

Into the depth

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Hugging a tree. Not an activity that you would expect in Cinekid's MediaLab. But this year, in the technology 'arcade' full of computer games and interactive installations, there really is an oversized tree trunk. Children in the MediaLab who want to experience this bulky colossus are given VR goggles and a special glove. With this equipment, when they throw their arms around the artificial trunk replica, something magical happens. They see and feel a giant sequoia – the biggest tree in existence with a potential lifespan of thousands of years.

De diepte in

The images of this sequoia were filmed by the English collective Marshmallow Laser Feast in California. Players of the interactive Tree Hugger installation do not need to travel all the way across the Atlantic in order to fathom the tree's measurements. Looking upwards with the VR goggles, one experiences the dizzying height of the sequoias. Touching the ancient bark is rewarded by a detailed zoom in, allowing the tree hugger to get lost in the organic landscape.

In 1964, when television was still a new medium, Canadian media philosopher Marshall McLuhan wrote a book called Understanding Media. In this book he described the media with which we surround ourselves “the extensions of man”: expansions or extensions of our limbs and senses.

The ‘verrekijk’ or ‘far look’, as Dutch author Gerard Reve invariably called the television, extended the viewer's sight and hearing to the far corners of the world. And all of the devices and means of communication that have since been brought on the market have increasingly allowed us to reach into the distance: faster, more directly, from more places, at any point in time and in ever more fulfilling ways.

Watch and feel

The Tree Hugger's VR goggles and sensory glove are extensions of our eyes and sense of touch. The makers of the installation enable you to reach out to a tree in California: not only virtually through the filmed images but also literally, with widespread arms that are not able to encircle the broad trunk. You can watch and feel the sequoia up close. It's as if this is Marshmallow Laser Feast's answer to the Pokémon GO game, currently extremely popular among children. To the delight of many parents, Pokémon GO lures children outside to look for creatures that they can find via a map on their mobile phones, both in their immediate environment and far beyond.

All of a sudden you come across children – even those who hate walking – in parks and forests, searching for rare Pokémon to add to their collections. The animals they must catch and train possess special natural powers; they can do battle with floods and lightning, with electricity or earthquakes. But they are illustrated fantasy creatures, with no real connection to the location where you find them. And that also goes for the players of Pokémon GO. Anyone looking for a

Pokémon in the park is not looking at the trees but at his or her cell phone.

The players of Tree Hugger do not move physically, but are rather brought to a standstill, and they make contact with a tree that really exists. What is remarkable is that you can experience not only the sequoia's magnitude and bark surface, but the creators also let you penetrate deeper into the tree's 'being'. A prolonged embrace will allow you to see the sequoia's vibrational energy flow, as portrayed by the makers in virtual reality. Due to its size and age, the Californian tree is a tourist attraction. Marshmallow Laser Feast offers more than a virtual trip to this famous sequoia. Tree Hugger lets you see and experience how life flows through one of the oldest organisms on our planet.

The dragonfly's superpower

The interactive tree is a continuation of the virtual reality project *In the Eyes of the Animal*, in which Marshmallow Laser Feast lets you see through VR goggles how animals including a dragonfly, a frog and an owl experience a forest. From the viewpoint of a dragonfly for instance you see everything in swirling carbon molecules. Not only is this a spectacular sight, but it also gives the dragonfly a superpower that transcends human sentience.

Like Tree Hugger, this is a work of art that combines artistic imagination and the possibilities of the newest technology with wonder about the beauty of nature and the sophisticated intelligence of biological life, about which human still have little knowledge and awareness. We are fascinated by the possibilities of increasingly 'smarter' devices, while we are only now beginning to realise how widespread the communications network is for 'insignificant' organisms such as fungi.

The American science fiction writer Jeff Vandermeer articulated this nicely in an interview about his *Southern Reach* trilogy, in which he gives the plants and animals in a mysterious nature reserve a sinister consciousness: "When you think about the complexity of our natural world — plants using quantum mechanics for photosynthesis, for example — a smartphone begins to look like a pretty dumb object.¹

At a lecture in London, a member of Marshmallow Laser Feast collective expressed how overwhelmed they were by all of the amazing discoveries they made about complex creatures and forces of nature during their project research. This group of techies became inspired with the mission of using technology to promote the latest biological and scientific discoveries in their non-profit work. A utopian desire, you might say. But which utopia is depicted in Tree Hugger and *In the Eyes of the Animal*?

The publicity that accompanies each new device makes it clear that technological progress responds to a desire for contact far beyond our physical reach. A recent advertisement pities a boy in love whose phone subscription makes him wait half a year for a new mobile that lets him also see his girlfriend during a call. It is as if the tender bliss of these new lovebirds will be violated if they cannot FaceTime.

We are continually promised a utopia, holds media professor Imar de Vries in his 2012 book *Tantalizingly Close*. The book is an archaeological investigation of the myths surrounding the

presentation of new communications inventions to humans. One utopia that advertisements remind us about each day is the perfection of interpersonal contact: if we have the right medium in our hands, contact with our fellow humans, wherever in the world they may be, will be easier and more complete.

In the tree

In a sense, Marshmallow Laser Feast's VR projects conform to this idea of progress. The technology used offers the possibility of contact beyond our physical reach. But the true phenomenon presented by these interactive installations is the reach for depth rather than distance. With *In the Eyes of the Animal* you experience the surrounding forest from the perspective of the animals that live alongside us. With *Tree Hugger* you can look inside the tree with a kind of x-ray eyes. As if you, like the dragonfly, perceive life on earth through the basic elements from which it is composed: molecular particles, energy flows, the light that a tree converts into nutrients through photosynthesis.

