

PROGRAM DATE: 2018-07-05

PROGRAM NAME: WOMANITY – WOMEN IN UNITY

GUEST NAME: PROFESSOR MARYNA STEYN – HEAD OF THE SCHOOL FOR ANATOMICAL SCIENCES – FACULTY HEALTH SERVICES – WITS UNIVERSITY

SPEAKER	TRANSCRIPTION
DR. MALKA	Hello, I'm Dr. Amaleya Goneos-Malka, welcome to 'Womanity – Women in Unity'. The show that celebrates prominent and ordinary African Women's milestone achievements in their struggles for liberation, self-emancipation, human rights, democracy, racism, socio-economic class division and gender based violence.
DR. MALKA	Joining us in our Johannesburg studio today is Professor Maryna Steyn who is Head of the School for Anatomical Sciences in the Faculty of Health Sciences at Wits University. Welcome to the show!
PROF STEYN	Thank you.
DR. MALKA	Prof Steyn as Head of the School of Anatomical Sciences at the University of Witwatersrand and also Director of the Human Variation and Identification Research Unit, you play a vital role in establishing forensic anthropology as a sub-discipline in South Africa, training many post graduates and also bringing case analysis into the formal stream of investigation. Can you please tell us more about the school and what are some of the milestones that you want to achieve in this role?
PROF STEYN	Right so you know I'm sitting here wearing two hats; as the Head of the school of course anatomy forms an integral part of training of all the Health Sciences related disciplines you know and in that sense of course we have an important role to fulfil and the responsibility to society to know that we produce capable graduates. However, more in my personal capacity and my personal passion really is the forensic anthropology part which you know is really where I see myself and that is my main passion in the research and the practice of forensic anthropology and basically deals with analysis of human remains found in forensic context and that is basically what my main role is and you know where my interests lie. And so in this sense you know what I would like to achieve or what I've been working for in my career is to make forensic anthropology a formal discipline, to put it in the mainstream of forensic analyses, to make sure that we train postgraduates, and in the end it's all about I think a service to the community in the sense that we want to give a name to unidentified people, you know, who are left somewhere to decompose, you know, often people who are killed; murdered in South Africa and of course there's no closure for families, there's no follow-up; an unnamed person, it just does not seem right you know and that's something that we need to change.
DR. MALKA	So part of that it's about establishing their identity, knowing who they were so loved ones can mourn and that the person...everyone is an individual and that we identify who they are and that they have a name on their tombstone.
PROF STEYN	Yeah absolutely, I mean everybody deserves to have a name associated with their remains.

DR. MALKA	Everybody's somebody.
PROF STEYN	Yeah everybody's somebody, everybody has a family somewhere that needs to know what happened to your relative and after all no case can be investigated if we don't know who the victim was, so that's your starting point in any criminal investigation is to know who the victim was, who he was last seen with, what is his life history, what did he do and so on and there's no way that we can know that if you don't know who the person was.
DR. MALKA	So in that, for almost layman terms, the investigation of human remains in a forensic context, that would be if people are watching television the likes of a CSI and that type of nature of understanding who victims were, you work a lot with police in order to solve crimes.
PROF STEYN	That's basically it ja, so usually if you find a decomposed body in the veldt or in a shallow grave, you have no idea who it is, so our role is to clean the remains and then to establish you know if it represents the remains of one individual or more than one, often is it human or not, is it complete or not, is it male or female, what the ancestry is, what the age is you know to assess the trauma of pathology, see what we can do to help identify, that's basically what we do.
DR. MALKA	And typically how long does that process take?
PROF STEYN	Sadly I must tell you, very long. The analysis in itself doesn't take that long but there's a huge backlog in the system, I think it's well known that there's a huge backlog in the forensic system so...
DR. MALKA	...I assume it's very specialised so you haven't got a lot of resources; people wise.
PROF STEYN	Not so many resources, no. I think in a case where there's some information of a suspected identity it gets higher priority and we try to push it through the system, especially you know if we have an idea who the family may be or the case and so on, but unfortunately the standard body found in veldt case, long backlog to get through all those old cases, unfortunately.
DR. MALKA	And I read that in your consultation with the South African Police Service that you've been working this for almost twenty years as part of your... you know I consider the academic side your day job and this is another life pursuit and passion and you've completed more than four hundred forensic anthropological case reports and have been involved in several high level investigations and repatriations; can you share some of your experiences in the role?
PROF STEYN	Well I think the cases that stay with you are the ones that you go to court for. So often maybe of these cases never get solved and you not always have closure but the cases for example that I went to court for and that stay with me for example is the David Simelane murder case, inin Swaziland, this individual murdered 35 women and left them in the forest, so that was a case that I was involved with and went to court for. You may remember Mark Scott Crossly, the case where the body was thrown in the Lion cage, you know, so that was also an interesting and unusual case. I went to court for one child abuse case which is also quite memorable for me but if we speak of incidents, specific incidents that happened, in forensic case work there was you know just one thing that stayed with me always; there was the remains

