

Podcast

Not just a Pretty Object

Previous Episode: [Perils of Preservation \(/podcast/perils-preservation\)](/podcast/perils-preservation)



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Guests: Tess Machling (UK) and Sigrid van Roode (NL)

Introduction: **Blingy, fashionable or personal. Jewellery has been an integral element of identity for thousands of years.** Despite this, historic and archaeological examples of these items of adornment have often been understudied and misunderstood. This month we are joined by two guests who are intent on changing this, aiming to highlight the true beauty of jewellery in a wider context. Listen in to hear all about the similarities and differences between studying historic and archaeological jewellery and how to start moving towards seeing these objects as craft items which can tell us their own fascinating stories. **Tess Machling** is an archaeologist and independent researcher looking at Prehistoric and Iron Age gold from a craft perspective. **Sigrid Van Roode** is an archaeologist and jewellery historian.

Meet our Guests



Tess Machling

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Sigrid Van Roode

Sigrid Van Roode is an archaeologist and jewellery historian. Originally trained as an Egyptologist, her PhD research examined 19th Century Egyptian jewellery. With 30 years of experience in jewellery research, Sigrid's goal is now to preserve and share the information associated with items of adornment from North Africa and the Middle East. She also works as a jewellery consultant and runs the website Bedouin Silver, which contains blogs, e-books and online courses.

Transcript

It's the first Friday of the month, which means that it's time for the next episode of #FinallyFriday, bringing you insights and discussions from around the world focussing on experimental archaeology, ancient technology, archaeological open-air museums and interpretation.

Phoebe: Hello and welcome to #FinallyFriday. My name is Phoebe Baker and today I'm joined by two specialists from our EXARC community for a conversation about jewellery. Tess Machling is an archaeologist and independent researcher looking at prehistoric and Iron Age gold from a craft perspective. Tess is now at the forefront of a project called The Big Book of Torcs which aims to explore the techniques, manufacture and craft required to create British Iron Age torcs. The project involves a number of people from a variety of backgrounds, including goldsmiths, silversmiths, jewellers, archaeologists and heritage specialists.

Sigrid van Roode is an archaeologist and jewellery historian. Originally trained as an Egyptologist, her PhD research examined 19th century Egyptian jewellery. With 30 years of experience in jewellery research, Sigrid's goal is now to preserve and share the information associated with items of adornment from North Africa and the Middle East. She also works as a jewellery consultant and runs a website Bedouin Silver, which contains blogs, ebooks and online courses.

So a big welcome to both of you, it's really nice to have you here, I'm really looking forward to the discussion that we've got coming up. A question to begin, who do we see wearing or, in the past tense, who wore the types of jewellery that you're studying?

Sigrid: For my field of research it would mainly be women, in 19th and early 20th century North Africa and Southwest Asia. Men do wear adornments, you could say, but actual jewellery is frowned upon, so it would be mostly the women in my case.

Tess: Yeah, you see, this is where it gets really interesting because once we go back into prehistory, we do that very archaeological thing of kind of divorcing it from who we are now. So we don't talk about jewellery, which is crazy. We talk about, I don't know, the things as they are, as you say adornments or torcs, neck rings. We don't actually talk about them as fancy things. Once we get into the Roman period we do, and we're quite happy with Romans having rings and earrings and necklaces and bracelets. Prehistory, we're not keen on it. We try and find all manner of excuses for them not being jewellery. We also have very little idea who actually wore them. There is an association in the earlier Iron Age with torcs, the gold neck rings that I look at, being associated with women in graves. But towards the later Iron Age, we don't really have that evidence. We don't find them in graves, for example. So although you've got people like Boudica described as wearing this big gold neck ring, which was presumably a torc, we don't actually have specific evidence as to who was wearing them. So it's a good question to start with.

Sigrid: If I may reflect on that. You just said we do the archaeology thing. What I notice a lot if someone is buried with lots of, well, let's call it jewellery, then it's often automatically, oh, that must be a woman and preferably a princess. When she has more jewellery, the person, it has to be a princess. So many times it turns out that it's not even a woman, it's a guy. So the whole gender thing, I think it's very interesting.

Tess: We do the opposite in prehistory here of almost associating... gold is about status. Status is about men. So gold torcs, the general population's understanding of them, they talk about kings and tribal leaders. So we've got these two weird things going on, haven't we? That on the one hand, it must be a woman because it's jewellery, and on the other hand, oh no, if it's status...

Sigrid: ...then it has to be the guy!

Tess: It depends what your perspective is. If you're a prehistorian, you'll look at it one way. If you're a Romanist, you'll look at it another way. I suspect even a different way from your point of view, looking in the 19th century.