In de boom

You could call this a movement inward. This same shift is happening in the various communication devices, apps and gadgets that have come onto the market in the past decade. Joggers run around with heart rate monitors and pedometers, office workers can track their energy use and movement, for dieters there are BMI calculators and calorie counter apps, and for hypochondriacs there are home tests for bowel disease and lung disorders. Devices measure or regulate the indoor climate or the uptake of oxygen in the blood, and ears can be protected against noise with a decibel meter.

Seismologists are currently calling for the introduction of a mobile phone-based notification system for earthquakes in countries with little money and infrastructure, as the sensors in smartphones seem applicable for the early detection of subterranean vibrations. This is a life-saving interpretation of the vibration function of cell phones. This signal – which elicits the physical reaction of a quicker-beating heart through fear or expectation in the smartphone owner – could thus be linked to the turbulence of the volcanic magma deep below our feet.

McLuhan could not have foreseen this kind of extension of the person in a period when earthquakes were still recorded by measuring instruments. These developments are made possible as technological inventions become smaller, more manageable and more portable.

Every touch and movement

The PC that stood on a desk opposite the user ten years ago, the telephone, stereo system and television that each had a permanent place in the living room, and the camera that was only taken out of the closet on special occasions, have been merged and reduced to a paper-thin tablet, a smartphone or a smartwatch worn close to the skin. Displays previously operated with buttons have been transformed into sensitive screens that register every touch and movement of our fingers.

The latest development is the use of the surface of the skin as a keyboard to control a device that is too tiny to have its own keyboard.² The distance between 'hard' machines and the 'soft' human body is disappearing in an almost breathing, pulsating interaction between human and matter.

In *Tantalizingly Close*, Imar de Vries cites French media philosopher Pierre Teilhard de Chardin, who although he is much less known than Marshall McLuhan preceded him in a visionary analysis of technological progress.

In his 1959 book *Le Phénomène Humaine*, de Chardin, who was also a paleontologist and a theologian, proposed that all matter is ultimately reducible to the same substance. He saw the development of our earth in three stages: first there was the geosphere (the crust), and then the biosphere was formed (life with all of its organisms). He called the next stage, which would be established in the future with the help of networks of technological inventions, the 'noosphere'. All terrestrial organisms, matter and human-made machines would unite in the noosphere as one big consciousness. It was all a bit esoteric and eccentric, as Teilhard de Chardin considered the basic substance constituting all earthly phenomena to be 'divine'. Furthermore, regarding the energy flows that would connect everything in the future, he suggested that the technological exchange of signals was similar to a telepathic coordination of all human brains.

Yet thanks to the latest technologies and scientific discoveries, Teilhard de Chardin's vision is quite applicable to the consciousness being developed half a century after he formulated his theories. You can see the 'internalisation' that he predicted in Marshmallow Laser Feast's interactive projects. And also in the quest by artists/fashion designers for 'smart clothes' – that for example via sensors that register heat, skin moisture levels, heart rate or physical proximity – provide information about the emotional life of the wearer. The Los Angeles-based designer Noori Farahi for example developed a piece of women's clothing entitled *Caress of the Gaze*. The upper part that covers the wearer's neck, shoulders and chest is an artificial 'skin' full of soft spines that make wave-like contractions like a living organism. This contraction happens in reaction to the gaze of someone standing before the wearer; a camera in the artificial skin records how the eyes of the 'viewer' move over the clothing and the underlying body.

Although we are hardly aware of it, this 'body scanning' is something that everyone does. Farahi's garment provides a physical response to the inquisitive, sometimes erotically charged look without the wearer being able to exert any influence. *Caress of the Gaze* represents an animal interaction between bodies that usually escapes our civilised consciousness, taking place at the level of energy and impulses, in the action of hormones and body fluids. It reminds the wearer that humans are beings of nature.

Extraterrestrial celestial body

Two other interactive works of art that can be experienced at the 2016 MediaLab reflect the same organic internalisation: *Anima* and *Fiet*, two 'living' objects created by Dutch artists.

Fiet by Studio Tour is a white, cloud-like sculpture that hangs above the player, with a movable

surface formed entirely of hollow cones. When the player makes a sound the 'skin' responds with contractions, giving the impression that this creature is alive and aware of its surroundings. Anima by Nick Verstand is a screen in the form of a giant sphere. Images are projected from the inside onto the surface of the globe, forming liquid patterns in changing colors that seem to move in response to the viewer's presence. It is a bustling, vibrant ball of energy.

Fiet is reminiscent of a mysterious animal that lives on the ocean floor, whereas Anima evokes an alien celestial body. Both may be discoveries that humans can perceive only due to inventions that let us reach into the distance. Yet you do not view them remotely; they are 'life-sized' objects in your proximity, and they relate to your presence and to your body.

You can play with these lifelike creatures without touching them. And the relationship you create with them is intimate, sensual and purely physical. They are bodies. The awareness that they insinuate using sensors and sophisticated motor control, cameras and moving projections, is a fine example of state-of-the-art technology. And yet they bring the players back to their own nature. They reflect what else a human is: a wonderful product of life on earth, breathing, throbbing and vibrating with energy. That is what the MediaLab children and their accompanying parents will experience this year. Hugging a tree. Embracing life. Teilhard de Chardin's eccentricity proven right in an Amsterdam arcade full of technological gadgets.

Appendix

(1) An Interview with Jeff VanderMeer, "Full Disclosure, I'm Really A Komodo Dragon", by Lincoln Michel in BuzzFeed, 15 March 2014, https://www.buzzfeed.com/lincolnmichel/jeff-vandermeer?utm_term=.yexG14LX7#.eqAA8BGXN

((2)See Blog #6, Something to hold on to: <https://www.cinekid.nl/node/1916>

Colophone

Here there will be info about the book, platform, copywrite ++++++