



THE ROBOT WORKSHOP

Words: Yazeed Kamaldien
Photography: xxxxxxxxx

Cape Town artist Ralph Borland saw roadside wire artists and cellphone repairers working side by side, and had an idea ...

“Wirework is such an economical form, I’m transforming the material and using waste material quite common in South Africa,” explains Ralph Borland. “Wire is also cheap.”

Wirework animals and vehicles meticulously created by talented street artists are a common feature in most markets across the continent. Borland is challenging the idea of the analogue wirework design and giving his creations life by using electronic components - essentially creating wirework robots. Will Borland’s project be the frontrunner of next-generation wirework crafting on the continent?

“I thought it would be cool to drive up to a traffic light and someone is selling you not just a static bird or car, but something that is responding to you,” he says.

Borland recently showcased his ongoing project, African Robots, at the independent Muti gallery in Cape Town. The show comprised the results of three experimental workshops with wire art craftsmen from South Africa and Zimbabwe.

Through it, Borland was able to communicate his ideas of creating movable, sound-making wireworks that transform roadside wire art into a less static but no less decorative automata. Maintaining the classic

wirework model seems part of the plan, although new shapes are proposed to broaden the aesthetic from the usual to include global cultural references.

Borland explains he started with a very basic desire. As with most things, it’s always personal.

Borland is fascinated with toys and made his first wire car at 14. That fascination has continued through his adult life. He first outlined the idea in his PhD proposal in 2006, in which he imagined a crossover between the side-by-side networks for street wire-art production and cellphone repair to create new, interactive objects.

This led to Borland working with wirework artists to create his first piece, a bird - a small starling - which he exhibits alongside his first wire car. As with most Maker projects, simple and cheap components are essential.

“It has a cellphone battery and circuitry that lights up the eyes, and the wings move,” Borland says of the starling.

Three workshops followed, merging electronics with wirework. In one workshop, wirework artists deconstructed “made in China” toys, hacking their electronic bits into new wirework creatures. A caterpillar truck was turned into a cat, with headlights becoming

glowing eyes and a body that replicates truck movements. A slightly bouncy soccer ball became a wire frog.

Another workshop involved inserting circuit boards into wireworks. Lights, sounds and movements were added to wire toys.

"I wanted to bring wireworkers into the project and build a library of objects to demonstrate the idea," Borland recounts. "The thing about working with toys as a base is that they've already been produced with a high level of functionality. They're mass-produced, they work, they're robust, they're cheap. And you can take them apart and make something with them."

Recycling is an obvious component of the production line. Wire, motors from old printers or CD players as well as plastic and other found materials are all incorporated into the end result.

"Electronic components are also cheap, but a lot of people don't know how to put them together. I'm sharing the know-how with the wireworkers. With the skills transferred, wireworkers could apply this more broadly into their work."