Sigrid: My point of view often leaves from that of a collector. You have these items that have been collected, they are no longer worn, so they have been dislodged from their actual cultural context. But then they are reinterpreted by people who also, very much like archaeologists, have no idea of the actual cultural context of that jewellery. So that's a third way of separating jewellery and persons.

Tess: Yeah, and again, that picks up on something that really gets to me, is we don't look at these objects as craft or, like you say, relating to people, particularly the torcs I'm looking at. If you're looking at something like the Snettersham Great torc, which is a kilogram of 2,400 year old gold. Everyone always talks about the value, the bling. We completely lost touch with the people who made it, wore it, used it, curated it, loved it. What it actually meant. It becomes cash value. And that in itself also affects how easy it is to look at these things because you can't just go and have a look at them. You have to have special permissions to get them off display. I can't take it somewhere to show somebody. These things affect how we end up researching it as well. It makes life quite difficult. Is that the case for you with the silver that you're looking at?

Sigrid: Yes, very much. I so recognise what you are saying because, first of all, one of the things I most often say - and sometimes scream - is that jewellery does not exist in a vacuum. It is part and parcel of the culture that produced and wore it. We are very used to looking at jewellery from an art historian perspective, like this style, this decoration scheme, this use of material, and that sort of gravitates towards the value of the thing. A question that I very often get is: is this fake? Because this should be coral, it should be turquoise, but this is plastic. And then it takes a whole lot of time to explain that there is an entirely different value attached to pieces - like the amuletic, the magical value, which is something that I find personally so fascinating - which hinges on colours, and it doesn't matter whether it's plastic or ruby. As long as it's red, it will do the trick. And that's an entire different avenue to explore.

Tess: Yeah, we have that in torcs as well that there's surface treating, either intentionally or unintentionally just because of the way they're hammering, which is bringing gold to the surface and removing other metals, maybe silver and copper that are in there. So you get these different colours. And like you say, does it matter that it's a solid material, as long as the colour's right, or the way it's made even. It's very difficult. And on the other hand, you kind of have the flip side of that, where everything is so defined by the art historical approach - or perhaps on top of that, the kind of spiritual, religious aspect of these things, or ritual aspect of these things - that we lose track of the practicality as well, in that how they were made, the people who made them, and that becomes a very, very practical process of, you know, if I've got this much gold, and it's not great quality, there's only certain things I can do with it, so I might have wanted to make a very elaborate sheet gold torc. But if the gold's not good enough, I can't, I've got to make something else instead.

Sigrid: That availability is so incredibly important of the right materials and what to do with them, how to work it. I see that a lot in, for example, aluminium jewellery. It's much easier to work than silver, so you get these beautiful copies.

Tess: Wow, I've never seen aluminium jewellery, isn't that amazing?

Sigrid: Yeah! looks super impressive and then you pick it up and it just almost flies out of your hand. It's super light. That's something that gained ground in the 1940s, so after the Second World War, when lots of aluminium shrapnel was left in North Africa and Southwest Asia, like mess tins and airplane wrecks and stuff like that. That's very useful material that you can easily melt in simple circumstances. So you get these

replicas, which are not lesser items than the original silver items, they're just a new type of execution of that same thing. That's also something I wanted to ask you, because I read somewhere that when torcs are visibly older, that actually elevates their status, like when they have visible repairs?

Tess: If you read the standard literature, yes, they talk about very, very visible repairs and that almost the repairs, like you say, are part of telling the story of the antiquity of the item. But when you actually look at other Iron Age repairs, including a lot of old torcs, they are doing it very, very well. They are using a lot of metalworking techniques. The Torrs Pony-cap, I don't know if you know, it's an Iron Age kind of chanfrein which has big horns on the top of the head for a pony. That is really old and it's got various cracks on it. And if you look at it, they've cut these beautiful little patches, shaped patches to go over the cracks, which have then been riveted and soldered on and there's a decoration added on top of the patch and it's absolutely beautifully done. And yes, it is a visible repair, but it's an incredibly competently done metalworker's repair. Whereas if you look at something like the Grotesque torc, which is that one everyone always cites as having been visibly repaired, you don't actually need any metalworking skill to have done that whatsoever. It's actually used pieces of wire or old pieces of torc, they haven't even annealed the gold. So they've just wound the wire and the wire is springing off, because as you know, if you anneal something, it'll settle much better. Annealing is heating it up, for those that don't know, and cooling it down, and it makes the alloy more malleable. And then you work it and it gets harder the more it's worked. So I don't think it was intentional. I think we've got some very specific things going on with the Grotesque torc, which are all about how fast it was repaired to go in the ground. And from some of the other Snettisham hoards, there's actually pieces of material that are almost identical to what we see on the Grotesque torc. And it's almost like they've rifled through one hoard looking for pieces that they could repair the Grotesque torc with. So, I think we've got very specific individual stories going on. But in general, when you look at other torcs, there's the Sedgeford torc as well. When they cast the terminals for that one, it cracked. And they've ever so carefully drilled holes in the ends and the middle of the crack and put rivets front to back through the torc to stop the crack from running any further. Now, when you actually look at the torc, you can't see where that repair was. So if it was true that repairs meant longevity, they would have made it visible. They haven't. They've tried to hide it. They've tried to make the torc look as if that had never happened to it.

