2014
CyberArts

ARS ELECTRONICA

HATJE CANTZ

Hannes Leopoldseder · Christine Schöpf · Gerfried Stocker

Prix Ars Electronica
CyberArts 2014

International Compendium Prix Ars Electronica

Computer Animation / Film / VFX – Interactive Art – Digital Communities
Visionary Pioneers of Media Art — u19 – CREATE YOUR WORLD
[the next idea] voestalpine Art and Technology Grant
Prix Ars Electronica Collide@CERN Residency Award

Contents

PRIX ARS

ELECTRONICA 2014

The Magic Triangle

Hannes Leopoldseder

September 18, 1979: 100,000 people are gathered in Linz's Donaupark surrounding the Brucknerhaus to experience the first *Klangwolke* (Cloud of Sound) featuring Anton Bruckner's *8th Symphony*. Thousands of Linzers have put radios on their windowsills. For the first time, Linz becomes a city of sound. A welcoming address by a robot called SPA 12 and the Linz Klangwolke kick off the first Ars Electronica Festival. That was 35 years ago.

That day, September 18, 1979, marked the turning point in Linz's development from a steel town to a city of industry and culture. The Forum Metall and Forum Design had paved the way. The festival was followed by further initiatives: the launch in 1987 of the Prix Ars Electronica, now the world's most coveted prize in digital media art, and the construction in 1996 of the Ars Electronica Center, the Museum of the Future. Up to that point, the Brucknerhaus—that is, the City of Linz—and the ORF (Austrian Broadcasting Company) Upper Austria Regional Studio were the producers of the festival. Then Ars Electronica GmbH was set up to perform that function, with mayor Franz Dobusch and the city council laying the foundation for Ars Electronica's successful future development. In 2009, Linz served as European Capital of Culture, with Ars Electronica playing a leading role in the application. In a bold and significant step, the Ars Electronica Center was expanded to 6,670 m². This is a museum oriented on the future and run by a very committed team headed by Gerfried Stocker, Diethard Schwarzmair and Horst Hörtner. The festival producers are Gerfried Stocker, Christine Schöpf and Martin Honzik.

Today Linz is an attractive city of industry and culture, a city full of life. On April 18, 2014, the ORF's Ö3 radio station named Linz Austria's most beautiful and coolest state capital and the one with the best quality of life.

The Ars Electronica brand has contributed to Linz establishing an image all of its own between Vienna and Salzburg, an image known far beyond Austria's borders.

60,000 artists from 128 countries have submitted works to the Prix Ars Electronica since 1987. It has become Linz's international ambassador. And, by the way, 34,000 foreigners from 148 countries currently live in Linz—another highly diverse network connecting Linz to the world.[1]

Osaka, Beijing, New York, New Delhi or Tehran—wherever I have presented the history of Ars Electronica, I am always asked why Ars Electronica emerged in Linz at a time when nobody else had come up with the concept for a technology festival of this kind.

The answer is simple. Hubert Bognermayr and I had the idea, it was well-suited to the city's identity and politicians had the courage to plan for the future. The festival was not made of iron and steel, the raw materials of the 20th century, but rather those of the 21st century: electronics, technology and the reciprocal interaction of art and society.

Computers are everywhere. In 2014 in the "Internet of Things" everyday objects can be information storage and transfer media. Things become a network. Now, Bill Gates' 1994 vision is beginning to unfold. At the Comdex in Las Vegas, the man who was then 39 years old uttered four words that would become legendary: "Information at your fingertips" (2005). Digitization is on the verge of a breakthrough: "Cisco forecasts that there will be 50 billion machine-to-machine devices by 2020, up from 13 billion in 2013. Today we call ubiquitous computing by another name: the Internet of things."[2]

Science fiction is becoming everyday life. Everything is getting smart: homes, buildings, apartments, refrigerators, heating systems, thermostats, streetlamps, vehicles, intersections, animals of all kinds, and plants too. The digital and physical worlds are being interlinked, even if there are a lot of problems still to be solved.

Neil Gershenfeld, director of the Center for Bits and Atoms at MIT, and JP Vasseur, chief architect in Cisco Systems' Internet of Things division, state: "The ultimate realization of the Internet of Things will be to transmit actual things through the Internet. Users can already send descriptions of objects that can be made with personal digital fabrication tools, such as 3D printers and laser cutters."[3]

The theme of the 2014 Ars Electronica Festival is *C … what it takes to change.* There is no disputing the fact that the world is on the verge of a digital turn; the shift is inevitable. Who and what are the driving forces?

The futurist Ray Kurzweil has long been publicly predicting that 2029 will be the year when the computer approaches human intelligence and even surpasses it. "A $1,000 computing device is now approximately equal to the computation ability of the human brain. Computers are now largely invisible and are embedded everywhere."[4]

And if Kurzweil's prediction does not come true in 2029, then in 2050. No matter what sort of metamorphosis the human-machine relationship undergoes, a lot of jobs will be taken over by automatons, autonomous machines and robots.

What implications will this development have for our economy, our everyday life and our way of life? The usual answer is that the economy will have to grow. New markets will emerge—in Asia, in China, India or Africa. A by no means pedestrian answer to the question of digitization's impact on our economy is provided by Martin Ford, an American economist and computer design and software development specialist, in his much-discussed book *The Lights in the Tunnel: Automation, Acceleration, Technology and the Economy of the Future* (2009). His point: "At some point in the future—it may be many years or decades from now—machines will be able to do the jobs of a large percentage of the 'average' people in our population, and these people will not be able to find new jobs."[5]

Who does Martin Ford consider to be "average" people? He means the majority of the workforce: employees in the transport and logistics industry, people in the crafts and trades, employees in shops, department stores, supermarkets, offices, factories and insurance companies—in other words, wage earners and self-employed people with average incomes. A considerable portion of their work will be taken over by computers, robots and digital systems. In 2050, according to Martin Ford, unemployment will reach a level that's hardly imaginable today. His worst-case scenario is 75 percent unless companies, unions and governments take action in good time: reduction of working hours, job sharing, expansion of the public health system, lifelong learning.[6] Ideas are called for.

