

**The Durban University of Technology: 07 September 2018**  
**Mr Johnny Clegg**

It gives me great pleasure to receive this academic honour today from the Durban University Of Technology. In this brief presentation I would like to address the subject of technical design from an art and cultural perspective.

I think the ability to design things is one of the deepest aspects and expressions of being human. Our brains seem to be wired and coded to respond to the impact of all kinds of expressive forms, designs and structures we see around us. From our early ancestors' first awareness of the infinite designs we see in Nature, whether in the complex structure of a flower or the weaver bird's nest, to the hexagonal structure of a bee's honeycomb, we have always been aware that the world around us operates and expresses itself through the designs that are apparent in it. The first humans also noticed that there were less tangible designs that operated in the world. They noticed that there were four seasons that came and went in a predictable pattern. They noted the waxing and waning of the moon and the astronomical design of the night sky and they took comfort in its predictable behaviour. They noticed the way animal and human bodies were designed and early hunter-gatherer art shows us how committed they were to trying to capture these characteristics in paintings and sculptures. It has been suggested this was an attempt by our early ancestors to magically capture the essence and power of these animals that were so important to their survival. And in attempting to understand and interpret nature and the universe, our early ancestors constructed the notion of a supreme being who was the author of the cosmic design.

Later as early religion developed, creative designs in stone structures, small wooden and bone carvings, together with the structure of burial rituals show that we were aware that by designing rituals and objects that express our feelings, we can make sense of the world and influence the way our lives unfold.

Design is a behaviour that structures our consciousness. It gives us sense of control and power over our day-to-day life. Human technological power and pre-eminence on this planet comes from one thing – the impulse to creative design. It builds on each generation's contribution, whether in art or in the many

different engineering and technical fields that exist today – from physical architecture to digitally-designed internet platforms that have a presence only on a flickering screen. From software to submarines, design is the key. Today we live in cities that use technologies our ancestors could not have dreamed of. These technologies were developed through trial and error as well as with the conceptual ability of humans to express their imaginations through the ability to create designs.

The formal way we construct our ideas and manifest them in art, advertising, and clothing for instance are some examples of the more visible physical expressions of technical design. But there are also invisible and immaterial designs that we cannot see – and music is one of them. We may be able only to *hear* music, but it is nonetheless one of the most developed areas of the human power to design that we have invented. I would like to dwell for a moment on this question of what music, and specifically songs, are, as examples of intangible design.

A song is a sound design. It operates with a set of sounds we call “notes”, flowing in a designed time frame we call “rhythm”. And the magic of this mode of expression is that songs only really exist when they are played. Their design unfolds in the performance, and the way the notes or melody and rhythm work together gives us a deep pleasure. Music reorganises the way we experience the flow of time. It ignites feelings, memories and emotions that transcend the immediate moments we live in giving them a magic and meaning. It expands our experience of place and purpose and we find and recognise deep connections to other people and to our own trajectory of life.

As a musician and songwriter, through my friend and brother Siphon Mchunu, I discovered the musical design of traditional Zulu street guitar music. Early on in the twentieth century, Zulu migrant labourers came upon western instruments like guitars and concertinas. And while there were traditional Zulu instruments like the MAKWEYANA BOW, the UMHUPHE mouth-bow, and drums, these new instruments from Europe opened up new possibilities to create, compose and design new kinds of songs. Zulu migrant workers reconfigured the tuning and the way of playing the guitar and developed their own unique genre of guitar music called MASKANDE – one of the world’s unique guitar traditions. Similarly, the concertina was taken apart, examined and slowly, these Zulu experimenters redesigned the configuration of the buttons until the concertina could be played in the way the musicians needed it – and could express their own culture and traditions.

In redesigning these European instruments in this way, the Zulu migrants redesigned and recreated their own traditional music and developed new rules of composition and performance. As a young boy of fourteen, I was amazed at this fantastic intervention and decided I wanted to become a MASKANDE street musician. Later on I saw Zulu war dancing and was deeply impressed at how the human body could be wired to express itself with such power and passion. So I also became a war dancer at the age of 15, and later, with Siphos, started our own dance team.

Dancing is a form of communication using the human body to interact with rhythm. Unlike music you can see it, but just like music it is a design that can only be appreciated when it is performed. Its essence, is performance design, and that design is based on dance choreography – another invisible kind of design programme. Choreography consists of the way that movements are worked out into sequences and then committed to the dancer's memory. When the beat begins, the dancer executes the movement patterns. If he or she is a good dancer, they add some ineffable extra beauty to the performance by the way they individually interpret the scripted movements.

Between 1970 and 1978 Siphos and I performed MASKANDE music under the duress and constraints of Apartheid's laws of Cultural segregation, as defined in the formulations of the Group Areas Act and The Separate Amenities Act. We had to find grey areas where we could perform. When our band JULUKA was formed, for a long time our music was not played on radio and a certain amount of our shows were closed down by the police.

And in this regard it is important to make another point about the urge to design. We also have to note that the ability to design things can also be used for darker purposes than sheer exuberant, human expression. People also use it to exploit and oppress one another by the way we engineer and design the rules that govern our societies. Throughout history, the laws and codes by which we have lived have often resulted in many of our fellows being left behind or being marginalised. As designers we should be aware of this.

In conclusion, I believe that we have arrived at time on our planet where we are designing our future with more power at our disposal than at any time in our history. The power of computer programming has exponentially increased our ability to develop artificial intelligence, robotics and machine learning. From marvellous medical and life science breakthroughs, to the use of drones to deliver either food to customers or death to our enemies, we stand on the threshold of an explosive transformation of our world and our species.

The act of creative design will never have had more significance and impact than what will unfold in the 21st Century. As designers and creators of art, that same deep impulse to communicate and control has led to design systems and possibilities we never imagined . I am hopeful that as students, teachers and practitioners of design art, we will all be aware of the new power of the technologies and platforms that we ourselves have created, and that now lie in our hands.

thank you  
Johnny Clegg