Sigrid: This is incredibly important for our understanding, I think, of how jewellery is treated and maltreated during its lifetime. These stories, like the one of visibly repairing and showing its antiquity, you just very fabulously myth-busted that for us. These stories, you also have that with the jewellery that I look into, because it's being discarded by the women that once wore it, because they have shifted to gold and more modern jewellery, so all of your grandma's old stuff, you would sell it. And then the silversmiths would use that material as raw material for new designs, but then in came the expats and the tourists and the hippie trail people who would buy these things. And then you get this whole new level of, I would call it silversmith legends, urban legends that are attached to pieces to make them more attractive to purchase for cultural outsiders who have no clue that that story is not true. There's one wonderful example, that has been busted by Margaret Mary Vale, about jewellery from Siwa Oasis in Egypt. They have these lovely horseshoe pendants with an inner detailing. And sometimes one of these tips is broken off. You will see the story repeatedly in books and in other publications that this was done to celebrate the birth of a son. Then the woman would break off one of these tips of that pendant. It's complete nonsense because of two things. This pendant represented value, so you would not intentionally damage a valuable piece to celebrate the birth of a son. Instead, giving birth to a son would entitle you to more valuable pieces. So you would get more, not damage one. But that is something that only can be..., well, 'busted', again, for lack of a better word, by doing the research, by understanding the culture, and by looking in different types of torcs and jewellery as you have. So, yay, thank you for that!

Tess: Do you think with those broken pieces, somebody had a lot of broken pieces and this was a good way to get rid of them?

Sigrid: The practice is that you would just break off a little piece of your jewellery when you needed cash, because we're talking about countries that have a super high inflation rate. When you would have money to spare you would buy extra jewellery and when you needed extra cash you would sell the jewellery, or pieces of it. Happens all the time.

Tess: Which happens over here, I mean if you look at all of the stately homes' family silver, the ones that were really, really rich kept their very early silver and then would buy more silver in the new fashion. Whereas if you look at some stately homes' silver collection, it's relatively modern because they were melting down the earlier stuff to produce the more fashionable, newer stuff. But if they didn't have enough money, they would have to recycle the old stuff, whereas the really big families would keep the old stuff and buy new, so would have a much, much bigger collection that showed longevity going back years. So yeah, that's the thing I always find about... - you probably find the same - with precious metal, we forget about these human stories. I find this particularly with goldsmiths as well. My family were actually goldsmiths going back to the Huguenots, father to son all the way up until my great-grandfather who died very young in 1936. And my family, my great-grandfather, helped set the Cullinan diamond in the crown and the sceptre in the British Crown Jewels.

Sigrid: Okay, wow!

Tess: Now, my family never had any money. The goldsmiths all had status, they were all goldsmiths, they were all freemen in the City of London. They were as good at their craft as they could be, yet they never had much money. We tend to kind of associate gold and silver and... there's all these very elite things. And yes, the people who commission them are elite, but the craftspeople that make them.... And that's what I love now, because we work with a lot of goldsmiths and the goldsmiths I meet, you'll talk to them and they've got a piece of gold that's £40,000, £50,000 worth. And they're just handing it around as if it was paper, because they're so used to working on it and I've never met a really rich goldsmith yet.

Sigrid: There is a saying, a proverb, in North Africa that expresses exactly this, that says: 'the jeweller's wife never wears a brooch', because of exactly this. The jeweller himself does all of the work, but it's not really making a very wealthy living, doing the silversmithing.

Tess: No, and trying to find that, identify that in the past... If you're trying to identify craftspeople, they're not going to have expensive houses. They're not going to have expensive workshops. As you yourself know, if you're working with precious metals, it's a very clean craft. So it's not like blacksmithing where you've got certain metal filings firing off all over the place. The chances of identifying archaeologically gold workshops or silver workshops and you've probably got quite an itinerant population. I would assume that the silver that you look at, have they got shops or...?

Sigrid: It can be both. In larger towns and villages you would have resident silversmiths that would actually be living there, but for large parts it would also be itinerant smiths that would just take everything. While I listened to you I had this mental image of a Tuareg silversmith from North Africa. When you see them at work it's really not much of a workshop they have at all. It's something that they could just pick up and move and do somewhere else again. Archaeologically, we would find zilch, unless we would be sieving very, very thoroughly to find maybe some traces of metal left. But otherwise, we wouldn't find it at all.

