them are Michelangelo and one is Donatello and the bronzes have it as well, it's a bit suspicious.

FLOOR: But, yeah, it was just a curiosity.

PETER: I don't think he had it. I think it was one of his models.

FLOOR: It would have been early on. Just because if it was something that showed up throughout his career, somebody influenced him early on.

PETER: It might have been the first one. I'm sorry, I don't know the dates. It's a good one for you to look up of the dates of all of those pictures; I can give you the references and see if all of them were early on. I don't know if they were actually early on or not. It would be interesting to do. No, those statues and paintings are spread over at least 30 years. Once a person has an idea of doing a toe or a nose or an ear in this way and they're a regular artist, they tend to keep that way of doing it. It becomes what you might call hard wired. If you draw something often enough, you tend to do it in the same format.

FLOOR: He would have found it more unusual if he discovered it through a dissection he was performing later in his career. He would have found that... it's all very original in the moment. One of the first dissections he did where it existed...

PETER: I totally agree. I have spoken to ten people like myself who are in their sixties and seventies who spent their whole lives of professor of anatomy and many of them had not realised you could have that anomaly. You would have to be an extremely observant person. It's not very common and it's not very easy to see. The other thing is that I went to... I have done a film recently on this topic with a body builder and we had the statues in Cambridge and had the body builder next to the statues and I posed him exactly like the statues! I made a movie. It will be going on YouTube! He's a very ripped guy! There are going to be a lot of people looking at it because he was fifth in the all England body building competition. I demonstrated on him all of these muscles that are labelled here. I have situated him next to the statue, standing in the same position sitting on a chair demonstrating them. To be honest with you, it's highly unlikely that it was someone that he drew. It's more likely that it's someone that he saw in dissection because I couldn't find one person in the body building community that could demonstrate that to me. You have to have no fat on the abdominal wall and you have to have the anomaly. To have both of those things, to about he a body builder who has also got that abnormality is one in a million. I don't know the figures. But it's very small. It's a good idea.

HAYLEY: Right. Ladies and gentlemen, I'm afraid that's time. I should apologies, first of all, for not putting an 18 rating on this lecture today!

PETER: Everyone here is over 18.

HAYLEY: I think we're all consenting adults. I will take a minute to give you an evaluation form to get your feedback on today's lecture. Thank you for Peter Abrahams for coming here to talk about the links between art and anatomy.

PETER: Remember, in the New Year, there will be a book out on this. I think it will be coming from the Fitzwilliam Museum and I think it will be called A Michelangelo Discovery. It is 12 chapters and with one chapter you have heard today. (Applause)

HAYLEY: The next lecture is 6th December on the subject of a change of heart, looking at the past, present and possible future of heart transplantation, which is in keeping with our soon to open exhibition Transplant and Life which will open on 22 November. Thank you all for coming.