EVAN EISENSTADT

Speculative Design Futures

THE DAY AFTER TOMORROW

EVIL, I THINK, IS THE ABSENCE OF EMPATHY

-Captain G. M. Gilbert

The beginning of the 21st century was a mixture of chaotic extremes. Since the industrial revolution, technology has grown exponezzntially. The once-impossible became standard, and what was once magical become normal. This pattern has repeated itself over and over again, but something began to change in the early part of the century.

Scientists began to realize that digital technology leads to loss of empathy, the prime barometer of humanity's wellness. History has shown that a lack of empathy leads to war and violence. From Ancient Rome, to the warring Christians and Muslims of the Crusades, to the First Nations of the Americas, to the Jews of Europe and the people of Rwanda, a profound lack of empathy facilitated unspeakable loss.

By 2020, children began to experience neurological changes in the makeup of brain pathways. The pituitary gland, located near the brain stem, began to shift and the spread of this information, however people began to take notice. As the pituitary degraded, children began to show increased episodes of ant-social behaviour and increased psychotic tendencies. School violence, once primarily located in the United States, began to spread throughout the world.

By 2030, the United Nations and the G7 Nations began to study ways to counteract the effects of digitization and empathy degradation. Violence levels across the world spiked and the global order began to collapse.

By the early 2040s, Europe had fallen into decay, while military dictatorships had risen across southeast Asia. President Ivanka Trump had finished her fathers dream of fortress America, and the country had completely closed off from the rest of the worzld. Canada and a handful of Western democracies continued to fight for Western order, but it seemed too late.

A young Scientist in the Free Province of Nunavut finally made a prototype that would allow people to become more empathetic to each other and reverse the pituitary gland degradation. The Empathy Particle Accelerator (EPA) was a small device that came into use throughout the world. The EPA even managed to slip into America via Ivanka Trump's shoe stores.

Within a decade, mortality rates plummeted and borders began to open again. Technology finally became a proactive means to help humanity after all the years of destruction and chaos it caused. The EPA allowed humans to become humans again. It allowed us to remember that it is in our nature to be emphathetic rather than at the mercy of our digital devices.

THE EPA

Possible Future

The Empathy Particle Accelerator (EPA)

Children spend too much time on devices from young ages, glued to their screens in constant cybernetic feedback mechanisms. Too much screen time alters childrens' brains, hardwiring their neurons in unsuspected, sometimes sinister ways. And parents are glued to their screens as well. What will be the cost for all this?