Tess: No, it's the same here because for the torcs, each component, you have a torc like the Great Torc, which is over a kilogram in weight, but I think 73 different components go into that because there's 64 wires, there's three parts to each terminal, so you start racking up and when you actually break all those down, each of those components is only about 15 to 20 grams each. So the crucibles necessary to make, they're tiny, they're a few centimetres across. The rest of the gold work is all being done because they're annealing and hammering and sheetworking rather than casting, so you don't have a lot of extra material left over. Or anything you do have left over, you're controlling, you're collecting. Okay, the odd bit you might drop on the workshop floor and you can't find it. But the majority of it, like you say, it's very, very clean. You can have a kind of two foot by two foot space with your hammers and your tiny anvil and a little crucible with a blow torch to melt the gold. And there's not much else. Hammers, punches, that's it. And a lot of those - the goldsmiths we were working with who don't work from a European tradition a lot of them, they work from a kind of Eastern tradition - the majority of the tools aren't even metal, so how are you going to find them? Because they're skin or they're antler for punches, rolled-up skin for hammers, things like that. So yeah, we're missing a whole community of workers, I think.

Sigrid: And that reminds me, I just went to the opening a large exhibition here in the Netherlands in our National Museum of Antiquities on the Bronze Age, which also shows amazing pieces of jewellery, including amber and jet and those things, but also that amazing Mold gold cape from the BM and some other jaw drops of pieces. And there is one mould of one of these Bronze Age clothing pins, with the wheel pattern. And then you look at that and think, that's just a bloody miracle that this thing survived. It's absolutely amazing. And then there is what always fascinates me - if I'm ever out of a job, I could write a book on this - that what we miss in terms of jewellery, especially from ancient periods: the perishable. So the things with the nuts, the flowers, everything that you would see in ethnoarchaeology right now. It's all gone and we have no clue what that might have looked like.

Tess: Also how that would link to the gold jewellery that we have got, because I've often wondered with torcs... the terminals have kind of got holes in the front. Were there things wrapped between, binding things, that we don't have now? Julia Farley has suggested a lot of connections with textiles. That a lot of the gold wire twists and things like that may have come from fabrics, textiles, spinning, and that relationship we just can't see. But going back to what you were saying also about the Mold cape, because the Mold cape is actually made from a piece of gold that's only about the size of a golf ball. I think it's about 600 grams?

Phoebe: And how big would you say the cape is?

Sigrid: Oh, it fits over your shoulders.

Tess: One of those kind of modern scarves, isn't it, that would sit down over your chest and your shoulders.

Sigrid: It reminded me of this trip that Meghan Markle took with Her Majesty the Queen. She was wearing a fantastic outfit which had a cape covering her shoulders, the creamy coloured one. Anyway, think that cape in gold with this beautiful embossed - am I saying that right? - decoration on it.

Sigrid: And it also had little beads hanging off it as well.

Tess: It would have made sound when you were walking.

Sigrid: I know, and also the strange thing is because it restricts you, so it slightly holds your arms in against your side and it's tiny as well. It would have had to have been a tiny adult or a child, but again that's because you're looking at this very small amount of gold being transformed into this... what looks to be a huge thing. And if you're looking at it from a distance, you don't know how thick that gold is. That's the same with torcs as well. It's transforming, constantly getting more bang for your buck. But it's always really interested me because coming back to the itinerant thing, it means potentially you could walk around with a kilogram of gold in your pocket and nobody would ever know it. So are goldsmiths travelling with the gold or are they going to clients who have the gold and making it for them? I've always wondered, because the client has this piece of gold which they give to the goldsmith and the goldsmith then does something with it, what's the quality control involved there as well? Because goldsmiths are very, very clever. You get no sense from a golf ball of gold that what's ended up in that cape, is that all of the gold that you had? Has there been other stuff added to it? The kind of human things that I wonder, were goldsmiths taking a little bit extra themselves?

Sigrid: We know for ancient Egypt that they had a very, very strict control on the gold that was used, that was mined, that was processed. Everything, literally everything, was weighed and noted down and weighed again at several points and the smith had to account for any differences. But in 19th century Yemen, you have women who would have their necklaces restrung, for example, because a thread would snap and then it needed to be rearranged, and that would be a perfect moment to add in some more silver or other beads or things that you would want added to it, but they would also check thoroughly whether the silversmith had actually returned that amount of silver. And that is why the name of the silversmith, his signature, was often added on it in a tiny silver plaque that would be sort of pasted on. That was also a quality control that their beads would not have been swapped for similarly looking but lesser beads.

