

EARTH DAY X COVID-19 X BLACKOUT

From the beginning of the winter 2020 semester until the shutdown, students from the Critical Curatorial Lab (Daniels Faculty) were engaged in developing an exhibition format to be deployed in an emergency scenario. Conceived as *pre-mediation* for a moment when patterns of life are radically disrupted, their aim was to examine the affordance of art during a power blackout. Running throughout this thought-experiment, radically reduced energy dependence and its possible culture was at issue. Addressing social relations, spectacle, and consumption, the project outcome was conceived as an emergency kit (exhibition) and instruction manual (catalogue) to be activated during a future power outage.

In light of COVID-19, only the second part of the project was realized. To mark the 50th anniversary of Earth Day we are pleased to share this playful manual (featuring student essays, artworks, and archival material) in digital format. While ultimately consuming energy via UofT servers, we offer this document (as polemic) to the time of Novel Corona Virus. As the shutdown drives a dramatic reduction in energy demand, causing the largest ever drop in recorded CO2 emissions, this sudden change is also bringing instability to electrical grids worldwide. Blackouts may yet be a flow-on effect of this pandemic. However, beyond any outages, we propose the relevance of our speculative method for broader reflections on cultural life during our present crisis: Attempting to exhibit the critical moment in advance is a way to better handle its emergence in real-time. Curatorial pre-mediation is one bulwark against intercession by panic or shock doctrines, when everyday society and culture are up for grabs.

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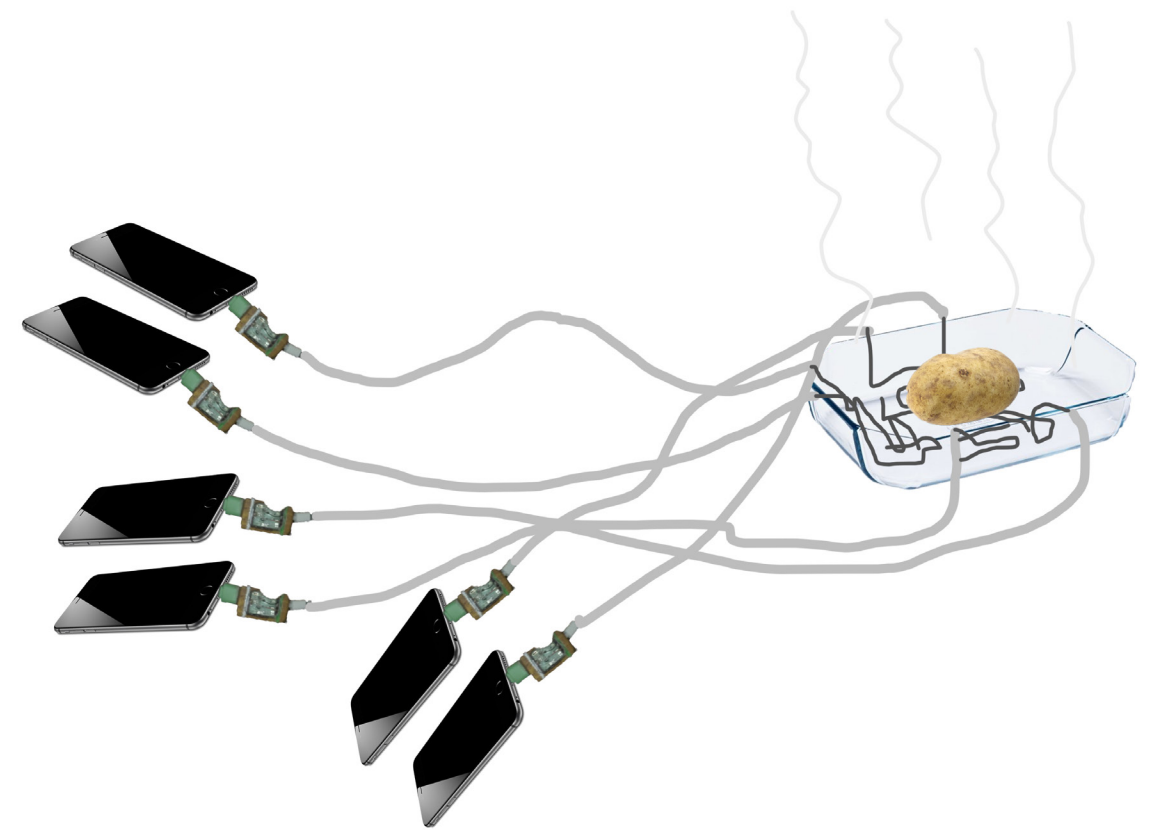
Curators: Lilian Ho, Kaixin Li, Leona Liu, Jiaxin Mai, Olivia Musselwhite

Artists: Simon Fuh, Talia Goland, Eli Kerr, Seo Eun Kim, Matthew Nish-Lapidus, Yoko Ono

**BLACK
OUT**

A MANUAL

DO
NOTHING,
KEEPING IN
MIND THAT
NOTHING IS
AS IT
SHOULD BE.



Make a delicious sous-vide
potato

SIMON FUH

Scores for a blackout

Matt Nish-Lapidus

March 20 2020

Steps towards sounding a collective remembrance (for any number of participants)

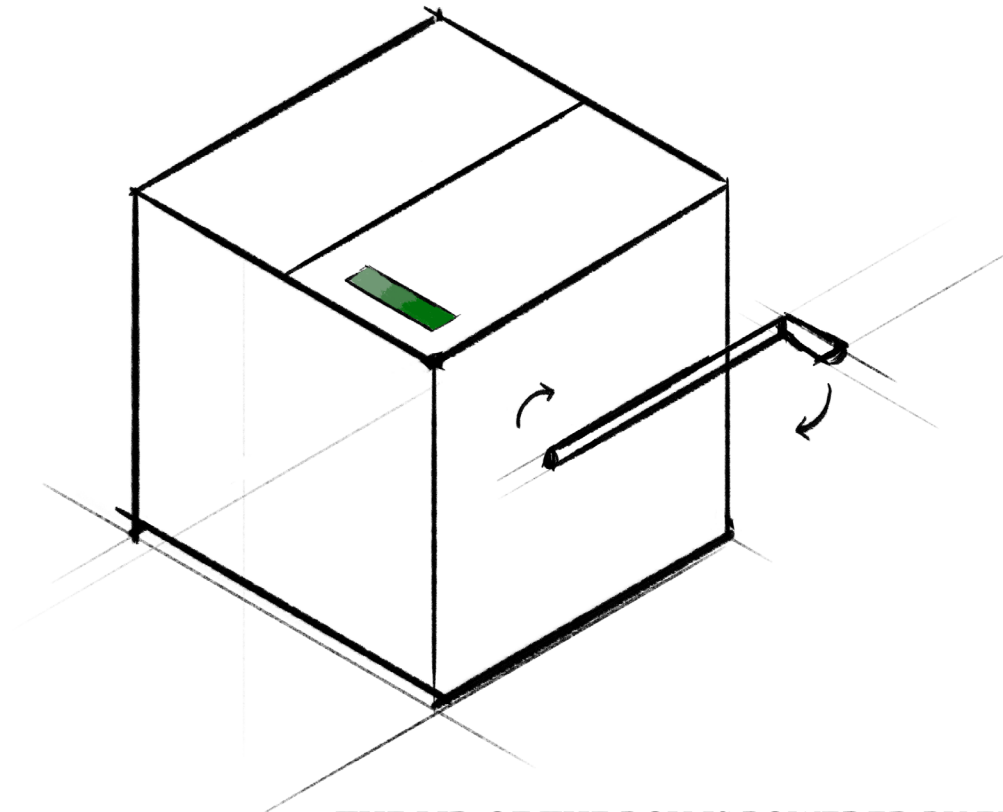
1. Listen closely
2. Notice what is no longer present
3. Notice what is now noticeable
4. Individually, create the sound of what is now gone. Use anything in your immediate surroundings
5. Continue until your body remembers.