	<p>of a small boy brought in and he still had his clothes on, badly decomposed, partially skeletonised but he had his clothes on and we were taking his clothes off and there was a green balloon in his pocket and to this day you know I think about this kid, you know, who was a child and something evil happened to him, you know, and the kids...the kids are always disturbing, they stay with you, you know, a kid...a child should not be found dead in the veldt, you know, there's something inherently wrong in that. On the repatriation front I think something that I still remember as a moment of meaning for me is we worked on repatriation of four soldiers, they were called the Ebo Four from Angola, from the border war; we found only the remains of three individuals under very difficult and dangerous circumstances, which is another long story. But eventually the mother of one of those soldiers was still alive and I remember when she took the little box with the ashes and kissed it and put it in the Wall of Remembrance; the closure for her to bring her son home, to know what happened, to know the remains are here, they're not in a foreign country, they're not sitting somewhere lying...well we excavated it from the aircraft disaster and that is also you know one of the moments that I will remember as being very meaningful for me.</p>
DR. MALKA	<p>It's such a different career stream and field so everything that you're describing and these are all issues that really matter in a human level on wanting to have closure of events of if there has been a death and knowing that your loved one has been found and putting an end to the mourning process.</p>
PROF STEYN	<p>So...so you know that in Gauteng one out of every ten cases that move through the mortuaries remain unidentified; I think this is actually completely shocking and they....</p>
DR. MALKA	<p>...cause no-one is looking for the person, it's...</p>
PROF STEYN	<p>...Ja, no-one keeps looking or they get lost in the system or you know the situation in South Africa I think many of them may be migrants; illegal migrants maybe, who knows, or people coming to look for jobs in the city and you know months later when the money stops coming home, you know, they realise that this person may be missing. So it's just a huge humanitarian issue, you know, one in ten people out of our thousands that go through there, so it's not an insignificant problem, it's a huge problem.</p>
DR. MALKA	<p>No, a massive, massive problem. You've published over 130 articles in scientific journals and book chapters, you've also co-authored the book "The Human Skeleton of Forensic Medicine" and your research focuses on the human skeleton obviously, both from a past point of view and also from the present perspective; starting with the past, often I feel from an African context we're always taught history from a European perspective at the expense of our own heritage. You earned your PhD in 1994, studying skeletal remains from Mapungubwe, a thousand-year-old archaeological site in Limpopo Province, can you tell us about some of your findings from the study, I know it's tapping deep into the archives, but yes, if you could share us some of your learnings on this prehistoric population which is an essential part of our culture?</p>
PROF	<p>Yes, Mapungubwe is I mean it's so close to my heart really. So</p>