Tess: In Iron Age Britain we have this strange thing that so much of the gold, because it's not very pure gold, it's a lot of mixed alloys and they're obviously recycling. There's things with various torcs where we've found that one torc terminal doesn't seem to match entirely the other torc terminal and it's almost like someone's had one, made the other one, and then made it into a torc, and I'm wondering if this is a means of passing on the kind of power or the symbolism or whatever else. Or like you say, is this one of those things of taking the piece of jewellery off when you need it, you know? And the rest of the original torc went into recycling for something else. And then later on when they've got things back together or maybe when there was a marriage or something like that, you make a new one. But the gold they're using the whole time, there's no real standard. It's not very pure. And the fact that they can do all of these surface treatments that make things look more gold than they actually are, you wonder if there's a kind of element of... because goldsmiths clearly knew exactly what they were doing. Did the clients?

Sigrid: Yeah, that is fascinating. You can look like a million bucks and never know that you may have been cheated out of a golf ball of gold.

Tess: And also that you have these things called tubular torcs, which look like a kind of inner tire ring and they are standard big neck size, I guess, two centimetres, three centimetres across the neck ring, tubes. And you look at them and they look huge, but the gold is actually only 0.01 millimetres thick and these torcs actually only weigh 110 grams. Whereas something like the Snettisham Great Torc, which in dimensions is about the same, weighs over a kilogram. But of course, if you saw someone wearing this tubular torc and it's got an iron rod inside it and packing and things like that, probably even if you picked it up, you'd have no idea it's only a 110 grams worth of gold. Whereas those looking on would have said, oh my goodness, look at that huge great gold necklace that they've got. It's something I often wonder about, about who was up to what and did they know what they were doing? You know, these things were obviously important, ritually and whatever else.

Sigrid: That whole keeping up appearances, that is also something that I so recognise from North Africa and Southwest Asia, where the jewellery that a woman would wear, that was her dowry gift. So that was hers to keep. And of course you want to show off your wealth. This is very much about wealth and showing your financial status. But not everyone could, of course, afford such a dowry. So you have tons of, for example, imitation coins. The Maria Theresia Thaler was one of the most famous coins. It was minted from 1761 or somewhere in that region. Anyway, it was the first coin with a guaranteed silver content, so it became hugely popular. But anyone who would be wearing coins of roughly that size - and again they could be aluminium - you would not see from a distance that that was not the real deal. And that was the idea, so you just show off, you look good from a distance. But then from close up, it might be a different thing. There is actually this true story: in Egypt, there was a company that specialised in imitation gold jewellery. It was called El Gemal, the camel. And that would create jewellery that was relatively cheap. It was gold-plated, not real gold, but it would even have these imitation hallmarks and you could not see the difference from even within a metre or so. It was really, really well done. And there are testimonies, women, who would say, well, I had to swap out my actual gold bracelet because of an emergency like hospitalisation or something like that, and then they would buy back an imitation bracelet and their husband would not see the difference. They were that good!

Tess: Yeah, I love that kind of thing. I really do. Because that's where you get the humans and if you see that in the past... I like all the mistakes on torcs. There's one torc where someone's tool has slipped and you can see they've actually gouged part of the collar while they were decorating it. And then they've burnished it out, because luckily it wasn't too deep and you can see where they've just polished it out. But you just have a moment back 2,000 years ago when some poor person was standing there with this and it flipped, and Ah ha!... The moment before you see that actually, no, it's okay, I can burnish it out. How much swearing was there?

Sigrid: Yeah, I was literally going to say, you can hear the swearing and maybe this master goldsmith looking on... what did I told you to! I love very much seeing the humans in and behind jewellery.

Tess: Because we've got various pieces where we think we can see apprentices or beginners. Do you have that in the jewellery that you look at? Because I find that amazing when you can see those starting out.

Sigrid: I'm not technically good enough to see whether I'm dealing with an apprentice. What I can see is the business decision of the owner. So the little damages, little things that have been broken off, things that have been patched up, sometimes conspicuously, sometimes very neatly done. It all together tells a story of, not just changing your bracelet because it's broken, or I'm going to get a new one because they don't cost anything, but you see the actual meaning that a piece had to its wearer. You see the availability of craftsmanship, of materials, of economic resources to have it fixed, you see her deciding, oh, now I need to sell part of this bracelet so I'm taking something off. And that to me is fascinating and heartbreaking also, because I work a lot with jewellery that comes from collectors. The damaged goods are the first to go, because no one wants to buy that, but it is in these damages that history actually unfolds itself. And I'm a bit concerned this is the first to leave from the material record. It feels to me sometimes that I'm working with jewellery that is about to become archaeology. It's losing its context, it's drifting further and further away from its primary life, you could say.