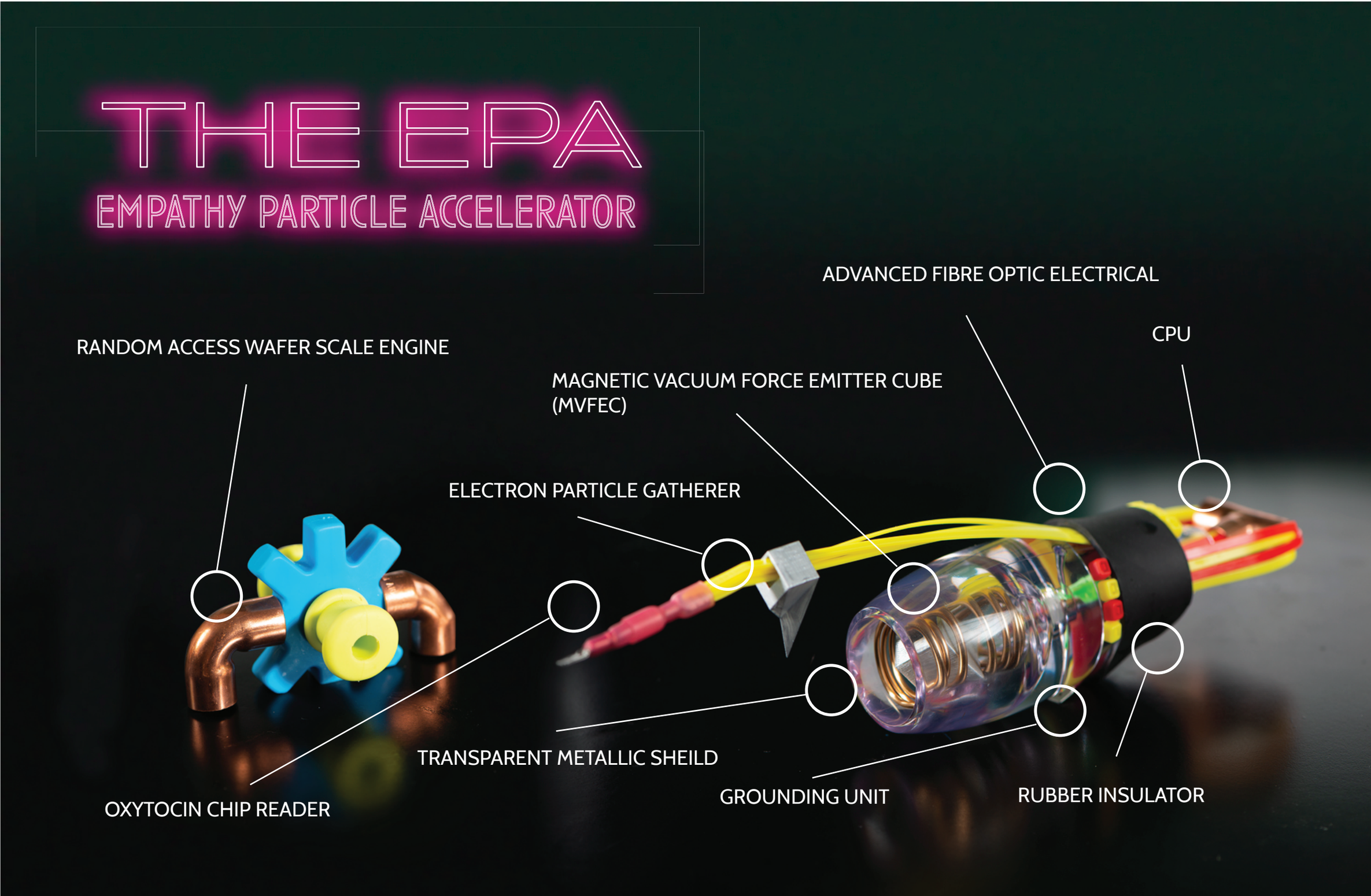
Children are growing up unable to connect with one anther, creating friction among friends and family. The warmth of a human hand is replaced with the cool, offset glow of an LED screen. So many have become so addicted to their screens that without them they would suffer digital withdrawal, anxiety and depression.

Digital technology was born from the ideas of the Memex and the pursuit of ultimate human knowledge, in which the betterment of humanity comes from information exchange. But digital technology has left us more vulnerable than ever. We claim to value the binary of human connection, yet digital technology has lead to more polarization and less empathy, suggesting more volatility in the future.

The Empathy Particle Accelerator (EPA) was born out of necessity to fight extremes of dehumanization caused by our digital devices. Funded and distributed by the United Nations, the EPA helps humans manufacture oxytocin molecules during periods of stress caused by digitization, in which they are able to empathize and communicate more successfully with peers. Described as CERN technology early on, this device is able to target certain molecules in humans, allowing hormones to produced and secreted.

THE EPA

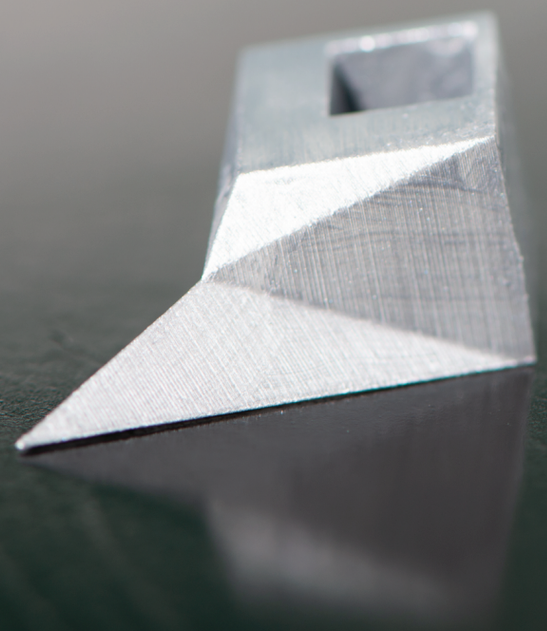
EMPATHY PARTICLE ACCELERATOR



AUGMENTATION 1

ELECTRON PARTICLE GATHER

This device picks up negative ions from the room, and turns them into positive energetic ions which power the MVFEC.



