Fatma Ismail:
We are excited to have with us today Professor Salima Ikram. She's Distinguished Professor of Egyptology at the American University in Cairo. She has worked as an archaeologist in Egypt since 1986. Professor Ikram has published extensively in both scholarly and popular venues for adults and children on diverse subject matters, ranging from traditional Egyptological subjects to zooarchaeological topics. Currently, her research focuses on the changing climate of Egypt as reflected in the fauna relying on evidence derived from fictional archeozoological and climatological evidence, changing food sources and eating habits, rock arts, and funerary customs.
Welcome, Professor Ikram.

Salima Ikram:
Thank you so much Fatma and thank you for inviting me to this series.

Ismail:
Of course, the fascination with King Tutankhamun stems from the rich tomb where his mummy was found among hundreds of other objects in 1922. As an academic, what do you think is the significance of its discovery? And do you think the tomb and its content have been studied enough?

Ikram:
Well, I think it's obviously one of the most exciting finds in Egyptology. And it is significant not only to Egyptologists, but also to the general public, because again and again Tutankhamun manages to sort of stir up enthusiasm and fire interest in ancient Egypt and all things Egyptian. And for us of course, as Egyptologists, it is extremely interesting, because we have an almost intact group of artifacts that come from a single tomb. And so using these we can learn about religious beliefs, funerary customs in particular time, as well as looking at all of these artifacts, we can better understand technologies that were used, economic importance of trade and exchange because of the various materials used to create these marvelous works of art and daily life usage from Tutankhamun's tomb. So, I think there is still a huge amount that can be done with the goods that were in the tomb. And as we are seeing more and more, even the tomb itself does not seem to have yielded up all of its secrets yet.

Ismail:
Let's start with the mummy. As a world expert on mummies and modifications. Can you summarize for us the recent studies done on the mummy of the boy King- I think the mummy was in relatively good shape. What does it tell us about his life and death? What's unique about among his modifications, besides the erect phallus, of course, but I hope you can talk about as well

Ikram:
I have to say, there have been quite a lot of studies recently. Well, actually not that many, let's be honest. When Carter discovered the mummy, it was intact, but it was so covered with highly resinous glutinous, black material. And in fact, it was very firmly stuck to the coffin. And many of its bandages, and all of the funerary jewelry, was really clinging to the body. So Carter had the unenviable task of unwrapping Tutankhamun because of course, at that time, it would not have been possible to have taken this out in his coffins out of the tomb, and through an x-ray machine in Cairo. So what he had to
do was to do what was traditionally done at that time period, which was to try and release the king from his coffin, and undo his bandages in order to study the mummy. And unfortunately because this glutinous black sticky material was so thick and so, so sticky, he wound up having to actually cut up to some extent poor Tutankhamun during the course of investigations. But they did take good notes and photographs bunch of amazing pictures throughout of this whole event or series of events rather. And so unfortunately Tutankhamun was not in very good shape by the end of it, he probably wasn't in brilliant shape at the start of it because he was really just covered up with black glue, which is a combination of resonance material. So recently, after Carter worked on releasing it, Douglas Derry and Saleh Hamdi Bey, worked on looking at the mummy and analyzing it, then Derry did some further work. And then in the 1960s Harris and his team have, actually looked at it. And then subsequently, the Hawass team has done CT scanning as well as DNA analyses. And I think there were perhaps some blood work done as well in the 70s or so. So there's been little pockets of attention paid to the body of the king. And they have all yielded different results, some of which have been contested in the medical press as well as the Egyptological Press. So as with anybody, by studying the bones or the remains one can learn about Tutankhamun and by studying the mummification, we can learn more about religious beliefs. And what is interesting is that Tutankhamun's a very complicated mummy because; okay, let me just start. He was mummified in a very curious way and several anomalies are apparent if we compare his mummification to that of the kings apart from Akhenaten's just preceding him as well as those that followed. 18th Dynasty rulers are not really buried the way Tutankhamun was or mummified the way he was. There are two levels of resin in his cranium. The arm position is well I suppose in a way for the 18th dynasty. They actually were not very firm about where they put their arms but the location the evisceration cut is odd, the position of the penis is odd. The fact that we can't seem to find his heart is odd. Now there are some of his ribs are missing, but this could have been something that happened in recent history where we think that robbers might have gotten in or to remove some of his ribs. And the huge amount of resins and oils used in the embalming is also an anomaly. You don't really see anything like that till much, much later. So it is, Tutankhamun's mummification is very unusual. And as a result, of course, people have spilled a lot of ink saying, oh, he was mummified in this terrible way because he died far away from Egypt. Because either he was you know, fighting with someone he was on campaign, or he was hunting, and a hippopotamus kicked him or a horse kicked him or various other things.