Lighting the way behind

Find all light switches and turn them on.
Wait for something to happen.

Free as in freedom

Build a fire using electrical utility bills as fuel.

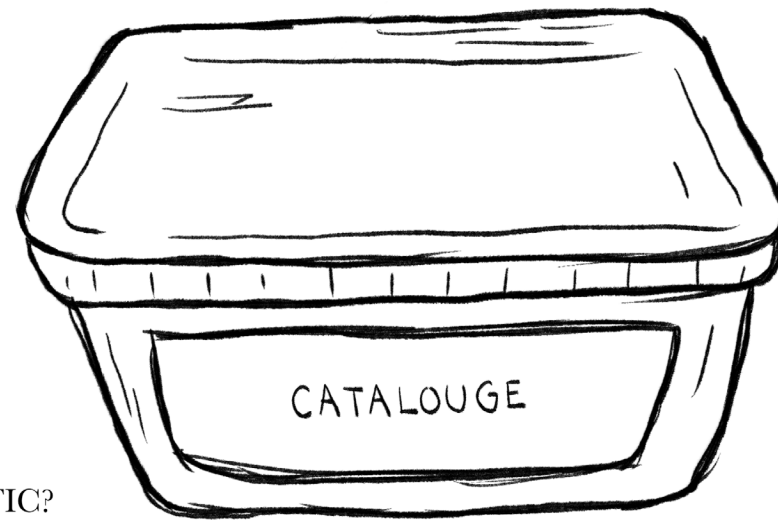


THE LID OF THE BOX IS POWERED BY ELECTRICITY.
CRANK THE HANDLE TO GENERATE ELECTRICITY UNTIL IT OPENS.

JIA MAI



HAVE YOU EVER DOUBTED YOUR USE
OF PLASTIC?



WHY IS EVERYTHING IN PLASTIC?

JIA MAI

LIVING WITHIN ARTIFICIAL LIGHTING: THE BIOLOGICAL, SOCIAL AND AESTHETIC IMPACTS

OLIVIA MUSSELWHITE

Electrical Lighting is infrastructure that allows everyday modern life, while slipping past everyday attention. The lack of recognition of electricity falls under the category of the “technological unconscious” (Byrd & Mathewman 87) as the electrical grid stays in the back of people’s minds. The technology that keeps peoples’ lives bright is only noticed in its absence, as the better technology is, the less it registers (Byrd & Mathewman 87). With electric lights blaring constantly and without recognition, light pollution has become severely overlooked by the people living within it, who are unaware of its widespread effects. Blackouts bring attention to the constant artificial illumination of the world and facilitate questions on what it means for nature and humanity to live in a non-stop artificially lit up world, including views on light pollution’s biological, social and aesthetic impacts, which have become a point of interest for artists.

According to the International Dark Nights Association, Light Pollution is the excessive and unnecessary use of light (darksky.org). Light pollution can be broken down into different types of excess light; ‘Glare’ is the excessive brightness experienced through electric lights, ‘Skyglow’ is the drowning out of the night sky (most commonly observed in urban areas), ‘Light Trespass’ is light that stretches to where it is unneeded and ‘Clutter’ is the overlapping of light from more than one source (darksky.org).

The modern world has developed drastically because of electric lighting, but this lighting has also become an increasing problem for living beings, including humans. In creatures, the effects of light pollution are dire, resulting in threatened species. One of the many species affected are birds, which tend to be blinded by glare, or else they gravitate towards artificial lights, colliding with buildings to then fall to their death. The Fatal Light Awareness Program (FLAP) is based in Toronto with the initiative to inform people to take actions to protect birds from

day and nighttime collisions with buildings, which have seen millions of birds lost. The connection between the deaths of birds and artificial lighting is left generally unknown to citizens of Toronto, as by the time the day comes around, gulls have taken the bodies of the fallen birds, leaving the streets clean in the morning (Drake). The threatening of nature's survival spans a range of living things. According to Drake, "Researchers have already identified harmful impacts on a shocking array of non-urban species, including bats, insects, plants, fish, turtles, marine invertebrates including corals, and even primates".

Light pollution affects the human population. For people who are living in highly light-polluted areas, the constant exposure to light has potential threats to sleep and to health. Photons strike one's retinas which trigger neurons that regulate the brain's pineal gland which produces the hormone melatonin (Drake). Melatonin begins to rise at sundown and peaks around midnight, regulating one's sleep cycle, but when excess light disrupts this, it causes irregular sleep. Excess light during the night is also connected to more serious health concerns including: heart disease, diabetes, depression, and cancer (Drake).

Not only are there physical health concerns, but people are becoming increasingly disconnected from the stars, and ultimately, disconnected to the awe of seeing the rest of the galaxy and the world beyond individual lives. In dense urban areas, "the sky is so filled with light that 99.5 percent of all stars that people can see are completely invisible without optical aid" (Drake). According to Dacher Keltner, who is a psychologist at the University of California, "'Philosophers have written about how a big beautiful sky makes you feel like you're part of something big, like it's sacred, like it's purposeful,' he says. 'By contrast, a smoggy sky that is closing in on you or a night sky that's filled with pollution kind of weighs heavily on your consciousness.'" (Drake). Light pollution

blocks out the natural sublime. The Sublime is the romanticized feeling of seeing overwhelming vastness or power before this gives way to a pleasurable experience (Stone). The stars are hidden, but the electrically illuminated lights of cities bring a new kind of sight which can create the same feeling of the sublime as natural forms do. Stone states that it is impressive in itself that the sight of the city skyline at night has only been available to people to view for around a century. With electricity, there is the new category of the "electrical sublime" which creates a, "human-made constellation, erasing the heavens in favor of 'man-made stars'" (Stone).

While there is beauty in artificial lighting, there is also ugliness. The modern world attempts to drive out as many shadows as possible and, in the process, neglects beauty (Tanizaki 30). Tanizaki states, "from candle to oil lamp, oil lamp to gaslight, gaslight to electric light - his quest to for a brighter light never ceases, he [spares] no pains to eradicate even the minutest shadow" (31). The mindset of keeping shadows constantly at bay has resulted in the gluttonous overconsumption of energy, so much so that the excess light is termed a type of pollution. Tanizaki protests the insertion of technology and energy in our lives. Tanizaki addresses the ugliness of the equipment that facilitates people's modern lives saying, "he [buries] the wires rather than [hanging] them in the garden, [hides] the switches in the closet of the cupboard, [and runs] the cords behind a folding screen" (1).

The landscape of the modern world is changed by artificial lighting. Neon advertising signs clarify the environment by bathing it in light, yet also obscures the meaning of the environment by overloading the senses with stimuli (Smith 9-10). Times Square and Piccadilly Circus are spectacles that attract tourists, which facilitate a social atmosphere during the night that has not existed before (Smith 11). Artificial lighting eliminates the associations of danger, evil

and primitiveness that comes with darkness, fostering a sense of security by having streets, buildings, and entrances lit up (Smith 72). In the end, the beauty of darkness is sacrificed for a sense of public security (Smith).

Breathing Lights, 2016, is an art project with installations in Schenectady, Troy and Albany, New York by the artist Adam Frelin and the architect Barbara Nelson (Blakemore). The windows of three-hundred vacant buildings are illuminated with LED lights from the inside (Anzilotti). Warm lights fill each window which can be seen from the street with "a diffuse glow that [mimics] the gentle rhythm of human breathing" (breathinglights.com). The project is meant to transform "pockets of shadows into places of warmth" (breathinglights.org). The project's ultimate goal is to draw attention to the need for public money to go towards building developments (Anzilotti). The art highlights how the presence and absence of light changes a space drastically. A place that is considered undesirable and dangerous when it is dark, feels safe during the night with the illumination of light. Light brings the connotation of the inhabitation of people and therefore security, Breathing Lights brings this sense back to abandoned places.