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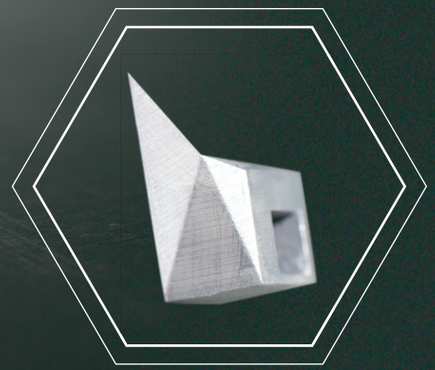
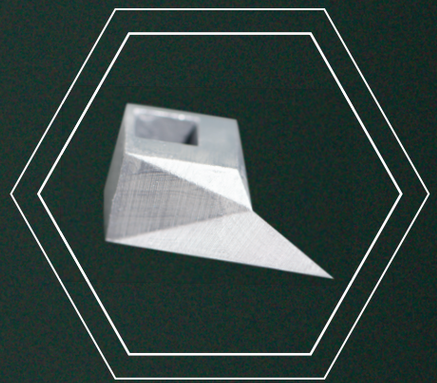


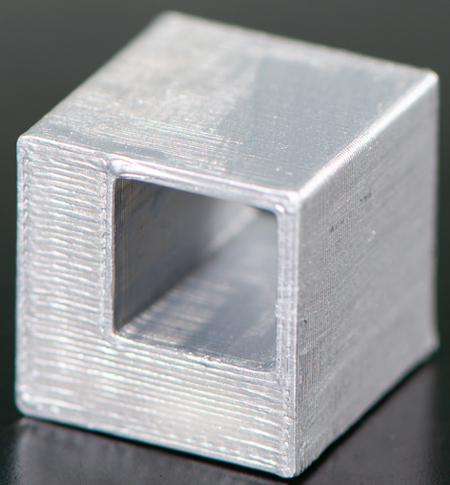


VENTRAL

AUGMENTATION 2

MAGNETIC VACUUM FORCE EMITTER CUBE

The most powerful feature of this device, as it spins it creates a magnetic field that focuses on oxytocin molecules in its medium range. It triggers the pituitary gland to secrete this hormone, which in turn causes a feedback mechanism creating increased empathy and happiness in users.



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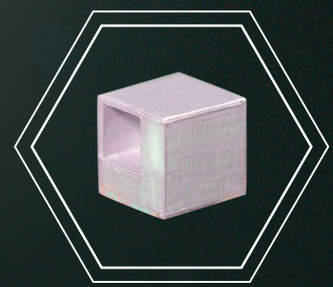

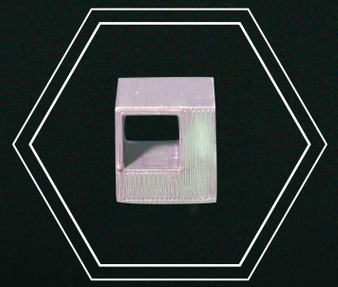

VENTRAL

EPA SPECIFICATIONS

OXYTOCIN CHIP READER

This measures the amount of empathy in a room or region by analyzing the amount of oxytocin molecules upon individuals and groups.

ADVANCED FIBRE OPTIC ELECTRICAL

This takes the binary data from the Chip Reader and places it into the Central Processing Unit (CPU) for data analysis.

CPU

The Central Processing Unit analyses the data for activation and deactivation.

RUBBER INSULATOR

This protects the users from electric shock from accelerator.

GROUNDING UNIT

This grounds EPA, preventing a short circuit.