**Ismail:**
Or the blow to the head…

**Ikram:**
The blow to the head [is ]because] part of his parietal was knocked in. And then subsequently we have learned that actually, as far as we can tell the blow to the head was bit mishandling either by the embalmers or subsequent to that. And so there was no real blow to the head, the ribs is a questionable thing, but they seem to have been cut out to release some of the jewelry on his body, which was present and documented by Carter. So it happened subsequently, perhaps during the Second World War, when we have events such as these taking place.

**Ismail:**
There is a mention of him suffering from malaria as well. Is that correct?
Ikram:
So, with the Hawass and his group, they did all these CT scans and analyses and they found that Tutankhamun had malaria but did not die because of this. They did notice a fracture in his femur in his leg, upper leg, a thigh really. And some people conjecture, this might have been the cause of death because he might have broken this and had septicemia and then died. But physical anthropologists as well as medical doctors, were not all in accord with this interpretation. So again, despite all of this modern technology that we have and medical knowledge, we still don't really know what Tutankhamun’s cause of death was, and he could have simply died of the flu. Which is much more of a reality nowadays than before.

Ismail:
Sure. So can we at least say it was a combination of several issues that led him to his death rather than one main cause?

Ikram:
I frankly, don't think we can say anything for sure at this point. I don’t think there’s sufficient evidence, but what we can say is that his mumification was very odd. Because the position of his embalming incision it goes from his navel to his hip. That is not something you see during the New Kingdom. Also the amount of this black resinous material, you don't see, the erect penis again you don’t see…

Ismail:
The absence of the heart… I think you had an interesting theory about this with linking him to Osiris, we know that according to tradition, the deceased is usually associated with God Osiris but more so with King Tutankhamun. His image is represented very clearly on the burial chamber as God Osiris and maybe the absence of the heart is also something related to the mystery of Osiris.

Ikram:
Well, certainly, I did propose a theory that Tutankhamun was, because as you know, the Amarna period before that had sort of jumbled up religious beliefs, and maybe Tutankhamun was moving towards a more traditional. So, basically, all of these elements seem to be that Tutankhamun really was being during his life, he was the living Horus, to sort of kick back to the Amarna heresies. And in his death, he was very literally, Osiris with his headdress. And in fact, you know, Carter commented on this as well. He had this headdress that was reminiscent of that of Osiris. He had an erect penis, which we see with Osiris. He was colored or black, which is identifying Osiris and Osiris with the land of Egypt because the soil is so fertile, that if you even now go down and take up the Nile soil, it is extraordinarily rich, fertile black soil. So, here we have the mumification, seemingly, turning Tutankhamun very literally into the God Osiris to rule in the afterlife, just as Horus, he ruled in this world.

Ismail:
So intentionally making a statement that everything is going back to normal to pre-Akhenaten’s time. So the burial anomalies in the mummy and among the objects, as we'll discuss later, seems to be intentional.
Ikram:
I think that it was definitely intentional. And it's not even necessarily pre-Akhenaten. What it does is pre-Akhenaten plus moving forward because a lot of what you see going on there is something that then contributes to how Egyptian religion evolves throughout the Ramesside Period. And it is more traditional certainly, and more secure, but you see much more interconnection and interweaving of deities as well as the King and these divinities.

Ismail:
Many curious items exist among King Tutankhamun's treasures. What was the significance of the many walking sticks found in his tomb, for example, there are over 130 of them?

Ikram:
Yes, Andre Veldmeijer and I are working on these. And we have a lovely team assembled where we are hoping to publish not just the sticks, but compranda, as well as sort of the idea of what sticks and staves mean to the ancient Egyptians. And thanks to the ARCE for an AEF grant to help do this. But some people say that all of these sticks point to the fact that Tutankhamun had problems with his legs. So we looked at the bases of the sticks very carefully and actually have not found anything conclusive to point to the fact that they were used to such an extent that as by someone who needed them as a support, and I have had a series of unfortunate accidents with my limbs. So I have been using a walking stick for some time. And I could also use my walking stick and the wear patterns and compare them to what Tutankhamun had and other people's walking sticks. And it does not really see that for the most part that they were used. But of course, the ones in his tomb, had many of them most of them had a ceremonial purpose as well. So he would have used them in ritual context. So that would mean there wouldn't be much use. The ones that would have been that seem to have been used for daily life, do not really display a huge amount of wear pattern. Several of them, all of the sticks in fact have evidence of animals like little insects eating bits and pieces and general deterioration more than they do of actual use patterning. So I think that if one starts probing deeply, which is what our project is doing into sticks and royal tombs and in fact private tombs as well or non-royal tombs, we do have a large numbers of sticks bound in tombs such as that of Tutankhamun, other royalty or royal associates like Yuya and Tjuyu, but non royal individuals as well, not of course in the same number, and sometimes by young people. So it seems more that they have a ritual purpose. I hate to say this, but it's probably true not as well as you know, something a role to play in terms of accessories, rather than 'I am going to lean on this stick because I can't walk'.