<p>STEYN</p>	<p>Mapungubwe is very interesting because in Southern Africa it was the first area where social complexity developed. So whereas before people lived in smaller homesteads, at Mapungubwe because of the social statuses site so people still initially lived in an area called K2, which is also part of the Mapungubwe complex and then social complexity developed so that the leadership developed a royal or sacred or holy leadership and they moved on top of the famous Mapungubwe Hill where there were 23 skeletons buried of the royal family and a number of these were buried with golden objects and that is where they famous golden rhino and the bowl and you know all those famous golden objects come from, so they were specifically associated with the royals of this site and they were burial goods, grave goods. So I mainly looked at the health status of these individuals, the skeletal collection comprised of about 120 individuals. Firstly, as far as the health status is concerned we had some interesting findings in that people were not really suffering from chronic diseases or malnutrition. So the life expectancy was not particularly high; we could work out the demography through a process called palaeography so you could work out the life expectancy which is fairly low but probably death resulted from acute infections and acute diseases and very little found in the line of chronic diseases. So clearly their nutrition was adequate, they had a healthy lifestyle, none of the well-known chronic diseases that we could find there. An interesting thing about the Mapungubwe Gold Graves; unfortunately the bones themselves were pretty poorly preserved, is that it was always presumed that these individuals were buried in a sitting position, if you look at how the bones were arranged but then we excavated remains at Thulamela, which you may have heard from, Thulamela is in the northern part of the Kruger Park and there one of the burials was a secondary burial, meaning that this person died somewhere else and he was of such importance to the community that they brought the bones and reinterred it as some sort of ceremony or some sort of symbolic action at Thulamela with some gold objects and I'm convinced after having looked at all these old photographs on that at least one of the individuals at Mapungubwe was also a secondary internment, you know, showing some deep meaning of the importance of this individual and bringing the remains from elsewhere and doing a symbolic interment.</p>
<p>DR. MALKA</p>	<p>And what happened with...if I can say what's happened with the sites, the burial sites, the bones, is everything preserved or has it been relocated?</p>
<p>PROF STEYN</p>	<p>Yeah so for me personally it's a bit of sadness because the bones were repatriated and they were reburied at Mapungubwe you know as part of a ceremony of repatriation. Now because I'm a scientist you know I think it's a great loss. I've recently become involved in some ancient DNA projects where and in one of those papers we were able to push the origin of modern humans back to about more than two hundred thirty thousand years and...but at the time that I worked on Mapungubwe this was not feasible, I mean the...</p>
<p>DR. MALKA</p>	<p>...the technology wasn't there...</p>
<p>PROF</p>	<p>...it just wasn't there and how much I would have loved if we were</p>

STEYN	able to do ancient DNA on the Mapungubwe.....
DR. MALKA	...and you can't access the bones now because of
PROF STEYN	...they're reburied and you know most of the ancient DNA studies focus on, you know, where did people come from, but as part of the spinoff of it is also information on disease. So for example we entered the first malaria resistant gene develop either the resistance you know so it goes along with climatic changes, it tells you something about lifestyle, agricultural activities...
DR. MALKA	...whole environment that's connected in the bones...
PROF STEYN	...so there's so much you can learn from it so I'm hoping that somewhere in the future you know those bones can be re...taken out again and sampled.
DR. MALKA	So it must have been a real privilege to have been able to access them....
PROF STEYN	...to work on them, for sure.
DR. MALKA	Turning to the present, can you tell us about some of your current research and the significant learnings that come out of the work?
PROF STEYN	Well through the years what we've worked a lot on in the forensic realm specifically was to develop standards by which we can identify people. For example I'm busy with a project on adult age estimation because it's very difficult to determine the age from an adult individual's bones. In a child it's easier because things happen, your teeth erupt, your bones grown, the ends of bones fuse and so on, adult's its quite difficult. So that's one of the projects that I am currently working on and with the postgraduate student under as from still coming from University of Pretoria, for example we're looking at developing criteria to determine if a person was under the age of 18 or over the age of 18 and that is very population specific so you cannot use the standards that exist from Europe for African populations and we've already been able to show that there are vast differences in maturation and that's of course legally very important, you know, if you committed a crime under the age of 18 you'd be tried as a sub-adult whereas over if you'd obviously be an adult and also for issues of migration. If you're under the age of 18 and you're a refugee the country has to take you, whereas if you're older you know you can be sent back, so the legal age of 18 is quite significant.
DR. MALKA	I am learning about a whole new world.
PROF STEYN	Sorry, so much information. So with the student we're looking at teeth and changes in the vertebrae that you can see in X-rays to determine at each state what's the probability of this person being older or under 18, so that's...so it also finds it's a skeleton but it finds application in living people as well. But then we have also other projects of adult age estimation looking at bone histology and various statistical models, so that's the one thing that I'm working on and then lately just because one can, I've always...also moved a bit craniofacial identification, not that I'm such an expert but I do know where the shortcomings exist and something that may be quite relevant, you know, today is you know the Sam Nzima.....passed away yesterday...
DR.MALKA	...yes...