Tess: We do lose so much, don't we? I have the thing of torcs in this country. I actually wrote a piece about this recently, because it suddenly dawned on me, for the last 30 years we haven't had a torc that's been archaeologically excavated. Everything is either antiquarian or coming up through detecting. And when it's coming up through detecting, although it's being reported, it's not being left in the ground, it's being taken out of the ground, and then archaeologists go back later and try and find where it came from. But we really don't have context, and there's so much missing now, like you say, the things like organics, were they there? Because most people won't recognize them, and the torcs have been given a nice clean and a good scrub before they mostly get seen. It's really difficult because we're not seeing the full set of things and that on top of the fact that, for years and years and years these things were excavated and melted down. One of the loveliest torcs that I've got, torque terminal, the Netherurd one, was actually part of a large hoard and it was found by a shepherd in 1806, a shepherd boy, and the whole lot just went to an Edinburgh goldsmith. So we've got now one torc terminal and two coins and that's it from this quite a big hoard. And Mary Carhill who was the curator at the National Museum of Ireland, some of the gold Bronze Age lunulas where a dentist has taken tin snips to the gold crescent and it's got little squares cut out of it where it was used for making fillings!

Sigrid: Oh my goodness!

Tess: Taking a little piece of gold off this beautiful thing to make a filling! But that's the big problem, isn't it? We're losing our data set. We always have lost our data set for thousands of years, because it's always something that can be reworked into something else.

Sigrid: You can't blame the shepherd boy for stumbling upon this treasure and selling it. The dentist I have thoughts about. But the same happens also with the data disappearing, for example, with scented components of jewellery. I see that a lot in North Africa. They have this beautiful, beautiful scented paste which just smells divine. And you would also apply that on the inside of bracelets to make them more smooth on your wrist. And of course, it would rub off and you would be perfumed all day, fantastic. It's often washed off now as dirt, because no one wants to buy a 'dirty' bracelet, so sellers will take that off and it just disappears, while the fragrant context of the things is enormously important for the women that would wear that. But I imagine with torcs, especially when none of them come from a sound archaeological context, we have no way of knowing.

Tess: No, there's so many things. And like you say, that thing of scent, those other experiences that we can't touch, we don't know they were ever there and yet they were so important, associated with that jewellery. It's miserable, isn't it? It really is.

Sigrid: Okay, so before we get ourselves into a depression and this #FinallyFriday podcast ends in us having a drink, there is also, I think, just because of things like this podcast, the attention that you pay to painstakingly reconstructing how these torcs have been made, there is so much that we can actually gain from jewellery if we start looking at it as an archaeological object or material culture in its own right and not just as, oh god it's pretty, the end.

Tess: Absolutely. That's the thing that we found that a lot of the torcs we looked at had never actually been measured. There was one that we didn't even have a weight for it. No one had ever weighed it because it had sat in a case for 150 years and it was beautiful and it was pretty and everyone assumed somebody else had

done something with it. That's my big thing is the metrics of it. I want to know the dimensions, I want to know the weights, I want to know the tool sizes because then we can start comparing and contrasting. Who is doing what the same? We've managed to identify at least two, probably three torcs that have been finished or made by the same maker. One is from Scotland, one is from Nottinghamshire, 200 miles apart, but the way the little punch marks - which are only less than a millimetre across - they have this very odd... it looks random, but then when you actually look closely, there's certain motifs they use again and again and again, and there's three or four motifs. They're random enough not to be coincidental. And it's very idiosyncratic, it's very much that this one particular craftsman, who I just love, because most of the other torcs are very rigid, so they do three lines one way, three lines the other way, three lines one way, three lines the other way. The person who did these two torcs kind of goes, right, I'm going to do a little one here and a little one here and this and this, and it's so free flowing. You can almost feel them doing it. And then to see them doing it on another torc 200 miles away, that's wonderful. But when we started looking, everyone said, oh yes, the tooling, they talked about tooling and basket work and no one ever talked about the individual styles of it.

Sigrid: Fantastic, then you have individuals!

Tess: You can do some amazing stuff when you really get up close and that's the bit that I love because you do start getting a feel for an individual or a school, and I think a lot of people don't understand that. Craftpeople understand it, goldsmiths understand it. But armchair academics kind of go, but I can't see the difference. It's like, look! No, but I can't see the difference, and it's really tricky to try and explain. I've always assumed that most people can see it, but I think a lot of people can't. It is quite tricky for people to really look closely at something.

Sigrid: Looking is, I think, one of the most difficult things, because we see what we want to see, and the things that our brain sort of chucks aside as not important - you know, strikes, vertical strikes, horizontal strikes, who cares, it's decorated - that is where the individual is. I did that whole metrics analysis on the body of jewellery that I studied for my PhD from late 19th, early 20th century Egypt. No one had measured these things before, weighed them, and just put them in chronological order, which - as an archaeologist with OCD - that's the first thing you do! And then I noticed that these things actually change over time, which could be correlated to economical and social and political developments, which makes complete sense at the end, but no one had ever thought: let's just start at the beginning and lay them all out. It's interesting what's in the details.