TRANSPARENT METALLIC SHEILD

The housing of the internal core of EPA, protecting unit.

MAGNETIC VACUUM FORCE EMITTER CUBE (MVFEC)

The most powerful feature of this device, as it spins it creates a magnetic field that focuses on oxytocin molecules in its medium range. It triggers the pituitary gland to secrete this hormone, which in turn causes a feedback mechanism creating increased empathy and happiness in users.

ELECTRON PARTICLE GATHERER

This device picks up negative ions from the room, powering the MVFEC.

RANDOM ACCESS WAFER SCALE ENGINE

This is a massive database in which users' genomes are sourced for individual genetic markers to help generate oxytocin in users.

INTERFACE LENS

Design

This User Interface (UI) Design is based upon technology that is already upon us. In 2014, Google announced the creation of smart contact lens that featured micro-electronics which could sample biomarkers in the tears, therefore allowing diabetics patients monitor there glucose levels. This remarkable technology is proactive in nature, helping a patient monitor their blood sugar levels before they become problematic. Proactive design is healthcare is essential because it stops a problem before it manifests, which is ultimately better for the patient and caregivers. Continuing googles advancement, this UI design would monitor stress hormones in the patients body through biomarkers in their tear duct. The major stress hormones involved in the nervous system are adrenaline, cortisol, norepinephrine. These hormones are essential for survival, however when they are elevated for long periods of time they wreck havoc on the body and can lead to prolonged periods of delirium.

The first part of the Enhanced-Augmented Smart Lens (EASL) will monitor patients stress hormones, while the second will create an augmented reality in response to those biomarkers. The augmented reality will be user specific, therefore the graphics will be in based on the users personal life experience, to counteractive the hormones of stress. If a patient has found memories of traveling the forest, the EASL will augment the hospital room with elements of the forest that are calming in nature. A secondary device, which will not be explored here, would also add sound to enhanced the user experience. Creating an augmented reality that responds to a patients stress hormones is infusion of good design and medicine. It is completely non invasive, meaning the side effects are negligible. It could only improve a patients hospital stay, creating a safer environment for he patient, hospital staff and family members.

Furthermore, by lowering stress hormones, we can actually improve a patients health and well-being. I would also argue that the cost of giving patients these Enhanced-Augmented Smart Lens (EASL) would be offset be shorter hospital stays.

SHORT FILM

Online
https://vimeo.com/401195549

NANOBAR

Design

NanoBar is made from an organic food substate infused with nanoparticles called ambrosianen. Ambrosianen is not the food of the gods, but it is close.

Ambrosianen is a food substrate that chemically reacts within your body, which alters it macro-nutrient and micronutrient structure according to the individual's genetic makeup. This process creates the perfect food, in which your body gets exactly the nutrients it needs.

Image the power of a food that chemically alters its composition according to your bodies homeostatic mechanism? Ambrosianen can help ensure that people get all the proper maco and micronutrient specifications according to their body chemistry. This is the power of ambrosianen.

Process

ONE

Ambrosianen is made from organic food substrate that is composed of the basic equal ratio of macronutrients and a base level profile of micronutrients. This substate is formed with nanoparticles, which is made from modern-day nanotechnology. The macronutrient structures are made with polymeric nanoparticles, which allow them to be chemically reactive however completely biodegradable and bio-compatible in human cells.

TWO

Once ambrosianen comes in contact with gastric acid inside the stomach, the substrate breaks down into its individual micro and micro-nutrient profiles. These chemical reactions con-tinue in the stomach with the arrival of hormones from the bloodstream. These hormones begin to interact with the digesting food, which begins to alter the chemical makeup of the molecules.

THREE

The hormonal system in the human body acts as a negative feedback mechanism, in which a hormone is secreted by a gland which produces a result. Once this result is complete, the hormone stops secreting completing the feed-back loop. The molecular composition of the ambrosianen continues to alter as it makes its way through the stomach and into the small intestine. This process of alteration continues until all the macro and micronutrients are com-pletely absorbed into the bloodstream.

SHORT FILM

Online
https://vimeo.com/401195549