PROF STEYN	...took the iconic Hector Peterson Makubu photo, so with my post doc and it was actually mostly his work, you know I just helped him a bit, last year there was a request from a radio station to look at the guy who was carrying Hector Peterson because there's a person in Canada as a refugee who....
DR. MALKA	...I've heard about that story, can you...but please, share with us...
PROF STEYN	...yes so this individual, Makubu who carried the body of Hector Peterson, because of that photograph suddenly there was a whole lot of attention on him, especially from the South African security police, so he fled to Africa but there's lots of information that he may not have been so mentally stable, under a lot of stress, believing that you know the government was after him and this and that and eventually he..an individual entered Canada and he gave his name as Victor Vinnetou, but there's reason to suspect that it is the same person. So in this case what happened is that photographs were provided of Makubu in his young days and then photographs of Vinnetou now the individual of Canada and we tried to match it to do a photo comparison to see if they are actually the same person or not and we've actually just published that paper. And the outcome of it is that there's no evidence to suggest that it's not him, we cannot...because there's such a long time lapse and people change and the photographs, the number of photographs that were available were limited and so on, you cannot make a firm conclusion but from what we've seen there's no evidence to say that it's not him. So it needs to be followed-up with DNA, the did do DNA with the brother but then it turned out that the brother had a different paternal lineage and so and Vinnetou is refusing further DNA assessments but that, you know, one has to...people think that DNA is just like a magic wand but it isn't because you know you need to have someone...
DR. MALKAa reference point....
PROF STEYN	...you need to have a reference point to compare it with you know, so that's where that story is currently.
DR. MALKA	But that's fantastic, 42 years down the line on being able to still try to understand and assess and look at what the answers are and the impact that it has on people's lives.
PROF STEYN	Yeah, so that was a fun story, well an interesting story to do. So in that line you know one of the projects that we're now doing with the PhD student is to look at the reliability of facial comparisons, so even though it's not the skeleton but it's the face, you know, it relates to the work of forensic anthropologists, so typically if you commit a crime, you're a bank robber and you know your photo's are recorded on CCTV...
DR. MALKA	...there's lots with facial recognition technology that's happening in the social media space...
PROF STEYN	...ja, ja but that's not, unfortunately....
DR. MALKA	...it's very superficial....
PROF STEYN	...ja and its not reliable for court cases, it's not...it can give you an instant possible recognition but you can't use it in a forensic context. So we're doing a project currently, we're doing a blind assessment of

	comparisons to see how accurate and reliable they are because obviously these cases go to court you must have an idea of how good we are at it, you know, 'cause you may send someone to jail for life and it's..
DR. MALKA	...and their life's on the line...
PROF STEYN	...and it's a false-positive so we're doing a series of experiments currently to see you know the reliability of this technique so...so as I've said I've been dabbling a bit in the facial ...craniofacial identification stuff as well, ja.
DR. MALKA	Well thank you for sharing those perspectives and the work that you've done in the past and also looking towards the future.
DR. MALKA	Today we're talking to Professor Maryna Steyn who is Head of the School of Anatomical Sciences at the University of the Witwatersrand and Director of the Human Variation and Identification Research Unit.
	AD BREAK
DR. MALKA	You are listening to 'Womaniity – Women in Unity' on Channel Africa, the African Perspective, on frequency 9625 KHz, on the 31 meter band. Also available on DSTV, Channel 802.
	Today we're talking to Professor Maryna Steyn who is Head of the School of Anatomical Sciences at the University of the Witwatersrand and Director of the Human Variation and Identification Research Unit. We would love to receive your comments on Twitter:@WomaniityTalk.
DR. MALKA	In the previous segment of the show Prof Steyn shared some of the insights and developments into the work that she does touching on both the role at university in her academic capacity and also in terms of her work as a forensic anthropologist and she shared some of the casework that she has done to date. Prof Steyn, you're a member of the Editorial Board of Forensic Science International; you were the director of Forensic Anthropology Research Centre at the University of Pretoria; you're currently serving your second term as President of the Anatomical Society of Southern Africa and you serve on the board of the Forensic Anthropology Society for Europe and the International Association for Craniofacial Identification. Does taking an integral part in so many important associations and organisations come with the territory of your career or is it something that grew on you along the years and now has just become part of your identity?
PROF STEYN	For me I think it's more something that comes with the territory, it's not necessarily something that comes naturally. I think if I had a choice I would sit in my labs all day and do research or work on a skeleton but I guess it becomes necessary. If you become an older, more senior academic I think these things tend to happen to you and I guess it's just something that you have to do but they may not be my first choice always.
DR. MALKA	But as we said offline, part of the component in academia is about publishing, it's...what's the mantra...? "Publish or perish"...
PROF STEYN	...absolutely but the publishing part I love, you know, sitting behind my computer and thinking of a paper and thinking up something new and writing it up, that's great, but during a meeting well that's something that....