Ismail:
Yes, especially with the ones that have curved ends and representations of enemies to them. They kind of... Clearly, they are not functional, they're more symbolic.

Ikram:
Andre and I have been trying to do all kinds of experiments to see how one would use those if ever going to use them.

Ismail:
How about the different kinds of food that were found in his tomb?
Ikram:
Oh, something so dear to my heart. This was what my dissertation was about. Yeah, Tutankhamun was a growing boy. And there were lots and lots of different kinds of food found in his tomb. So we have red and white wine, no beer strangely. And we have a huge amount of Dom palm nuts, which even now children in Egypt love to eat or you crush up and you turn them into a juice.

Ismail:
I love that personally

Ikram:
Exactly! They were knobkerries, which are jujubes, as they're called, in English colloquially, raisins, dates, lots of different kinds of bread, and most of all meat. He had a poultry and beef. So, you know, ribs, and leg joints and all of these things were there so you can tell the growing boy needed to be nourished in the hereafter.

Ismail:
Yeah. Do you have a favorite artifact among his treasures?

Ikram:
Oh my God, that's so difficult. I think one of my favorite things is the Anubis on the shrine, which was found when it was found, Anubis was covered up in linen cloth, like a cape. So, if he looked like a super Anubis.

Ismail:
That's iconic.

Ikram:
Very iconic. It's the whole idea of wrapping things to make them more sacred as well as to protect them. But he really just looks look as he's going to be a superhero. And he is exquisite. But I mean, there are also some charming things like Tutankhamun's gloves or his underwear that are so nice because one has a sense of this sort of personal relationship almost with this boy because of the underwear and some of his shoes and gloves. You can see that they're different in size so you can see that they're being kept. And sort of stored since he was little he grew up and it's like, nowadays people keep the first pair of booties worn by their children little shoes. And then sometimes they bronze them, but it was the same thing because Tutankhamun's clothes and chairs since he was a young boy had been kept and then they were put into the tomb for him which is just so sweet.

Ismail:
So charming! I love that he had a lock of hair from his grandmother in the tomb.

Ikram:
Isn't that Victorian! So Victorian!
Ismail:
The media, as you mentioned before, has latched on to a theory about there being hidden additional chambers in Tutankhamun's tomb. What is the latest news on this topic? And what do you think of this theory?

Ikram:
Well, this is a very amazing thing. It seems in some images that it is a possibility that there is a door. But when people have done sort of magnetometry and various scans, this is not always proven to be the case. I think that until all of the raw data is released to people who can actually run this and look at it, people on the outside cannot really come to any decision. Certainly, some groups say there is absolutely something behind that wall while others are absolutely fully sure that there is nothing. As I don't have access to the data or the software that would interpret or image it, I really couldn't possibly comment. Though I would love to think that there is something delicious and wonderful behind that wall.

Ismail:
Yeah, we always like to look forward for something especially if it's connected with King Tutankhamun. It'd be fascinating to discover anything in addition to what we already know.

We did find a beautiful and almost intact tomb of the third Intermediate Period King Psusennes I at Tanis, dubbed the Silver King. Do you think we are likely to find another burial as rich as that of the Golden or Silver Kings?

Ikram:
It was a great shame that the Tanite burials were found during the Second World War because there are filled with extraordinary objects, some of which were in fact taken by the priests of the Amun and Tanite kings from royal burials of the Theban kings of the 18th, 19th and 20th dynasties and then reused or melted down and re-appropriated. I think that given the fact that we still have tombs of high priests, queens and even kings that have yet to be discovered, it is not outside the bonds of possibility that we will find something intact and as exciting as the tomb of Tutankhamun, perhaps even in the Valley of the Kings or the West Valley, because there still is a lot to be discovered. And it is extraordinary, how in Egypt, which is a magical place, you completely unexpectedly come upon something just by the turn of a trowel.

Ismail:
Or a fall of the donkey…

Ikram:
The fall of the donkey, the stumble of the horse, the person who trips and falls into a shaft; or let's not forget the goat, that was grazing in the bare hills of the Theban necropolis.

Ismail:
Thank you so much, Professor Ikram for a fascinating discussion.

Ikram:
Thank you very much.