With the social upsides to artificial lighting, the influx of light makes darkness, as Stone states, a "sought-after luxury" that needs protection and preservation. With artificial lighting so consistent in people's lives, Stone states that, "Urban darkness is now perceived as somehow unnatural - blackouts [and] disruptions to electricity create a temporary 'artificial darkness'".

In 2006, curator Andri Snær Magnason created, Lights Out Stars On in Reykjavik, Iceland. In its first running, the street lights were turned off for a half hour and residences were asked to limit the amount of lights in their homes (news scientist.com). This was done in order to reduce the light pollution that normally drowns out the stars and the Northern Lights. An astronomer, Þor-

steinn Sæmundsson PhD, talked about the stars over the radio. Everyone could participate in this event, as they did not even need to leave their homes to see and learn about the Northern Lights that they no longer experienced on a regular basis. Magnason's project has continued through the years, with the intention of raising awareness and fostering humanity's lost connection with the stars, as Reykjavik is already biologically-friendly, with power that comes from CO2-free resources. Magnason says about the project, "The universe above us has been the primal inspiration for homo sapiens in science, religion, art and philosophy. Imagine if we would raise a whole generation without music, dance or colors. That is what we are doing when we [turn] off the stars" (andrimagnason.com).

The event of a blackout brings attention to the results of the overconsumption that people have become accustomed to. In order to run nighttime illuminants, the power grid is overexerted. In "The Agency of Assemblages and the North American Blackout", Bennett describes the electrical power grid, of which light is possible, as an assemblage- a material cluster of charged parts which remain "in proximity and coordination to function as a flowing system" (446). The grid is of human construction but also has active and powerful qualities beyond humans including: electrons, trees, wind and electromagnetic fields (446). Bennett describes electricity as an entity in itself that surges beneath the ground and around us at all times. Humans vie for the control of electricity- trying to satisfy its demand from consumers that is encouraged to grow without consequences (Bennett 449). The grid cannot handle the amount of power that people demand and will increasingly fail (Byrd & Mathewman 86). When there is a widespread power cut that lasts an extended period of time (which can happen to any country, rich or poor) this is termed a 'Black Sky Event' (Gray) or a 'Blackout'.

The reasons for Blackouts are numerous. Blackouts can be caused from natural and manmade events. There is a continuously growing demand of electricity from growing populations and new technologies (e.g. electric cars), and there is an instability of power sources as the world slowly converts to renewable yet intermittent energy sources (such as wind and solar power) meaning that electricity will be temporarily unreliable (Gray). Natural disasters including hurricanes, earthquakes that physically damage electric grids and geomagnetic storms caused by extreme waves of flares from the sun overload electric grids (Gray). Creating blackouts through cyberterrorist attacks and the physical damaging of infrastructure by people is another way that the electric grid can become disabled (Gray 2019).

The consequences of Blackouts are vast, with the modern world being highly dependent on electricity. Without power: water supply, sewer systems, road signs, traffic lights, public transit and electronic banking become useless and supply food chains become disrupted (Gray). Crime rates have also been observed to increase during periods of blackout (Byrd & Mathewman 91). With the prospect of increasing power outages in this lifetime, people need to be prepared for the possible biological, social and aesthetic changes that will occur and it becomes important to train a society that can live without power.

Blackouts, as Bennett puts it, “[light] up quite a lot” (462). The accelerating and disproportionate consumption of energy by people is protested by the grid that stops its flow without human permission, and “thus [speaks] the grid” (Bennett 462). The entity of the grid rejects constant lighting by changing its flow without human permission. The power of electricity makes it a force to be respected, not exploited carelessly.

Blackouts facilitate questions on what it means for nature and humanity to live in a

non-stop artificially lit up world, bringing discussions on views on light pollution’s biological, social and aesthetic impacts. Constant exposure to light has negative biological impacts, posing threats to the lives of creatures and threats to the physical health of people yet has positive social impacts, as there is a feeling of safety with well-lit spaces. The aesthetics of artificial lights are conflicting, as light can be both visually spectacular or visually displeasing. The paradoxical qualities of artificial light have become questions of interest to artists, who explore its positive and negative effects. The event of a Blackout asks, would living in a blackout world be possible? And would we be ultimately better for it?

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Light Piece

Carry an empty bag.
Go to the top of the hill.
Pour all the light you can in it.
Go home before dark.
Hang the bag in the middle of your
room in place of a lightbulb.

1963 autumn

YOKO ONO, LIGHT PIECE, 1963

Learning to Let Go:

1. Trace the outline of your phone onto tracing paper
2. Cut out the paper into many small sheets
3. Find your favourite pictures in your phone's photo album
4. Trace the photos with a pencil until your phone dies



SIMON FUH, 2020

“*In a rather round-about way, many of the artists have provide a visible analog for the Second Law of Thermodynamics, which extrapolates the range of entropy by telling us energy is more easily lost than obtained, and that in the ultimate future the whole universe will burn out and be transformed into an all encompassing sameness. The “blackout” that covered the Northeastern states recently, maybe seen as a preview of such a future. Far from creating a mood of dread, the power failure created a mood of euphoria. An almost cosmic joy swept over all the darkened cities. Why people felt that way may never be answered.*”

- *Robert Smithson: The Collected Writings*, Ed. Jack Flam. Berkeley: University of California Press, 1996.

THE MERITS OF PLAYING WITH SHADOWS

LILIAN HO

*How much of earth's beauty is due to its shadows!
The tree and the cliff and the far-floating cloudlet,
The uniform light intercepting and crossing,
Give manifold color and change to the landscape.*

*How much, too, our life is in debt to its shadows;
To griefs that refine us and cares that develope,
And wants that keep friendship and love from decaying;
With nothing to cross us we perish of ennui.*

“Shadows” by Thomas Durfee

We live so much of our lives encased in light. From our entrance into this world under the gleam of harsh hospital lights, to the sun-filled days of childhood summers, to the lonely desk lamp standing watch over a late-night work cycle. Even when we lay in bed during the darkest witching hours, a tap of a button can illuminate a room with a smartphone's glow. Our electric lights seek to illuminate every corner and crevice of our homes, breaking us free of the sun's natural cycle of day and night. Since we first figured out how, humans have sought to chase away the darkness with their devices of light. But quickly we learn, where light falls, a shadow appears on the other side.

Some people fear shadows and the darkness that they represent. In the famous Plato's Cave allegory, shadows are used to represent a false illusion about the truth. Here, the shadows are negative, and the light of truth is the positive. Some people want to wash them away completely. A common symbol used in literature and folklore, often times shadows are used to represent a darker, more evil mirror of reality. But others admire and embrace them.

In his beautiful text, “In Praise of Shadows”, the Japanese writer Jun'ichirō Tanizaki writes a loving ode to shadows and their important place in Japanese aesthetics. The text is a flowing stream of consciousness and provides a tranquil and calm view on the value

of shadows. He uses the contrast between light and dark and the value systems that are attached to them to discuss the contrast between Western and Asian cultures. The West is depicted as constantly trying to strive towards progressing their own position through illuminating the spaces around them to the greatest extent. In contrast, the subtle and subdued forms of oriental art is seen as an appreciation of shadow and subtlety in how they approach the world. Some of the examples he raise include the traditional architecture of Japanese homes, the types of lacquer used by Eastern cultures and the ways in which they reflect light, as well as the settings and staging of traditional Japanese performances. In some cases, objects and people can look more beautiful half encased in shadow, than they would be under a full set of illuminating lights. Even his musings on looking into the murky depths of Japanese miso soup hold something profound in his understanding of the shadow. When you look into something seemingly so inconsequential as the shadow at the bottom of your bowl, yet see something inspirational there, what does that say about yourself?