Tess: We also found that everyone was looking so much from an art historical perspective, rather than actually looking at the technology that was going on underneath the torcs and underneath the art and the surface. We were finding that the same techniques - very distinct techniques - were being used to make torcs that were widely differently decorated. And it's almost like you can see the fashion change above the fundamental technology of how these things are made. And for the whole of the kind of early period..., because this is the problem. Every bit of dating that we have for Iron Age gold, everyone would say, oh yes, this dates to such and such period. And you say, why does it date to this period? Because it does. Or because coins date to this period. But have you got any proof that coins were made? No, but if the coins are this period and they're using coins to make torcs, then the torcs must be this period. But you haven't proved that they're using coins to make torcs yet. So we've spent a lot of time basically trying to step back completely, ignore all of the dates and see where the technology is leading us. And it looks like towards the earlier period, they have better quality gold so they can produce sheetwork torcs. And then as they move through, the southeast of England starts trying to copy them, but they don't have the gold, and they don't have a gold working tradition. So they start doing what they do with bronze, and they start trying to cast them. And they get themselves into all manner of mess, because these hollow, donut-shaped torcs don't want to be cast in the same way that a bronze axe does. There is not one torc that's cast that's perfect. They've all got problems. It's because they're basically trying to create this form which works brilliantly in sheet gold, in cast gold, but it just doesn't work. But they don't have an option, I don't think.

Sigrid: There's also this entire story behind that of why these people wanted to create that type of torc, and not decide, oh, we do our own style of torc in this gold that we don't have, but no, they've got it and we want it too. There's a dynamic there that is much bigger than jewellery. That is fascinating.

Tess: And also they bury it and it is like they bury the Iron Age. That this incredibly symbolic Iron Age item - we have torcs that have been curated, collected, whatever you want to call it, for about 300 years before they go in the ground - and then suddenly they put all of them in the ground, and they're gone. They don't melt them down, it's the end of an era, literally, that they can't quite get rid of them. Things are moving on, the Romans are coming, but they still can't let go of this Iron Age symbolism. So yeah, it's the power of jewellery, I think that's the other thing. The power of these items. I've been working on something recently about them being symbols of lineage, and that sounds as if it might fit in with what you're looking at as well, because I'm assuming if this jewellery is dowries, that then gets passed on, does it, or does it stay with the person whose it was?

Sigrid: It doesn't, oddly enough. Well, it's not really that odd, because this is a woman's savings account. Much of it is melted down during the course of her life, because if she will have sons, for example, that will need to marry, they will need to provide a dowry to their bride. Which often comes out of the mother's dowry, or what is left of it. Also, in some regions it is rather insulting for the bride to have second hand jewellery. It has to be newly made according to their specifications. You can't just say: here you have an old handoff. So this notion of heirlooming is only beginning to shape up now, because now most of this jewellery is gone and now it gets that heirloom status, but it didn't, it was always just melted down.

Tess: Wow, so your data set's quite small.

Sigrid: My dataset for my PhD was like 1,500 pieces, max.

Tess: Which compared to what must have been there over the years.

Sigrid: I tried to calculate, to sort of extrapolate how much there must have been of this particular type of jewellery. That leaves me with below one percentage of what once must have existed.

Tess: It's cultural, isn't it? That we have this association with inherited is good, it adds value. In different cultures, that's completely different. As long as you've got the material, it can take on a new form.

Sigrid: Except for amulets. Amulets were passed on because these grow stronger as they are older, so then they have gained powers. But all the rest, for the most part, it was actually melted down as asset.

Tess: And also we're never sure how much there was there in the first place. As well as things like recovery bias - where there may be a lot of this stuff still in the ground elsewhere that we don't know about yet - but also what we do know about, we don't know how much of that... were they all the torcs that were ever made, or was it 25 times more? My feeling is because we are actually finding torcs that have been finished by the same person, then we were probably not talking about a huge original amount, because the chances of having two, potentially three - we're almost certain there's a third made by the same person - suggests it is quite a small data set. Obviously there are a lot that have been lost or a lot that still have to be found, but I don't think we're looking at thousands and thousands of torcs.

Sigrid: Which then brings us back again to where we started with the value and status thing. Because if it's only a few, relatively speaking, then they must have been important, significant items somehow?

Tess: Oh, I'm convinced. Yeah, they must have been. You know, in archaeology, we don't like talking about status, but when you're talking about a material like gold, you can't escape it because not everybody would have had it, not everybody would have been able to find people who could work it for them. It is a status metal and it would have looked so different. You think back 2,500 years and the only thing that would have been shiny is water. You might have seen the occasional piece of glass towards the end, or coral, or things like that. But gold and precious metals really are the only...