Knowledge sharing is essential for Borland. He currently

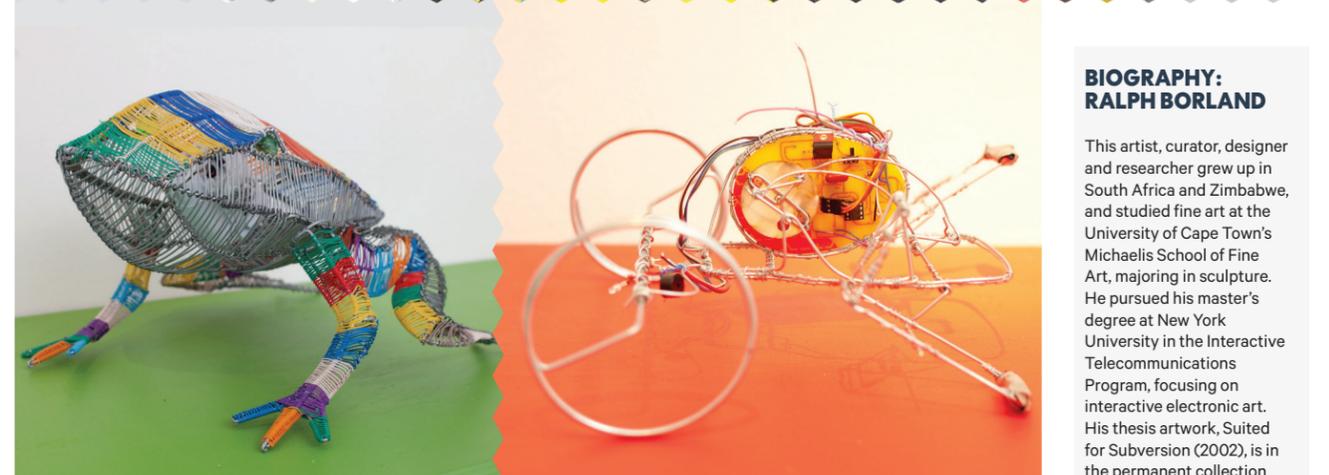
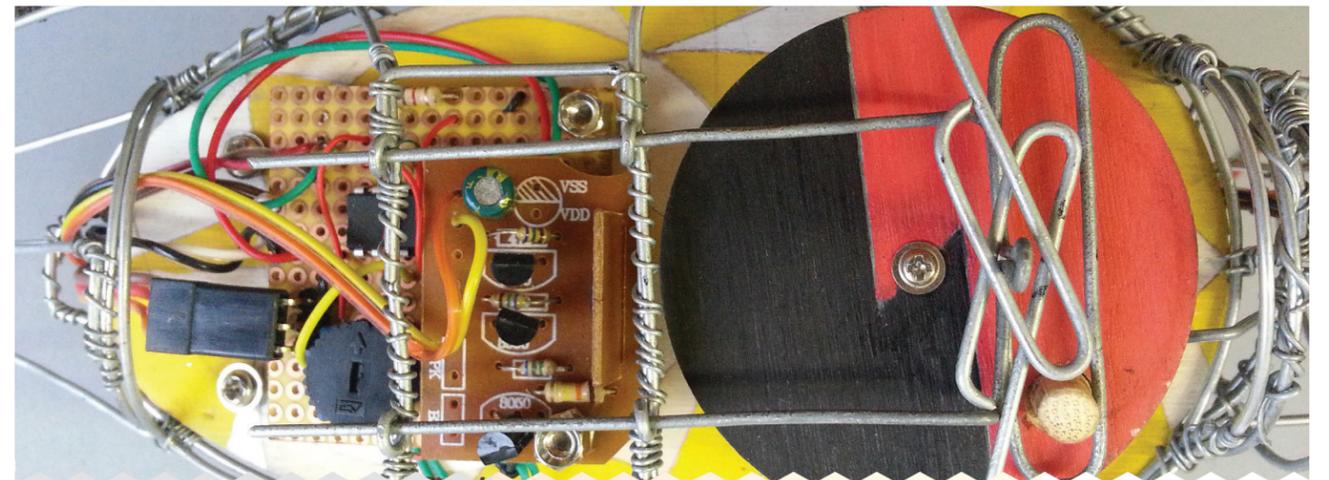
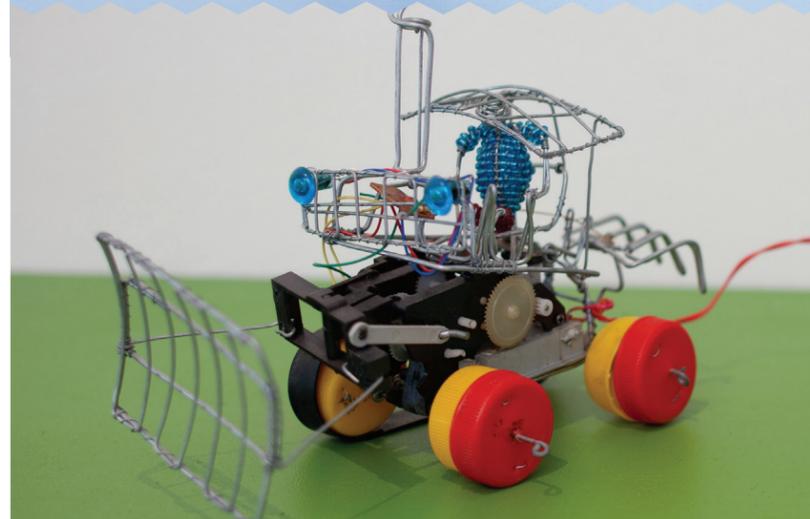
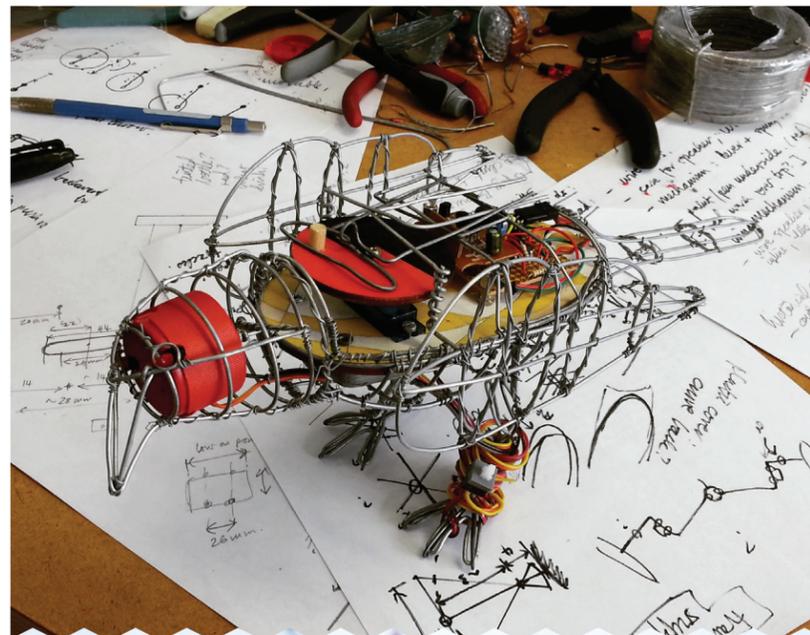
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works with five wirework artists at his studio in Woodstock, Cape Town, experimenting with different aesthetics and electronic ideas.