He writes with great detail, drawing in the reader with descriptions of different types of shadows, and how different surfaces - gleam

and shine - reflect light differently. At the same time, he maintains a certain level of self-awareness in the text. He is not positing that the Eastern view of shadows is the correct way for every culture or every person. He muses on how the Western tools of representation and modernity are best suited to creating Western calligraphy, literature and art. If the East had produced these technologies first, no doubt it would have suited Eastern styles much better. Having to use another culture's tools will always make your own output second best. There is still worth in trying something new and trying to adapt it to your own purposes though. Maybe through playing with shadows, we will see what Tanizaki sees in them. Or maybe we will see something else entirely, something that reflects our own experiences.

The text depicts the Japan of the past in a beautiful way, like we are gazing back at it through a shadowed glass. yet Tanizaki does understand that we cannot return to it, and that Japan is still going to continue to develop differently from it's old shadowy ways. Overall, this text is a very nuanced take on a changing landscape and an exercise in mindfulness.

One passage in particular stood out to me:

“ *The Chinese also love jade. That strange lump of stone with its faintly muddy light, like the crystallised air of the centuries, melting dimly, dully back, deeper and deeper - are not we Orientals the only ones who know its charms? We cannot say ourselves what it is that we find in this stone. It quite lacks the brightness of a ruby or an emerald or the glitter of a diamond. But this much we can say: when we see that shadowy surface, we think how Chinese it is, we seem to find in its cloudiness the accumulation of the long Chinese past, we think how appropriate it is that the Chinese should admire that surface and that shadow.* ”



Chinese Shadow Puppets
Source: China Puppet and
Shadow Art Society

In the murk and in the shadows there can be deep history and meaning buried under the surface. But on a practical note, where does this fascination with shadows lead us?

In various cultures around the world, shadow play, or shadow puppetry is an ancient art and folk tradition that is popular amongst both adults and children. It is present in such cultures as: Indonesia, India, Cambodia, Thailand, Malaysia, China, and many more. In shadow puppet traditions and philosophies, we see how the action of play is used to not only entertain, but to impart important allegories and lessons to their audiences. Many of these plays only require a single light source, articulated puppets that can be moved, and a translucent screen on which the shadows will be cast upon. Although many things can be done with simple set ups, some shadow puppet traditions have very elaborate puppets, sets and stories that require entire troupes of puppeteers to create. Highly trained puppeteers are able to make the puppets move almost like real human beings, and are even able to communicate emotion through skilled movement. The art of shadow puppetry can even be viewed as a precursor to modern cinematography.

In Indonesia, the traditional shadow puppet theatre is called Wayang. The puppeteer not only commandeers the puppets behind a screen, but also modulates their voice

in order to act as the narrator of the play. Occasionally, the puppeteer is accompanied by an orchestra in order to add a dramatic soundscape to the visual experience. Wayang usually depicts dramatic stories and popular mythological legends, such as the epics Ramayana and Mahabharata. The performances are very popular, and to this day often draw large crowds.

In China, shadow puppetry also has a very long and rich history. Many experienced puppeteers are able to perform dozens of plays which were traditionally transmitted through oral means. The puppetry skills were often handed down through families or through apprenticeships, creating long lineages of storytellers. Other than spreading stories and local legends, the art of shadow puppetry is also able to pass on social beliefs, cultural values, and local customs. It is also an art form that can transcend language barriers. After the Manchu rulers conquered parts of China, they used shadow puppetry as a tool to help them curry favour with the local peasantry and to spread their own cultural influence.

In these examples we see that there is a long cultural lineage of combining entertainment with educational matters. Through this shadowy art, cultures are able to keep their oral traditions, legends and mythologies alive through generations, while also providing opportunities for communities to come

Coming back to the ideas of shadows and the ideas of play that we have discussed so far, I believe that what we are trying to do with the curation of our Blackout kit is to combine these ideas together in an artistic context. There is a value in play and rehearsal in relation to darkness, as allegorical meanings can be communicated in an enjoyable and entertaining manner. With the different playful and interactive aspects of our kit, we can bridge between serious matters and playfulness.

We don't want people to just passively observe artwork in a gallery space, but be able to perform actions, use community bonds to gain new understandings, and actively engage with objects. The condition of a blackout or an emergency is so crucial to the deployment of this exhibition because it puts us in an unfamiliar environment and situation. Being in the dark, which is so alien to us in this day and age, can perhaps lead to new discoveries, new connections, new realisations.

We are so unused to being in the dark, cut off from the modern amenities that we are so used to having close by. But perhaps the next time a blackout unexpectedly hits our part of the power grid, maybe we can try to think about the shadows around us differently. Don't think of it as an inconvenience, just think of it as a different perspective. The shadows aren't there to hurt you, or to remind you of what you don't have. They could be there for you to play with, to be friends with, even for just a while. It's certainly worth a shot anyway, to unlock the playfulness that's inside us all. In times of emergency, of course it is important to have practical preparations ready in order to keep you and your family safe and healthy. But at the same time, it is equally as important to keep a sense of levity alive even in the middle of a crisis, lest the negativity crushes us alive.

LISTEN TO THE SOUND OF THE EARTH TURNING



YOKO ONO, EARTH PIECE, 1963

Mushroom Mobile Charger

SEO EUN KIM

Power is out and your phone is dead. All you need to charge your phone to call for assistance is use some mushrooms as a battery.

Included in the kit are:

- 1) Portobello Mushroom Growing Kit (x1)
- 2) Car Charger (x1)
- 3) Alligator Clips (x3)
- 4) Pen Spring (x1)
- 5) Galvanized Nail (x2)
- 6) Copper Coin (x2)
- 7) Scotch Tape

Step 1



Take the grow kit and cultivate Portobello mushrooms for 7-10 days.

Step 2



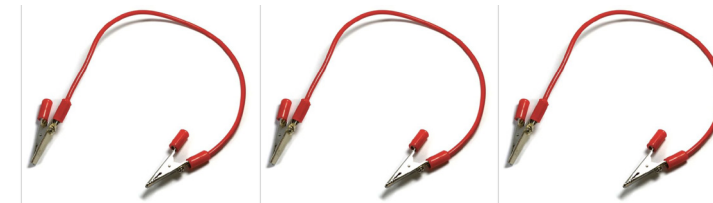
Harvest 2 caps of mushrooms and insert 1 copper coin and 1 galvanized nail into each cap, placed 1 inch apart.

Step 3



Tape one end of the pen spring to the exposed metal on the side of the car charger.

Step 4



Simply place the modem on top of the mycelium. Thanks to mycelium's ability to grow, it will naturally binds with the wires of the modem and connect it to the fungi's neural network.

Step 5



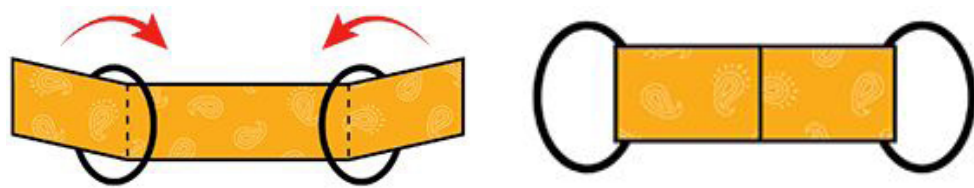
Congratulations! Your mushroom internet is now ready to use.

Step 3



Place cap skin pieces in the centre of the bandana, slightly overlapping each other. Fold the top and bottom portion of the bandana over skins as shown.

Step 4



Place the hair ties approximately 1/3 of the length on each end, folding the ends into the centre. Carefully loop the ties over the ears.

Step 5



Congratulations! Your mushroom masks are now ready to use. Discard skins after each use.