Sigrid: ...shiny things.

Tess: You have to have money to have it. You always have had. Okay, we're not talking about money necessarily back in the Iron Age, but you had to have something to be able to get your hands on gold.

Sigrid: And that shininess that you just said. We have a lot of depositions in the Netherlands of bronze jewellery that have been deposited in watery bodies, like moors or watery surfaces. Now I'm thinking that makes total sense. You deposit something shiny in something shiny. I never connected these two dots.

Tess: Yeah, we've got this kind of long tradition of chucking things in water over here, back to the Bronze Age and before, but they never tend to do it with gold. It's weird. Gold doesn't go in the water, bronze does. Torcs and things like that are very much deposited in hoards buried intentionally, so it is treated as a different material. And also, as we were kind of saying before, it's a very different means of making a gold artefact to anything else. The closest you can get is they were working in bronze sheet, probably, as well. That's quite similar. And then maybe working gold as and when it becomes possible. Or are they being looked after? Do they have patrons who kind of look after them to make torcs? Who makes the jewellery you're looking at? These are full time craftspeople?

Sigrid: Yes, most of them are, most larger towns and settlements will have their own specialised craftspeople. There are some part-timers as well, people who have two jobs, so you can be like a farmer and a silversmith. And it's mostly men that are doing the silversmithing.

Tess: I find that really interesting because we have no evidence for prehistory. But on the other hand, in medieval London, we do have female goldsmiths who have their own marks, who are working themselves. Because all of this skill we've got - we've got possibly 300 years of torc making - you can't write that down - because obviously there's no writing at that stage - it's got to be shown. Somebody has got to show you how to do it. And the logical thing for me is that that is within families. Tom Bjorklund has done this wonderful image. I don't know if you know Tom, he does portraits from the past, they are absolutely beautiful. And he's done an image of a Bronze Age metal smith, who's a woman, casting bronze. And around her are two kids who are helping and playing and learning the boundaries between play, learning, being with their mum. And I like to think that's how it was, that you would be absorbing all of this knowledge from before you even knew you were absorbing it.

Sigrid: Yeah, you would be immersed in this, growing up.

Tess: It's what your parents do. And I can't imagine that they would go, oh, you're a girl. No, we don't train you, we only train the boys. If it was a family business or an extended family business, if you had someone with aptitude, I don't think their gender would have made much difference. I don't know, I'd love to know. We need a woman who's marked something, put her name on one of these pieces!

Sigrid: Well, maybe the one that did this different decoration scheme could be a woman, 'I'm doing it differently'.

Tess: The guy's done it all rigid and ordered and she's come in all artistic. Yeah, I like that idea.

Phoebe: I think that's a really nice place to kind of wrap up. It's been a real privilege to listen in on this conversation. It's been so interesting and it seems like it's really such a conversation of identity both in the people that are wearing it and the people that are creating it and it's wonderful that you can start to get to grips with these things and the changing views now as heritage people viewing them as these craft objects will hopefully make such an impact. So yeah, a big thank you. I've got one last question, more about yourselves this time. What are your plans for the future and how can the EXARC community help to make a difference in regards to all the things that you have discussed today?

Tess: Oh, I just need to see more torcs, more and more and more and more torcs. That's always what it's about, getting up close and personal with torcs. The whole experiential side of this is also really important. I bought a piece of gold, during lockdown, which was just to basically give me an idea of how gold works, and I think that's really important and somewhere where EXARC can help, not just with gold, but getting people hands-on because once people get hands-on they understand things a lot more and you can learn more ten minutes playing around with a material than three hours reading about it in a book.

Phoebe: That's a really nice point. What about yourself, Sigrid?

Sigrid: I will continue to work on sort of raising awareness that jewellery is more than just adornment, but an actual historic source, because that is my main view on jewellery. That also goes for more recent jewellery, like what we call ethnic jewellery - basically non-Western jewellery. I would really like to raise awareness that that too is heritage. And for the EXARC community, I think when you're working with jewellery in any capacity, the non-material aspects are so incredibly important. So if people would take note of that, like how it smells, how it feels, how it jingles. I love that the Mold cape jingled. I will go back to the museum, look at it, and imagine it jingling. How it flashes in the light. These sensory aspects of adornment, I think are underrated still, but they may actually carry a large clue as to their importance for the people that made and used them.

Phoebe: That's a really nice point to end on. Thank you very much again, both Tess and Sigrid, for joining us and for sharing your experience and expertise. I know that I certainly learned a lot and I'm sure that our listeners did too. And a big thank you to everybody else for listening in to this episode of #FinallyFriday by EXARC. If you would like to become more involved with EXARC, why not become a member? Alternatively, you can make a small PayPal donation through the website to help support EXARC in its endeavours.

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