DR. MALKA
PROF STEYN	...ja, you have to do but it may not be my first choice.
DR. MALKA	Now 'Womankind – Women in Unity' is a gender based programme and as such we constantly focus on the importance of building female leadership capacity for the future of women both in South Africa and also on the continent. As a female professor who's achieved a lot in your life and one could almost argue that some of the forensic work is possibly a male dominated career, how do you see female leadership in South Africa, whether that's in the academic space, political environment or any other arena?
PROF STEYN	Well interestingly enough academia is becoming very female dominated, especially you know at the lecturer, senior lecturer level and in our lab, I think there's one male and the rest are all female. I don't know if it has to do with career prospects, you know, the idea that you have to earn money and that maybe you cannot do that in academia so much, but academia where I am, in the health sciences, is becoming quite female dominated. Maybe not up to the level of senior management and also in the university even you know up to senior management level, not so much females but I think we're getting there. As far as female leadership in the country is concerned, ja mixed feelings about this. I don't see myself necessarily as a complete feminist but I do think that we have a massive role to play, you know, this morning as I was coming to work I heard about a pedestrian being killed by a blue light brigade of the mayor of some or other town and I was thinking you know that maybe, maybe if it was a female she wouldn't have that ego that was...I don't know if it...this is probably not the politically correct thing to say but you know I'm thinking that maybe females don't have the egos that require all these exterior things to boost them, but maybe more down to let's get the job done you know so I'm thinking that in many of these forums we need more females because I think we need to let go of our egos a bit and get the work done.
DR. MALKA	And you're right, I mean we just emphasise and focus on symbols on power without actually taking responsibility for the position that you've been given to affect change...
PROF STEYN	...absolutely....
DR. MALKA	...need to consider those roles. One of the things that I've detected is that there seems to be a really strong feminisation in terms of medicine on the profile of students which, you know, years before it was a male dominated career path but now we are seeing more and more women take up the reins in medicine; does that also have a knock-on effect then in terms of how they move...how women move up and progress from being a student to going into the management sphere and being part of the leadership in the school?
PROF STEYN	Ja so when I studied medicine, when I applied, 15% of the admissions were female, so out of our class of 200 they took 30 females and I think that in a sense what you see now.....not so much into senior leadership because there simply were not as many. But you're

	<p>absolutely right, that we're seeing a really significant increase in females and not only in numbers admitted but also in number successes and that's one of the things that they have looked at at Wits and to see and seeing that the females, whilst studying are much more successful than the males and I think it has to do I guess with the amount of work that you have to sit through, you know, maybe it's better suited for female attributes, I don't know you know, the ability to maybe just sit and plough through a mountain of work, I don't know. But it is definitely so that it is becoming much more female dominated, but I think it is a good and a bad thing, you know, obviously I think females have a lot to offer but I also do think that there's some of the specialties for example that females tend to go into more than males and that it may be creating some imbalances in future you know, so I think that it's something that we need to watch, make sure that it's accessible and available for everyone.</p>
DR. MALKA	...so that the gender bias doesn't shift...
PROF STEYN	...the other way....
DR. MALKA	...the other way. Now one of the questions that I'd like to ask you now is about your personal journey and some of our guests who've reached tremendous achievements in their lifetimes say that factors that have attributed...that they have attributed to their success include their upbringing, perseverance, hard work; what in your opinion have been key drivers to your success?
PROF STEYN	<p>Well maybe a personality issue, I always had to swim a bit upstream. I don't know why it is but I can remember when I wanted to study medicine the old general practitioner in the town said but you know that's not really a job for a female and I guess I just had to prove him wrong. But that said, I guess today you would say today you would describe my upbringing up lower middle-class. My mother had to leave school before she could finish what's now grade 10, standard 8 because they were poor and it was the second world war and her father died and she had to go and work somewhere and to me that's one of the great pities I think in our family life because I think she was really bright, but really frustrated. In those days...she then went to work in the municipality and in those days if you were married you couldn't hold a permanent job so as soon as she got married she had to leave her job and look after the children and I think it frustrated her her life-long, you know, not...and always feeling a bit...</p>
DR. MALKA	...no fulfilment....
PROF STEYN	...ja...
DR. MALKA	...and almost being dictated that you cannot go and reach your potential.
PROF STEYN	<p>Ja. My dad grew up dirt poor on a farm in the southern Free State and he was the clever kid in the family and they collected money to send him to university to study medicine, all the siblings haven't studied and you know to him happened what I think happens to many students still is he failed first year chemistry, had no money to continue and had to drop out and so he became a railway policeman and then years later completed a degree at UNISA. So I don't think it</p>