Matchbook Exhibition Piece

Talia Golland & Eli Kerr

Before

1. Obtain a box of blank cardboard matchbooks.
2. The number of matchbooks in the box should correspond to the desired number of pieces in the exhibition.
3. Unfold each matchbook and affix an image inside its cover.
4. While the images can vary depending on context and desire, each should refer to an artwork that cannot currently be viewed in its original form.
5. In the absence of printed material, with a pencil or pen draw a sketch or write the title directly onto the matchbook.

During

1. In a dark room, form a circle. The number of members of this circle should be less than or equal to but no more than the number of matches in each matchbook.
2. Beginning with any member of the circle, remove a matchbook from the box.
3. Take a single match and strike it on the matchbook. Use the flame to illuminate the image in the matchbook for as long as the match is lit.
4. When the match burns out, pass the matchbook clockwise to the next member of the circle.
5. If the match is inadvertently or intentionally extinguished, pass the matchbook clockwise to the next member of the circle.
6. Repeat steps 3-5. When every match has been lit, the work has been viewed in its totality.
7. Remove the next matchbook from the box and repeat steps 3-6.
8. If the exhibition includes a text, a Narrator should stand in the centre of the circle. While the matchbooks are passed around, the Narrator should recite the text from memory.



After

1. When every matchbook has been completed, the exhibition is over and the matchbooks should be destroyed.
2. If a Narrator was present to recite a text, they are encouraged to forget it.

俊舒吾爱，见字如面：

来信收悉，家中均好，勿念。

时近仲夏天长夜短，晚饭后映着斜阳写信，一会得回屋点灯了。乡下不比你们城里，晚上就暗下来了，静静的只听虫叫，好在月亮甚亮，倒也方便照路，院中干些活计也不耽误。近些日子天气渐热，风也厌烦一到睡时就跑的无动静，一丝丝也没有了，晚上屋中燥热难眠，只好打几桶井水放在床边，那丝丝凉气一出，睡的道是香甜了许多，你妈还泡上个西瓜，早上起床切开一吃甚是凉爽。

前日晚你姑姑来家拿来一块手织的帕子，说是给你的，甚是漂亮，她说织了两天呢。我炖了鸡和你姑夫映着火塘的亮喝了点酒，不知是火烤的热还是酒量小了，不一会我就晕呼呼的睡了，他们什么时间走的都不知道，醒时只见你妈在塘火旁编着蓑衣，火光映着她的脸红红的，额头的汗珠儿亮亮的，甚是好看。

你在北平需调剂吃食，尽心教书也应休息好，时局不稳需注意安全，暑假将至可尽快携吾婿与外孙归家。外孙爱吃腊肉、腊鱼在塘火的烟中熏着天气虽热倒也无事，只是香气太是诱人。如不早回怕是让人吃光了。

不再唠叙，望安好。

父字

民国**年于**

HURRICANE MARIA

JIA MAI

//

Hurricane Maria is coming.
We could tell by the faces of the news reporters that it was serious, it was coming straight at us whether or not we were ready. The shelves of the supermarkets were nearly empty. Water and canned food were taken off the shelves the minute they were put on. Batteries. Flashlights. Candles. Band-Aids. Each shopping cart was a survival kit. Everyone was panicking. Everyone was so afraid.

//

At first it was just the wind.
And then it was the rain; pouring from the sky as though it was crying.
And then the water level started to rise... until it came to our doorsteps.
Howling. Cracking. Falling. Whistling. Tearing.
I feel as if I'm in a movie.
We gathered around lamps, candles, flashlights - sourcing for the comfort of light. Maria had taken with her radars, cellular towers, as well as all the electric power on the island.
We couldn't tell anyone that we were okay.
We couldn't know if everyone was okay.
We couldn't refrigerate our food.
We couldn't light our homes.
We couldn't use our bathrooms.
If we got hurt, the hospitals were shut down.
If we needed water, there are none... except for those falling from the sky.

//

The wind had stopped.
The rain had settled.
I was finally able to reach mother today to tell her I was okay.
I was running out of food.
Everything had to be in cans since anything fresh would spoil.
The lines to get cash would stretch blocks every day.
Credit cards were just as much as a novelty.
I hear hospitals pleading for diesel fuel over the radio.
They need it to power their generators to keep vital medical equipment running.
They need fuel to keep people alive.
I hear it may take months for electricity to be restored.
They are not trying hard enough.
We need electricity to keep us alive.

//

Electricity has been restored to the last neighborhood in Puerto Rico needing power restoration.
It's been 328 days.

FUTURE

JIA MAI

June 28th, 2021
Friday

The power went off as fast as it would have turned on. I was left in the dark, with nothing but the light from my computer screen illuminating right into my eyes. I hadn't even realize how bright the screen was. I quickly turned on the flashlight on my phone and walked to the light switch. At the flick of this switch, electric currents will return to the circuits of my home, I thought. No, not this time.

“Maybe it's just me.” I murmured quietly.

I pressed firmly onto the screen of my phone and it returned to its function of being a smartphone. Swipe. Tap. Swipe. Tap. Swipe. Tap. Tap. I opened Instagram and mechanically pressed through the circles on the top of the page, one after another it was the same black screen with the same white font writing the same content - “Omg blackout!”. I paused on my one of them and tapped reply.

“Power is out in your city too?”

“Yeah dude, it's getting crazy out here.”

“What do you mean?”

“People are looting and setting stores on fire”

“...”

I lifted my head up from my phone and looked out the window. People were just beginning to shuffle on to the streets. Nothing seemed to have happened just yet. The breezing wind of June was tempting me to leave the house too. I figured I had nothing to lose since the thought of having to stay in the dark alone only grew increasingly frightening. I pulled on a jacket and walked out the door, beams of light from flashlights and cell phones lit up the streets. Different things were happening from left and right. The last time I saw this many

people on the streets was when the Raptors took home first place during the NBA finals in 2019. Down the street, a mini concert was beginning to form as people pulled out their drums and guitars to form a temporal band. The lively atmosphere compelled me to walk towards their direction.

I lost track of the time I spent standing there, nodding my head to the music like a bobblehead toy. Perhaps it was the atmosphere of the people, or perhaps it was the unique situation we were all under, everyone was talking to each other and having a good time. I have never experienced anything like it. I was later interrupted by a pat on my shoulder. I turned around to find Amy grinning at me. Amy lived next door to me.

“Hey, you came out too!”

“Yeah, I didn’t want to stay alone at home. How about you?”

“Yeah, same. I didn’t even know how much I relied on electricity until today. And I have always thought that ‘you never know how much something means until you have lost it’ would be something I would be saying to my ex... Anyway! I heard the music from my house and decided to come check it out.”

“It’s quite fun here! I don’t know what I will be doing after though. I heard it’s getting crazy in other parts of town so it might be better to stay home but I really don’t want to be home alone.”

“Would you like to join me later for a barbecue on the rooftop? Two of our other neighbours invited me earlier. They have a grill and we can bring some meat up. It will be fun!”

It didn’t take long before I was scavenging through my fridge for meat to bring to the barbecue. On a normal night, I would have definitely rejected Amy’s invitation and stayed home to go on my phone or my

computer. But then again, this wasn’t a normal night.

I took the stairs up to the rooftop and found the two neighbours Amy was talking about already there setting up the grill. We introduced ourselves to each other. Their names were George and Amelia. We have apparently been living on the same floor for three years, but I cannot recall any memories of them. Amy joined us minutes later and brought along with her some beer.

For the rest of the night, we sat and talked before the flame. We talked about everything, from our life problems to politics to aliens in the universe. As our faces grew redder and redder, they became less and less like a stranger. I couldn’t help but think how my night would have been different if the electricity didn’t go out. I couldn’t help but ponder how I would have never had the opportunity to meet these people had it not been this blackout. It would have been weird spilling so much of my thoughts to a stranger, but tonight, just tonight, it was okay.

FIND SOMETHING BROKEN.

ATTEMPT TO FIX IT.

