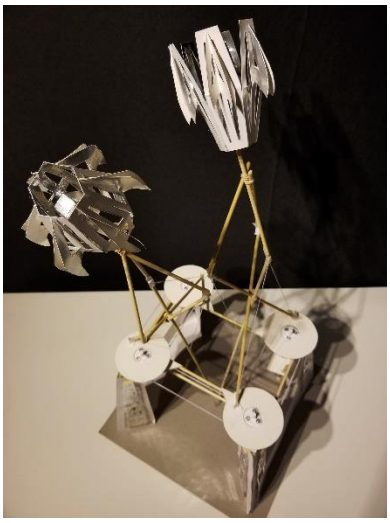


BURN IN THE FOREST 2018

EFFIGY PROPOSAL

ROBOTANY

By Tango

and

Dayna "The Mixtress" Scodras

Introduction

A robot is a machine that is controlled by a computer. Artificial intelligence (AI) is developing at an exponential rate. What will the evolution of technology bring?

"Botany" relates to plants and plant life.

Welcome your new robot overlord: ***Robotany***.

Robotany will be a 20 ft tall robotic plant. The two stalks move and undulate. The pods on top of the stalks open and close and spit fire. The movement will be triggered by movement in the plant's field of vision. There will be seating areas for participants to sit and watch the stalks and pods move, change, and spit fire.

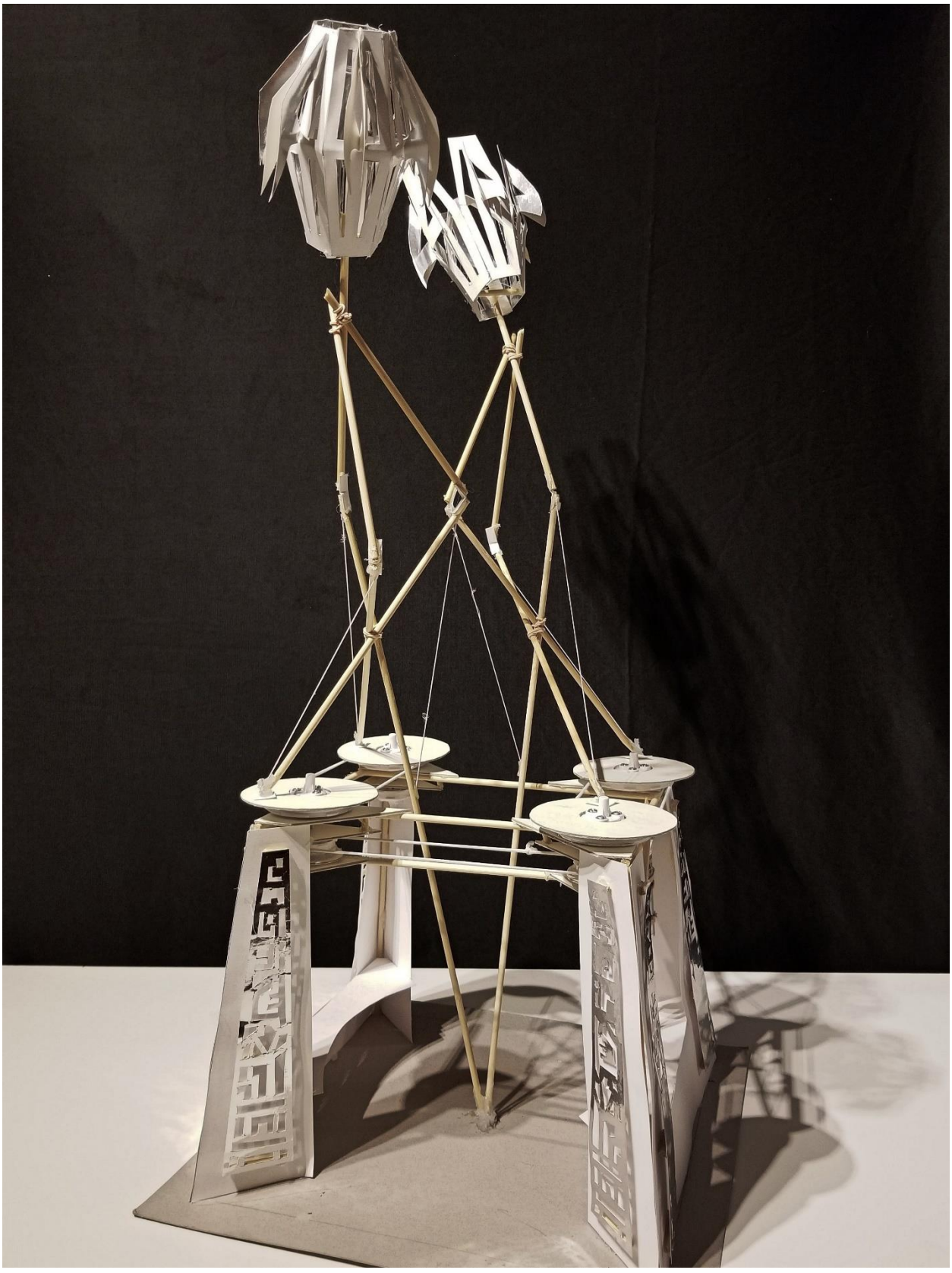
The roots of the stalks reach down to the centre of the floor where their movement can be seen and felt.

