Delivered by Vice-Chancellor and Principal Prof Tinyiko Maluleke Tshwane University of Technology: Academic Excellence Awards 2024-2025 CSIR International Convention Centre, Pretoria 5 November 2025

Setting the Stage for an Entrepreneurial Dance

On this exquisite nightfall, in a city that is nestling within the purple sea of the Jacarandas in full bloom, so that shades of purple are even reflected on the Pretoria night sky, we gather here, from all the eleven learning sites of the Tshwane University of Technology spread across the length and breadth of the Tshwane metropolis and the country.

We are here to honour academic excellence; we are here to pay homage to science.

The Bird in Our Hands

A few days ago, in Irene, I gave the keynote address at the inauguration of new members of the Academy of Science of South Africa – a body I myself have been a member of for more than a decade. As it says in the good book, 'truly I say unto thee, it is easier for a camel to go through the eye of a needle than for an average academic to be admitted into the membership of the Academy of Science of South Africa'. But there they were, the *crème de la crème*, the scientists and the researchers who had made it into the ASSAf - *the* ultimate, the one and only, academy of science of South Africa.

I was so much in awe of them that I drew inspiration from a parable once told by Toni Morrison and began my keynote with it. She told the story on Thursday 7th of December 1993, inside the legendary Stockholm Concert Hall, where she had just received the Nobel Prize for Literature. Morrison retold the well-known story of an old blind woman, renowned and revered for her wisdom, who is one day visited by a group of youngsters, whose main aim is to prove that she was not as wise as she was thought to be. Morrison narrated the story.

They stand before her, and one of them says, "old woman, I hold in my hand a bird. Tell me whether it is living or dead." She does not answer, and the question is repeated. "Is the bird I am holding living or dead?" Still, she doesn't answer. She is blind and cannot see her visitors, let alone what is in their hands. She does not know their colour, gender or homeland. She only knows their motive. The old woman's silence is so long, the young people have trouble holding their laughter. Finally, she speaks, and her voice is soft but stern. "I don't know", she says. "I don't know whether the bird you are holding is dead or alive, but what I do know is that it is in your hands. It is in your hands.

She went on to analyse the story in a thousand different directions and ways. There is one Toni Morrison in the world – then there is the rest of us. But I can say this to TUT, its staff and its students, friends and colleagues, the bird is in our hands. We dare not let the bird die. We have a dream in our hands we dare not let it die. We have young curious minds in our care, we dare not sell them a dummy.

But rather than attempt the impossible task of trying to retell the Morrison parable, I choose to invent my own imperfect and woefully inadequate one – which I also told to the new ASSAf cohort.

I start it with what Toni Morrison calls, "the first sentence of our childhood, namely, 'once upon a time'".

Once Upon a Time

Once upon a time, there was Science and there was Policy. Each was securely installed and nicely ensconced upon one of two neighbouring hills, separated by a deep, dark and scary chasm. In those days, Policy was Policy and Science was Science.

One day, Policy became very upset with Science – a culmination of many years of mutual loathing and reciprocal detestation. From that day, the shrill and discordant voices of science and policy would reverberate across vales and gorges, day and night, as they clashed and disagreed out in the open. Often, Policy would wonder out loud if, in light of all the urgent services needing to be delivered, any more time should be wasted trying to factor in Science and research in plans, tactics and strategies.

But Science would put it to Policy that without evidence-based research, without statistical data, and without adhering to the basic tenets of the scientific method, Policy ran the risk of becoming a joke, a brute or worse still, a blundering bull in a china shop.

But Policy shot back saying: 'oh glorified Science, please... can you do better than brag about how clever and knowledgeable you are? Have you accounted for the knowledge you stole and/or forcefully wrested from indigenous people all over the world? And has your knowledge done anything for the ignorant, the poor, the hungry, the thirsty and the violated, lately? Remember, while you are out having fun and games in laboratories, libraries and research fields, someone has to get the real work done. Someone has to hold up the sky. And who is that? None other than me, myself and I – Policy'.

Then one day things came to a head as they were bound to sooner or later. On that day, Policy and Science climbed down their lofty hills, dressed to kill and ready to kill. Down in the valley between, they met face to face upon a large uneven boulder.

There, Science and Policy circled one another and sized each other up. Policy displayed its muscular body, while Science used exaggerated hand gestures to point out its magnificent brains and its abundant knowledge. Policy lunged forward and Science pounced. Like Muhammad Ali and George Foreman's 'Rumble in the Jungle' in Kinshasa 1974, Policy and Science began their mortal combat.

Towards the Entrepreneurial Tshwane University of Technology

But in 2004, everything was shaken up, when a voice from a third neighboring hill was heard. That voice interrupted and overcame the noise of Science and Policy. It was the voice of a new kid on the block – boisterous, dissenting and very loud – so much so that momentarily, Science and Policy were stunned into silence.

The new kid on the block was none other than the Tshwane University of Technology.

Conceived in bullet-point number four of section 3.3 of Government Gazette number 23549 Volume 444 of 21 June 2002 in terms of which the "three technikons in the Tshwane metropole, namely,

Technikon Northern Gauteng, Technikon North-West and Technikon Pretoria should be merged". Indeed, on the 1st of January 2004, *voila*, the Tshwane University of Technology stepped into the knowledge-making fray.