问卷调查

Online Survey

您希望看到哪些未恢复的暂停活动？

What are the activities now suspended that you would like to see NOT resumed?

BLACKOUT

SEO EUN KIM

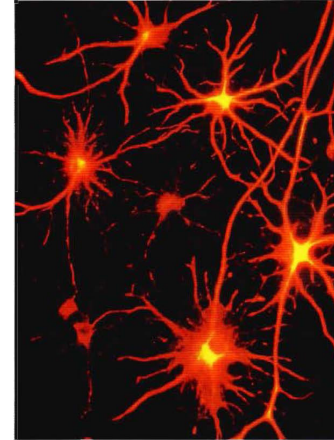
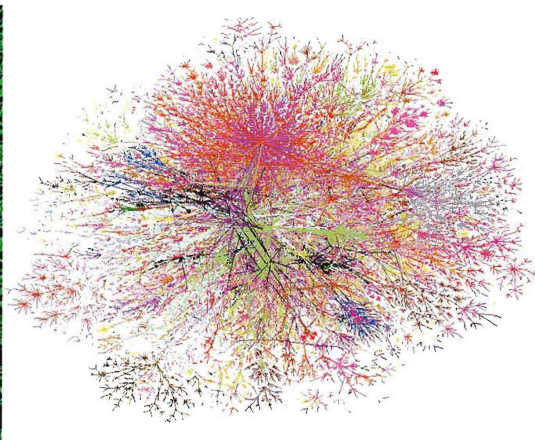
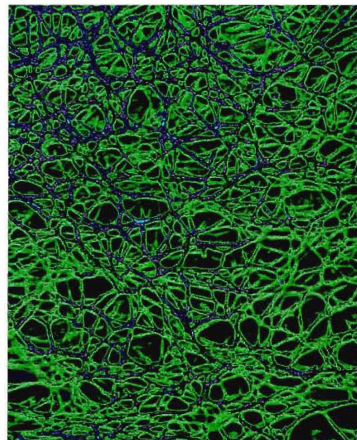
The power is out and the internet is dead. The only form of global interconnected network we have now is a viral infection. This virus, like the internet but more efficient, connects you in Canada to me in Korea; confuses Tom Hanks with a grad student; and superimposes the stock market and the street market. What to do now? We search for a new alternative global network from an old familiar source: mushrooms.

In 2019, artist Pascal Leboucq collaborated with Krown Design to introduce “The Growing Pavilion” at Dutch Design Week. The pavilion was made solely from bio-based materials, using the cattail plant as flooring, agricultural waste for furniture, and mycelium as wall paneling.

“What I really like is that mycelium is very organic and natural, but you can really use it as a designing product. It’s very easy to shape into furniture, for example,” states Leboucq. Though still in experimental phases, “The Growing Pavilion” promises the mycelium’s potential as shelter. The mycelium promises the potential to generate another basic human necessity: wi-fi. This alternative internet - to be called ‘Fungalnet’ - is “naturally primed for optimal performance:” self-sustaining, other-sustaining, and nutritious. Fungalnet does not exhaust any more of Earth’s resources because it already exists. It follows the circadian rhythm. It is “high-performance, extremely cheap, and



environmentally benign;” a new name given to an old friend - the mycelium. A fine web of cells constituting the reproductive parts of mushrooms, mycelium does not need a renewable source of power because it powers itself. In a 2015 study that proved mushrooms’ potential as an alternative source of carbon for Li-ion batteries, scientists discovered that mushrooms (cap skins of Portobello mushrooms in particular) are inherently self-activating.



From left to right: A close-up view of the interweaved cell chains that compose the mycelial network; A diagram of the Internet's information-sharing systems; A micrograph of the neuron network in astrocytic brain cells.

It does not need software developers, data analysts, or quality assurance specialists. It engineers its own infrastructure. “Interlacing mosaics of mycelium infuse habitats with information-sharing membranes. These membranes are aware, react to change, and collectively have the long-term health of the host environment in mind.” Expansive and adaptive, the mycelium is a neural network that mirrors not only the internet, but also the human brain:

Like the brain and internet, the mycelial network “...stays in constant molecular communication with its environment, devising diverse enzymatic and chemical responses to complex challenges.” Fungalnet will compute itself while simultaneously sustaining an ecosphere. Server farms will be replaced by mushroom farms; cloud infrastructure by mycelial infrastructure; neoliberal geopolitics by spore-politics.

Responding to the politics of planetary computation and cloud infrastructure, Benjamin Bratton declares in *The Stack*, “The design problems require speculation but are not hypothetical. They demand that we engage a response that is as inventive as it is ineluctable.”⁹ Such speculative engagement, Bratton continues, “...may displace well-established forms of human-machine infrastructure interaction, perhaps so well established that entire cities were designed to accommodate them.” Accordingly, Fungalnet will have vastly

reverberating and unforeseeable effects of destabilization by introducing ‘human-machine-fungi infrastructure interaction’. Mycologist Paul Stamets claims such multi-entity interaction is feasible. The mycelium is, “...a consciousness with which we might be able to communicate... Through cross-species interfacing, we may one day exchange information with these sentient cellular networks.” Mushrooms will not regenerate the electrical systems of former cities; germinating, instead, the new Fungus Polis.

Fungalnet’s infrastructure mimics the kinds of digital infrastructure called for by theorists to replace the current structures. Bratton describes the structure of planetary computations as, “...an architecture of seven layers of sovereignty and computation which wrap up the earth like a skin.”¹² In fact, operating simultaneously in the layers of the underground, ground, and aboveground, the mycelium is the original Stack - the original skin of Earth. According to Bratton:

“*Mobile networks link one site to the other and let some people walk right through walls, and others right into new ones. Those networks substitute for “the wall” and also provide for new kinds of continuity and connection, or discontinuity and segregation.*”

Like virtual links and viral infections, spores have no border. “Mushrooms reproduce through spores that can travel great distances via water, by air, or by hitchhiking on other carriers.” Could fungi become the new media space? Fluidly transmitting data across the vast fungal ecology like internet networks do?

German moving image artist Hito Steyerl

describes the internet as: “...a form of life (and death) that contains, sublates, and archives all previous forms of media. In this fluid media space, images and sounds morph across different bodies and carriers, acquiring more and more glitches and bruises along the way.” To Edward Kohn, such glitches and bruises may be unavoidable and even necessary to life:

“*Being alive - being in the flow of life - involves aligning ourselves with an ever-increasing array of emerging habits. But being alive is more than being in habit. The lively flourishing of that semiotic dynamic whose source and outcome is what I call self is also a product of disruption and shock.*”

Fungus Polis will become “...a politics that grows not from opposition to or critique of our current systems but one that grows from attention to another way of being, one here that involves other kinds of living beings.” Fungalnet will bring upon a comprehensive reconceptualization; ‘data’ will have to be redefined, along with ‘media’ and ‘cities’.

Similar sentiments of posthuman collaborative living are shared by Stamets and anthropologist Anna Tsing: “Our fungal friends equip us with tools to act responsibly and repair our shared environment, leading the way to habitat recovery;” “[Mushrooms] allows us to explore the ruin that has become our collective home.”

In the ruins of a global blackout and/or pandemic, we can look to ‘our fungal friends’ to figure out life-after-virus. “In the wake of catastrophes, fungal diversity helps restore devastated habitats... Wherever a

catastrophe creates a field of debris - whether from downed trees or an oil spill - many fungi respond with waves of mycelium.” So for now, take the mushroom growing kits and start populating your very own Fungus Polis. Included instructions will teach you how to make your very own mushroom face masks, mushroom smartphone chargers, and the Fungalnet. Once cultivated, it will connect with other fungal networks on its own, quickly plugging into the mycelial fabric that covers most of the landmass on Earth already.

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Mushroom Face Mask

SEO EUN KIM

Mushrooms have a scientifically proven ability to filter impurities. During a shortage of N-95 masks, follow the steps below to make a DIY mushroom mask.