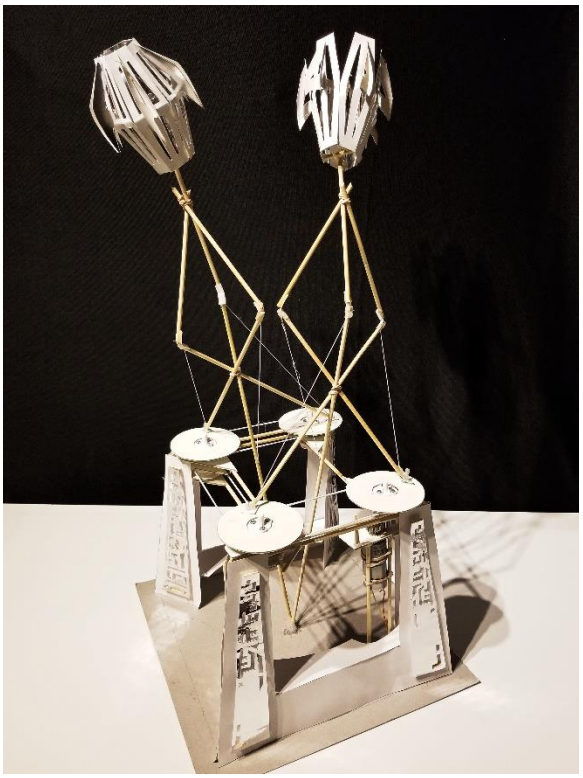
Eight metal panels with intricate patterns cut out by a CNC plasma cutter will be backlit with addressable LEDs. The colours and reflections will dance in response to the music.

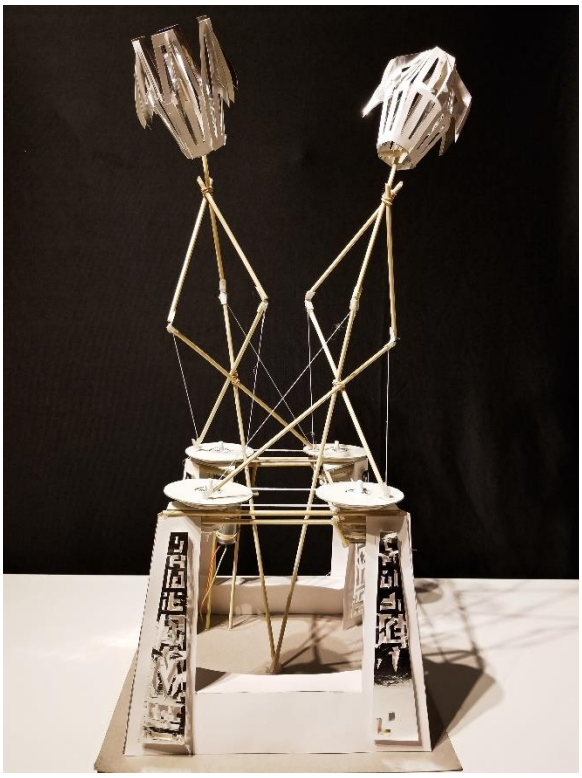
Music and vibration will add to the sensory experience inside the structure.