"My intention with this project is to share knowledge and to democratise access to technological knowhow. We're doing this through the medium of mechanical and electronic toys," Borland explains.

"I'd like to keep the project going and build more sophisticated things. There's a huge amount of talent in the wirework scene. But there's space for new forms and aesthetics that would be influenced by other cultural streams. People who wouldn't buy an existing wirework object might buy a design that we come up with together [in the studio]. Borland says the collaboration he has with wireworkers is "also about suggesting a design they haven't thought of". An example, also part of his exhibition, is a wirework Star Wars battleship. The intention is to use popular culture to increase awareness of the new robot design



BIOGRAPHY: RALPH BORLAND

This artist, curator, designer and researcher grew up in South Africa and Zimbabwe, and studied fine art at the University of Cape Town's Michaelis School of Fine Art, majoring in sculpture. He pursued his master's degree at New York University in the Interactive Telecommunications Program, focusing on interactive electronic art. His thesis artwork, *Suited for Subversion* (2002), is in the permanent collection of the New York Museum of Modern Art.

In Ireland he completed his PhD at Trinity College Dublin. His thesis was a critical analysis of design for the developing world, drawing on approaches from interventionist art and social activism.

Borland's current exhibition project, *DIY (DIY)exhibition.net*, is an exploration of storytelling through a selection of functional objects in South Africa, combining artwork and examples of everyday design solutions by amateurs and professionals.

For more information have a look at:

www.ralphborland.net
www.ObjectsinDevelopment.net
www.AfricanRobots.net
www.DIYexhibition.net

possibilities. "We started out in my studio watching the first Star Wars movie on my laptop. We then worked on some designs, then we went and watched the new Star Wars movie at the cinema."

This, of course, raises questions about intellectual property (IP) and copyright. "The wirework forms are not replicas of existing merchandise, but interpretations", Borland says. "I wouldn't see this kind of activity as a challenge to IP as much as evidence of the success of the movie in acquiring a devoted and creative fan base," he adds.

"I think the project should also be seen in the context of the large and active Star Wars fan base who make their own versions of equipment from the film, shoot their own short movies using the characters."

Beyond his own studio, Borland has exhibited African Robots at a few Maker Library spots, including at the Maker stand at Design Indaba in Cape Town recently and after that at the Maker Library exhibition in London last year.

Borland believes there is growth for his African Robots: "This can be popular. People will buy it."

"It's about a mindset. The idea will catch on," he says.

"There's a viral component to wirework. When (the animated film) *Finding Nemo* came out, one guy made a Nemo fish with wire. It became popular and then all children wanted one."

Like the example of making Star Wars battleships, the Nemo character is viewed as being derived from the original shape or form that has captured an audience hungry for pop culture iconography. Think Che Guevara T-shirts, Frida Khalo coasters or the Louis Vuitton logo on a bag that does not even resemble anything available on high streets.

Borland believes he needs to "find change-makers and work with them" to take the African Robots into the future.

"I did my PhD on designing for the developing world. Every project that tries to create change, the question is: can people carry on with it when you walk away?" he adds.

"I would like to establish an African Robots Academy where people could spend time learning and making new work." ☺