Included in the kit are:

- 1) Portobello* Mushroom Growing Kit (x1)
- 2) Bandana (x1)
- 3) Rubber band (x2)

**While this will work with most mushrooms, Portobello is recommended for its large caps.*

Step 1

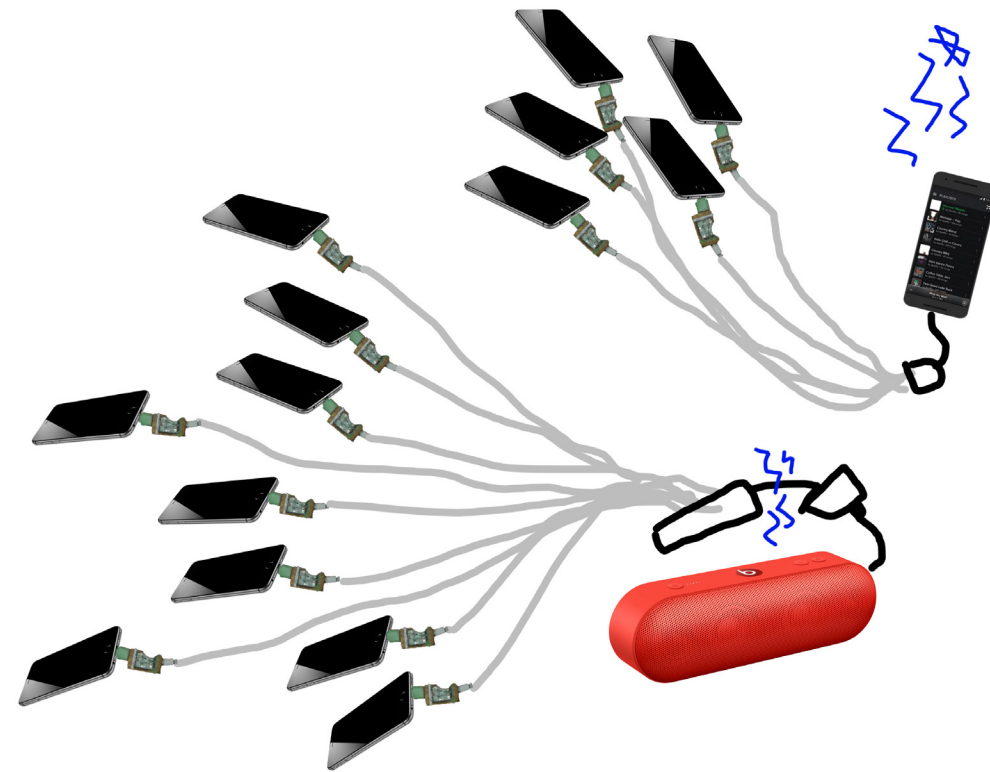


Take the grow kit and cultivate the mushrooms for 7-10 days.

Step 2



Once cultivated, harvest mushrooms and peel off the skin from the caps. Collect enough to cover the size of an average mask. (Put aside peeled mushrooms for consumption).



Power up your Beats Pill and iPhone with downloaded music by siphoning power from many other phones

SIMON FUH

Mushroom Internet

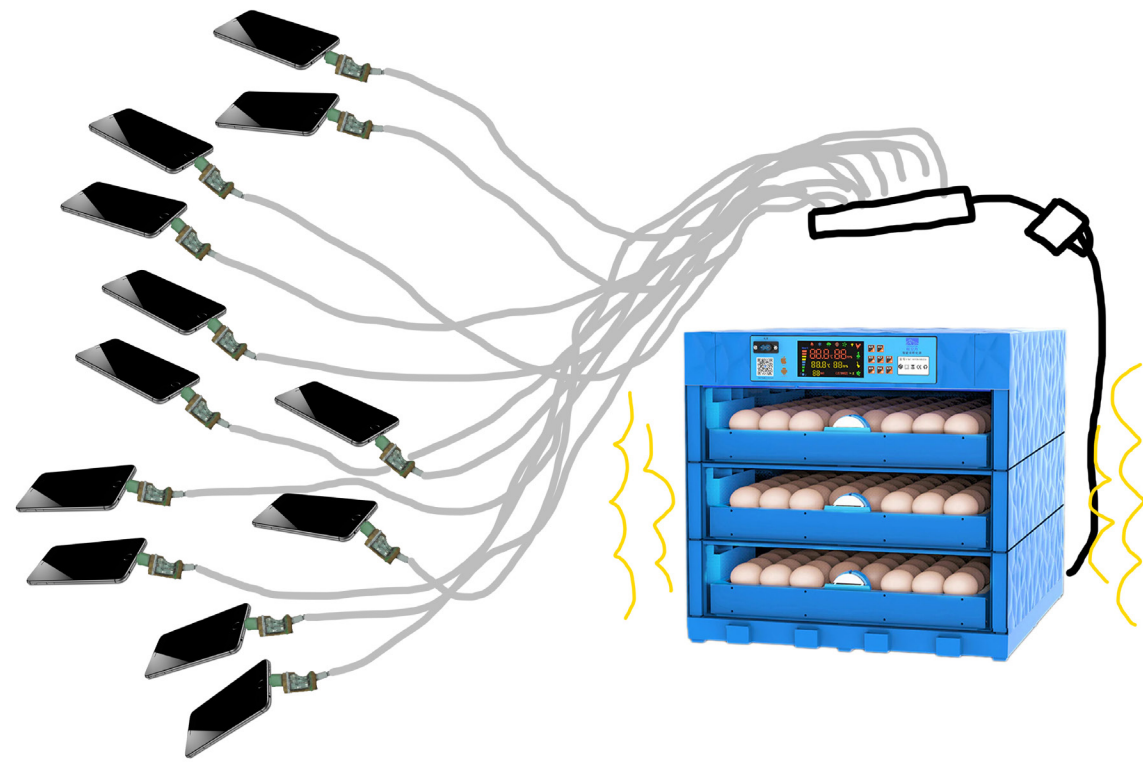
SEO EUN KIM

Power is out and the wi-fi is dead. Follow the below steps to connect to an interconnected network that does not require electricity.

Included in the kit are:

- 1) Modem (x1)
- 2) Fiber-Optic Cable (x1)
- 3) Router (x1)
- 4) Ethernet Cable (x1)
- 5) Wire Cutter (x1)
- 6) Hiking Shoes (x1)

Step 1



Give new life by powering your egg incubator with soon-to-die phones

SIMON FUH



Put on the hiking shoes and travel to the nearest forest to find mushrooms. Mycelium is a fine web of cells that make up the reproductive parts of mushrooms. While this can be found or harvested everywhere, the forest is your best luck to find large mycelial clusters. Look for concentrated groups of mushrooms.

Step 2



Beneath the mushrooms will be the mycelial mats that connect all surrounding mushrooms together. Through mycelium, the mushrooms share and store data amongst each as well as the forest. We must tap into this fungal network.

Step 3



Inside fiber-optic cables are thousands of optic lines. Using the wire cutter, cut the tip off one end of the cable and carefully cut open the end, threading out and exposing the lines inside. Insert the other end of the cable into the modem.