You will be lured and lulled by the promise of better life under your new robotanical overlord.

The future is Robotany!







The Team

The team co-leads are Dayna and Tango.

Dayna has been actively involved with the Vancouver Burning Man community since 2013. She has been an artist for most of her life. Her many means of artistic expression include painting, sculpture, jewelry, sewing, and costuming.

Dayna works as a colour-match wizard and an architectural coatings specialist at a commercial/industrial paint store. She has an exceptional eye for colour and aesthetics.

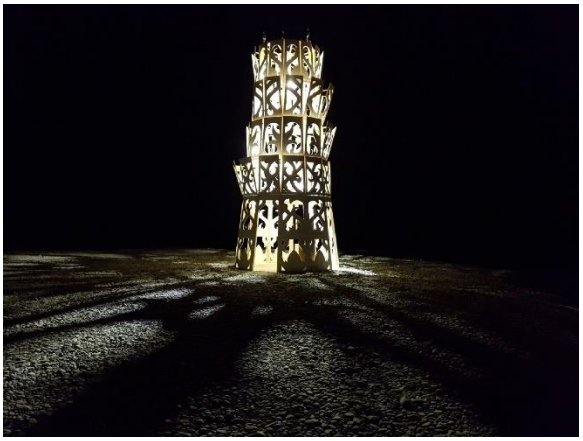
She was primarily responsible for the artistic design and she is involved in all phases of the design and build.

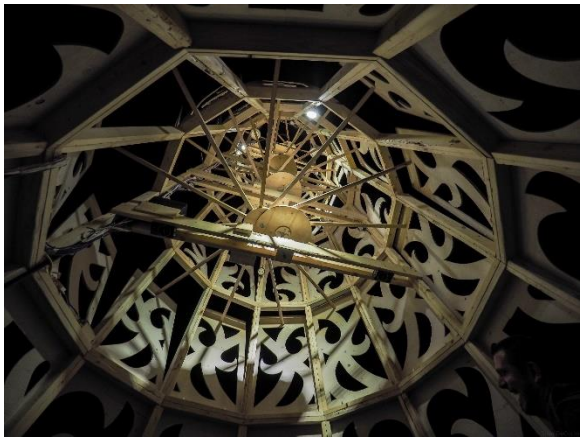
Tango has been an active participant at Burning Man and regional Burner events and parties since 2003.

Tango's main occupation is operating a residential renovation business. He is skilled in virtually all aspects of construction and renovations, including structural design, framing, painting, plumbing, electrical, drywall, tile, etc. He owns all tools required for construction projects. His education background includes a diploma in Civil Engineering Technology from BCIT.

Their recent past projects include:

- Kinetesthesia – The 2017 effigy for Burn in the Forest. It was a 24ft tall kinetic sculpture with 48 moving panels on four levels.





- Incendimus the Dragon – The 2016 effigy for Burn in the Forest. It was a 20ft tall fire breathing dragon with an animatronic head.

They have built the past six effigies for Burn in the Forest with the last two incorporating fire and kinetics beautifully and safely. They are dedicated to creating an immersive sensory experience for the event participants.

Matthew Beaton has provided coding and programming support for the past two projects. He created the interface through which Robotany will be controlled and brought to life.

Daniel Stratten will be providing CNC services and support for creating the metal features of the sculpture. Daniel and Matthew are the creators of the Venus Raver trap art vehicle and the Dante's InFURno theme camp.

Construction

Robotany will be 20 feet tall and 10 feet wide at the base. The structure will have a wooden floor. The design utilizes readily available building materials, such as 2X4s, plywood, screws, hinges, and bolts. The structure will have eight decorative aluminum panels and metal components in the pods at the top of the stalks.

The components of the structure will be fabricated prior to transport. The structure will be assembled and erected on site. The team has all of the tools and ladders necessary to assemble the structure.