Without any further waste of time, the newly born TUT dived into the 'rumble in the jungle' where Science and Policy were at each other's throats. Standing in the middle of the warring duo, the diminutive Tshwane University of Technology shouted:

Stop the senseless war. Hey, you Science and you Policy, we can do things differently. Instead of rivalry we can collaborate and cooperate. I come bearing great gifts, continued TUT. I come bearing the gifts of 4iR technology, innovation, artivism and artisanry, and entrepreneurship. Add to these, a bunch of some of the feistiest students as well as some of the hardest working academics in the sector. Together this basket of gifts I bring will revolutionize the relationship between Science, Policy and universities.

Thus began the journey of TUT towards the fulfillment of its purpose – by harnessing the latent synergies between Science and Policy, research and practice and innovation and commercialization. From day one TUT offered the stage for Science and Policy to explore different modes and rules of the hill Science and the hill of Policy. TUT has been and intends to continue to be the bridge that connects Science, Policy and Technology.

And so continue to call on Science, Policy, Technology, curious young minds, top rate academics and researchers saying; 'come to the bridge to explore and to fashion new solutions to the problems of our country, continent and the world'.

We may not have been always conscious of it. We may not have been always true to it. But TUT was born to be an entrepreneurial university. What else do you think it means to be a university that makes knowledge work? Knowledge does not work if it does not lead to work. Knowledge that cannot help us solve the problems we face is not worth the name. This understanding of knowledge as a constellation of science, policy and technology; is at the heart of our understanding of what it means to be an entrepreneurial university.

The entrepreneurial Tshwane University of Technology is the University whose time has come.

Look around you, everywhere you go in this country – look at the state of streets of our cities and townships; look at the loose hanging electricity wires crisscrossing above our heads in squatter camps and villages; look at the pit-latrines planted in our rural schools; consider the high levels of violence; ponder the levels of ethical ineptitude that have led us to several commissions of inquiry, feel the hopelessness, the joblessness that breed all manner of pseudo sciences on which many stake their lives.

And yes, there is so much work to be done, but so few people with the skills and the right attitude to tackle the work. So much water all around us but not a drop to drink! So much work to be done and yet everyone is looking for someone to employ them.

Indeed, some of those who brandish certificates and qualifications, do not have the skills, the attitude and the aptitude necessary to translate their skills into entrepreneurship.

There are trained teachers in villages without early learning centres who are waiting for someone to give them a job. There villages in this country needing only a hundred solar panels and half the number of batteries to be electrified – and yet we have universities with a dozen professors in electrical engineering, conferencing all over the world. There are villages that need three boreholes with four tanks to get water, and yet our water engineers are theorizing about water reticulation in

New York.

Are we under a spell of inertia and lack of creativity?

As an entrepreneurial University, TUT is here to break the spell of inertia, incompetence and lazy thinking. The time has come for every graduate to be told that no one owes them a job, just because they carry a certificate, even a certificate from an excellent university such as TUT. In my short life, I have seen many certificates that dismally fail to get the job done.

This is why I invite you to come let us build a university where entrepreneurship is the capstone graduate attribute. Let us produce a generation of graduates who will step out of the shadows to shape and to create new jobs for the 4iR economy. Whether the graduates are in the humanities, social sciences, engineering and the hard sciences - we have a duty to orientate them and to give them a predilection for closing the gap between science and policy, between knowledge and work, between theory and praxis, between humans and technology.

It is time we disabuse ourselves of the mythical idea that there is a know-it-all market waiting for compliant universities to give it the perfect candidate. Let us step away from the simplistic and now tired theory of the alleged mismatch between training and the job market. The job market itself is in a spin. The job market is at sixes and sevens. Industry is as confused about the future of work as universities us. That is why industry needs universities needs science needs policy. That is why we need partnership and collaboration.

That is why the senseless wars must stop and allow entrepreneurship to enter the room.

Come, let us stop the futile debates about STEM vs Social Sciences vs Engineering vs humanities vs ICT vs everything else. If any of these discipline-groups alone could single-handedly address the challenges of the 21st century they could have done so a long time ago. A time has come when we must move from qualification types to entrepreneurial flair and entrepreneurial acumen. As well as the intelligence quotient, the emotional quotient and now the artificial intelligence, our graduates need entrepreneurial intelligence - regardless of the certificate in their hands. That's where the Tshwane University of Technology is at, twenty-one years later.

TUT has made tremendous progress not only in brokering reproachment between science and policy and technology and people but in modelling the higher education revolution we need. This is the time to give full expression to the TUT model. The time has come for TUT to do what it was born to do and to be - the entrepreneurial university of the country and the continent, shaping the future. And TUT has only just begun to fully become who and what it was born to be and to do.

Were we to return to the Kinshasa rumble in the jungle, we would find Science and Policy no longer at each other's throats, thanks to the tremendous example of TUT. Were we to return to the Kinshasa's rumble in the jungle today, we would find a beautiful TUT campus, smack in the middle of the hill of Science and the hill of Policy. On top of the roof of that TUT campus, there is dancefloor like arena, upon which Science and Policy will be dancing the entrepreneurial dance, from good to great.