Step 4



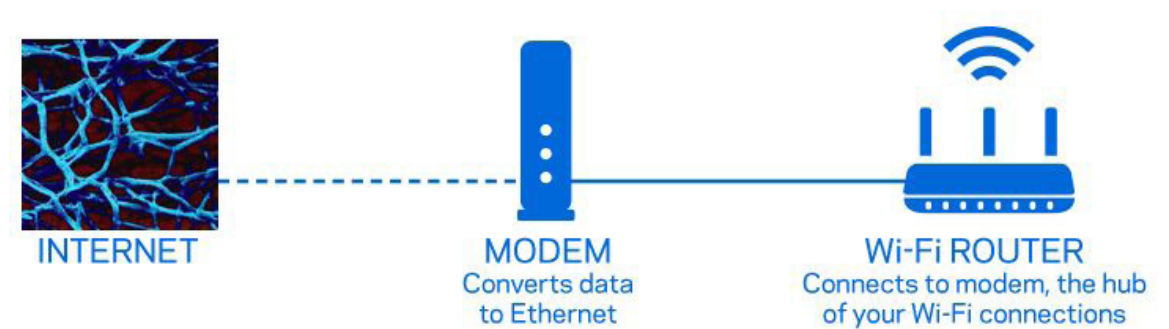
Entangle small bunches of the optic lines with strands of mycelial webbing. Mycelium has an exponential growth rate and will naturally bind with the lines then with the internal wires of the modem, connecting the modem's circuits to the fungi's neural network in a matter of days.

Step 5



Once successfully bound, connect the router to the modem using the ethernet cable. The wi-fi signal should now appear on your phone (Settings > Wi-Fi).

Step 6



Congratulations! Your mushroom internet is now ready to use.

“ *To be modern is to live within and by means of infrastructures: basic systems and services that are reliable, standardized and widely accessible, at least within a community. For us, infrastructures reside in a naturalized background, as ordinary and unremarkable as trees, daylight, and dirt. Our civilizations fundamentally depend on them, yet we notice them mainly when they fail.* ”

- Paul N. Edwards, *A Vast Machine: Computer Models, Climate Data, and the Politics of Global Warming*, Cambridge: The MIT Press, 2010

BLACKOUT: HOPING FOR THE BEST BUT EXPECTING THE WORST

LEONA YANG

“there’s no harm in hoping for the best as long as you’re prepared for the worst.”

~ Stephen King

Most people have experienced some sort of small scale blackout. For many, it is a fond memory representing a quiet time: families gathered in the candle lit living room telling stories, neighbors interacting for the first time in a long time to support one another, and roommates figuring out what to do with the food in the darkened fridge. Blackouts symbolize a time when people are forcibly jolted out of their normal lives and made aware that they are a part of a society, making them painfully aware of their dependence on the proper functioning of that society, and their dependence on the electrical grid to be able to do even the simplest of things. It also reminds us that we are not going through the experience alone. We can take comfort in the fact that others are experiencing it with us. Our sense of community, knowing that we are not alone, helps them through the fear and uncertainty that accompany a blackout. During times of crisis, a stable sense of community is pivotal to how a community will react during and after the crisis, affecting how quickly it can recover. However, when social connections are broken, our experience of a blackout can quickly change from a beautiful peaceful memory to a chaotic one.

In 1977, New York City experienced a large-scale blackout. Although only a short blackout that lasted less than 48 hours, it resulted in widespread looting and other criminal activity. Community cohesion, the sense of togetherness that binds a community together, was badly frayed due to fear of a severe financial crisis and serial killer. The 1977 blackout of New York City shows what could happen when people lose their sense of community during a blackout and the

detrimental effects it can have on a community. Due to the essential importance of community cohesion during crisis, precautions need to be put in place in anticipation of another blackout. To prevent the unpleasant event of the 1977 New York City blackout from transpiring again, *Blackout (2020)* will use art to fill that gap.

Today's everyday life relies heavily on electricity. Since the 20th century, North America's demand for electricity doubles around every decade. However, our current ever-increasing use of electricity is unsustainable for the environment. We are at a crucial point in our environment where drastic measures need to be taken to maintain a healthy ecosystem that is able to sustain the population of earth. As world leaders work on effective alternative energy sources, the best approach we can take currently is to cut down on our energy use. Not only does electricity contribute to carbon emission but it also releases harmful waste-products into our ecosystems. Our current dependence on electricity for even simple tasks, can make this task especially challenging. To make the transition to low-electricity consumption smoother, it is essential to embed in people's mind a positive experience with low electricity use. *Blackout (2020)* hopes to use positive social interaction to create this positive experience. With the introduction of the cell phones, the internet and social media, our method of communication has forever changed. Although social media allows us to stay in constant contact with one another, it also reduces the quality of our interactions. We see one another in real life less and have more shallow acquaintances. Blackouts can signal a downtime from our online world to reconnect with one another away from social media.

In an investigation by the Guelph Mercury Tribune, reporters found that during the Guelph's 2003 blackout, most people had found memories of it. They found that many people cherished the experience of having to

spend time away from their TVs and computers because it forced them to go outside and interact. They reported that they connected more with people and found quiet reflection time. During a blackout, people are forced to be present with themselves. The time one would usually spend scrolling through social media, now needs to be filled with other activities. Blackouts, on occasions that are short, can be seen as a catalyst for social interaction with people around a person. *Blackout (2020)* hopes to make use of people's receptiveness during this time to create in people's mind an association between low-energy consumption and positivity.

Research has shown that the simple knowledge that one is not going through a negative event alone, can be enough to comfort a person and prevent panic and depression. Humans have always been social creatures. As social creatures, we feel the need to socialize and be comforted when in distress. Comfort seeking can be a strong drive. In an iconic study conducted by Harlow and colleagues, experimenters found that baby rhesus monkeys preferred a wool clothed mesh monkey doll to a mesh monkey doll that offered food. This shows that our need for social connection is a strong urge that parallels even our need for food. This need is one rooted in evolutionary bases. Our DNA actively seeks out those that share our experiences. In times of crisis, regardless of whether it is cancer fighting or drug addiction, we seek out others who share our experience. In light of the novel coronavirus that emerged in Wuhan, China in late 2019, cities worldwide saw a hoarding of toilet paper supply. Due to the hoarding behaviors of some, others were left without any. Knowing that there may be no toilet paper available for purchase influenced people to buy even more. The more people buy, the larger the shortage. Community members become stuck in this vicious cycle as community cohesion breaks down. Restoring a sense of community and togetherness can be the fastest ways to break

this cycle. When Melbourne resident Regina George shared on a local Facebook group that she had 6 excess rolls of toilet paper to give, her post quickly garnered praise. Additionally, her act of kindness influenced others to do the same. People began messaging her regarding how they can go about doing the same for their community. Her kind actions demonstrate the power that a strong sense of community can have during a crisis.

Blackout 2020 is a non-traditional exhibition that takes the shape of an emergency first aid kit. *Blackout 2020* is not simply an art exhibition. Here the art serves a purpose. Just like a battery pack in an emergency first aid kit, the art also serves a purpose. *Blackout 2020* consists of three categories of items: an instructional art manual, art that can be deployed during a blackout and a survey. The instructional art manual is a compilation of instructional art created by arts that encourage social cohesion. Artworks included in the box that are not a part of the instruction manual are artwork that can be directly applied during a blackout. Lastly the survey included in the box serves the function of gathering information that can be applied to future blackouts and blackout prevention plans. *Blackout (2020)*'s unique form of a first aid kit allows the exhibition to be distributable to reach a wide array or audience. Like other first aid kits, nothing in *Blackout* is perishable and can be stored over a long period of time. The instruction manual was created with the idea of creating community cohesion in mind. Instructional pieces were selected and commissioned from both well-known and local artists. These instructional pieces encourage viewers to engage with one another. Some are complicated and require additional resources and others simple. Some instructional pieces included in the manual can almost double as social-psychological interventions. Social-psychological interventions are brief exercises that one can do to change previously held beliefs and attitudes. For example, contact hypothesis

devised by psychologist Gordon Allport, states that the more interaction one has with something, the more positive their attitude towards it becomes. As it is evitable that blackouts will happen, it is important to set in place plans that can make the experience more enjoyable for residents and prevent panic. *Blackout (2020)* is that prevention plan.

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LIGHT A MATCH AND WATCH IT TILL IT GOES OUT



YOKO ONO, LIGHTING PIECE, 1955 AUTUMN