Advance preparation of the components will be handled by the main team and two other volunteers. The team has a large facility available to them for the construction of the components. Pre-construction will take place on weekends during the 10 weeks preceding BitF.

They expect to need the assistance of two or three people for a total of about six to eight hours to assemble and erect the structure on site. Skilled volunteers are not essential although volunteers who are comfortable on ladders would be helpful.

Sound Design

The effigy will have a small sound system. It will be playing at low volume at all times.

Lighting Design

The eight metal panels will be backlit with addressable RGB LED strip lighting. There will be lighting in the pods and accent lighting throughout the structure.

Kinetics Design

The movement of each stalk will be computer controlled and facilitated by the rotation of two large discs. Each stalk will move and undulate. The pod on each stalk will open and close. There will be ultrasonic motion sensors located around the structure so the movement of the structure will be triggered by the movement of someone approaching it.

Some of the components purchased for the effigies from previous years will be utilized in the kinetics design this year.

The components will be easily removable for when the structure is burned.

Fire Effects Design

There will be one fire poofer in each pod of the two pods. These will also be controlled by the computer. The fire poofers will only operate while the project is under direct control by authorized personnel.

Fire Burn Design

The electronics, fire poofers, lighting, and metal panels will be removed for burning. The interior of the structure will be loaded with firewood when it is being prepared for burning.

Water-tight wooden boxes will be fabricated to contain gasoline and diesel at strategic locations in the structure. The lids of the boxes will contain the vapours to eliminate flash-fire risks. As the boxes burn, the gasoline will be released. This system worked very well during the burning of the 2014, 2016, and 2017 effigies.

In preparation for burning, some key structural points will be weakened to encourage the structure to collapse faster and to collapse in on itself.

Naturally, all aspects of the fire design must be approved by the BitF Fire Lead.

Whether or not the effigy will be fire burned, the finale performance will involve the following:

- There will be large fabric screens erected on either side of the effigy.
- Tango and Dayna will each be wearing a head-mounted video camera incorporated into a decorative headpiece.
- The point of view images from their cameras will be projected onto the large screens. Dayna's view on one screen and Tango's view on the other.
- The audience will be able to see what both performers are seeing, including the audience.
- Tango and Dayna will do a choreographed sequence involving fire breathing. The audience will be able to see the first-person perspective of what it is like to fire breathe.

Non-Fire "Burn" Design

In the event that the effigy cannot be fire burned, the electronics, lighting, metal panels, and fire poofers will not be removed for the Saturday performance. The lighting, movement, and fire poofer effects will be programmed to do a finale show for the crowd.

Tango and Dayna will perform the POV video fire breathing sequence as described in the previous section.

Safety

We understand the importance of using materials that have low toxicity and low environmental impact.

The design of the base of the structure will be simple and stable. Minimal excavation will be required. It would only be for levelling the structure. There should be no issues with the structure falling over due to wind loading.

We are reasonably confident that the design of the structure will discourage it being climbed by over-enthusiastic event participants. It will be difficult to climb and will, therefore, reduce the likelihood of injuries from participants falling off. All work during assembly will be accessed by ladders.

Leave No Trace

Due to the simple wood construction of the structure, clean-up should be limited to screws and bolts. There may also be a few unburned pieces of wood. Clean-up should only require a few volunteers for a couple of hours to pick up the debris.

If the structure is not burned due to a fire ban, it will be dismantled and likely disposed of and/or recycled back in Vancouver.

Budget

This is the estimated budget:

Lumber	$840
Fasteners	$200
Mechanical	$280
Lighting	$500
Electronics	$450
Fire Effects	$300
Metal panels	$700
Total	$3270

If the $3000 budget is exceeded, the team will self-finance the shortfall.

Conclusion

We think that *Robotany* will be a beautiful and mesmerizing effigy for BitF 2018. The design, lighting, and movement will make it appealing to the Burning Man community, both during the day and at night. As well, the project is aligned with the "Robot Overlords" theme of BitF 2018.

The effigy will be an attractive meeting place for the participants. The lighting design and the fire effects design will provide a delightful sensory experience, both inside and from afar.