	was a burden on me but you know I always felt glad for my dad's sake that I was able to become a doctor, kept my surname, my maiden surname you know because I felt he would be pleased...
DR. MALKA	...and fulfilling part of his dreams that he couldn't...
PROF STEYN	...ja I think there was a little bit of that, I never felt that pressure from his side but I do know that it was important for him because he couldn't do it.
DR. MALKA	Can you tell us what have been some of the pivotal moments in your life growing up?
PROF STEYN	I've had a very happy and lucky and smooth childhood, so I cannot say there were specific elements but I must say, if some of the things that I remember from growing up is...and it's just one of the injustices that stayed to me to this day and I remember we drove in our car near the railway station and how there were police chasing some black men away and I was told it's because they didn't have passes and that's, you know, that's just one of those moments of unfairness and ja, that moment stayed with me. But other than that it was a very secluded, a very smooth sailing, we were really quite isolated, you know, being a white Afrikaans kid in a semi-middleclass, we were sort of cocooned out from the outside world and it's only once you get to university that I think you see the real world and I worked for 18 months at casualty soon after I graduated and I think that's really for the first time where my, you know, my eyes opened and I see what life is really like out there...
DR. MALKA	...but I think that's a serious eye-opener working in casualty...
PROF STEYN	...it is absolutely, ja.
DR. MALKA	And who would you say have been some of the strong women in your life?
PROF STEYN	Well I guess most of us would say our mothers and I guess that's true and to be honest other than that there's no one that I can really point out specifically. I remember a person in my academic career that had quite an influence, it was our table doctor, you know when you do anatomy dissection you're being assigned to a table doctor and she was such a lovely lady who inspired us and carried us through our difficult moments, Dr. Marais was her name, ja but other than that no-one specific that jumps to mind.
DR. MALKA	And given your career you've done, it's like a three decade long career, what would you say have been the greatest lessons that you've learnt?
PROF STEYN	When I left University of Pretoria somebody said oh but how can you go, what about your legacy in this research centre that I started there...
DR. MALKA	...and I just have to add that you left the University of Pretoria three years ago after a 28 year long career...
PROF STEYN	...ja that was a long, long time, I just thought it was time to mix things up, but in any case as somebody said you know what about your legacy, this research centre and then I said you know your legacy, for me it's not in these structures that you leave behind, I think there's only one legacy for me and that is in the students that you've trained, the people that you leave behind that are capacitated to do something, you know and I think for me I feel that I cannot change the whole

	world and I don't feel the need to do that but I think you can make a difference where you are and in those students that I've trained and I take pride in where they are and what they're doing and what they've achieved, you know, I think that's your legacy that you leave behind.
DR. MALKA	So in the humans, in a pay it forward process. And lastly, as we close out the conversation today, could you please share a few words of motivation or inspiration that you'd like to pass on to young women listening to us?
PROF STEYN	I think it's once again this thing that you know you can't necessarily on your own change the world but I think...I think every day one should just try and do the best where you are because I think the fabric of society is in normal people just doing their best, doing the right thing, it's just something that I feel very serious about in South Africa with all the injustices and corruption is to do the right thing and do your best and just weave this fabric of society in everyday actions where you are.
DR. MALKA	Thank you very much, I think that's a really fascinating note to leave things on, that it's part of the fabric and the network of society, but society only functions if we all do the right thing.
PROF STEYN	That's right.
	PROGRAMME END