... what it takes to change ... The French economist Thomas Piketty does not go as far as Martin Ford, but he too has written a book that has triggered heated debates: *Capital in the Twenty-First Century.*[7] Piketty marshals a great deal of data to show that capitalist systems inevitably lead to increased inequality. According to Piketty, this trend can already be proved and will intensify over the coming years and decades unless countervailing measures are taken. The gap between rich and poor will widen dramatically. And Austria is no exception to the trend Piketty demonstrates; here too, the middle class is shrinking.

From all sides—from Pope Francis to Paul Krugman—Piketty's book has been described as a pioneering study. But opponents have also taken up positions—for instance, Jason Furman, economic advisor to Barack Obama, and Larry Summers, Harvard professor and former US Secretary of the Treasury.

Larry Summers sees the causes of unemployment and the widening gap between rich and poor as being primarily attributable to technological change: "It will be the devastating consequences of robots, 3D printing, artificial intelligence, and the like for those who perform routine tasks. And the trends are all in the wrong direction, particularly for the less skilled, as the capacity of capital embodying artificial intelligence to replace white-collar as well as blue-collar work will increase rapidly in the years ahead."[8]

For all high-tech evangelists who regard 3D printing as a megatrend, February 12, 2013, was a very special day: US President Barack Obama spoke of the tremendous potential of this new technology: "A once-shuttered warehouse is now a state-of-the-art lab where new workers are mastering the 3D printing that has the potential to revolutionize the way we make almost everything."[9]

Chris Anderson, former editor-in-chief of *Wired,* sees a bright future for 3D, with one or more printers—including one for the kids—in every household. The design is generated at home, and the production takes place in low-wage countries like India and China. Producers are not only big corporations but also private individuals who have bought or leased a 3D printer. There are already a lot of companies using 3D printing to produce things they use on an everyday basis.

An outstanding article by Marc Kowalsky in the

Swiss magazine *Bilanz*[10] cites a few examples: aircraft parts, nine small houses erected in Shanghai in a single day, human skin, jawbones, cars and chassis, hearing aids and James Bond's Aston Martin in *Skyfall.* Volkswagen, Caterpillar and Halliburton are planning to use this method to produce replacement parts. A revolver made of 16 components created with a 3D printer strikes fear into the hearts of the authorities and the public alike, and there are calls to ban 3D-printed weapons.

So just where is 3D printing headed? The simplest answer is that anything is possible. One of the industry's optimists is Shane Taylor: "It took the 3D printing industry 20 years to reach $1 billion in size. In five additional years, the industry generated its second $1 billion. It is expected to double again to $4 billion in 2015. This exponential growth rate is forecast to continue until at least 2025, by which time the industry will have reached up to $600 billion."[11]

Google with Larry Page and Serge Brin, Facebook with Mark Zuckerberg, Amazon with Jeff Bezos, Apple with Steve Jobs—these international corporations characterize the global economy in the 21st century. But none of these global players emerged in Europe, in the Old World, despite the fact that the idea of the WorldWideWeb came into being at CERN in Switzerland. While Europe was still discussing the dangers and problems, America speedily implemented the idea.

Correspondence between Mathias Döpfner, chairman of the board of Axel Springer SE, and Eric Schmidt, executive chairman of Google, not only makes it clear that Europe has fallen behind digitally; you could even say the ship has sailed and left Europe behind for good. Schmidt emphasizes the opportunities for a successful digital future that are there for Google to take advantage of with its many activities worldwide and especially in Europe.[12] Mathias Döpfner talks about the fear of dependence on Google in this open letter entitled "Why we fear Google." Here are a few passages from this eight-page document that could well be called unique: the first abdication in media history.

"We know of no alternative which could offer even partially comparable technological prerequisites for the automated marketing of advertising . . . We also know of no alternative search engine which could maintain or increase our online reach. A large proportion of high quality journalistic media receives its traffic primarily via Google ... This means, in plain language, that we—and many others—are dependent on Google. At the moment Google has a 92.2 percent search-engine market share in Germany ... Google doesn't need us. But we need Google ... We are afraid of Google. I must state this very clearly and frankly, because few of my colleagues dare do so publicly. And as the biggest among the small, perhaps it is also up to us to be the first to speak out in this debate."[13]

Nevertheless, the German executive's outcry also had positive consequences, and perhaps this was his intention. Government officials got a wake-up call after seeming to have slept through the digital revolution that had been unfolding with unprecedented speed over the two-and-a-half decades since the WorldWideWeb's invention in 1989. Otherwise, German Minister of Commerce Sigmar Gabriel could not have made the following statement in the context of the debates conducted this year: "The Internet is a young technology. Anyone older than their mid-40s today did not communicate with friends via e-mail or Facebook when they were teenagers."[14]

In 1989, Sigmar Gabriel was 30 years old, which is to say that he was a prime candidate to have been able to come to terms with the technology of the future, the new www, and to recognize the implications of the incipient digital revolution.

Students from Silicon Valley were the first to recognize the essence of what was new about digitization—the Internet and getting linked up in networks—and developed their ideas in their now-famous garages.

In the years immediately after the founding of Ars Electronica in 1979, only experts from the US and Japan could be invited to the festival symposia, because in Central Europe there were far fewer scientists dealing with the possibilities of this new technology.

The discourse between Google on one hand and Döpfner and Gabriel on the other is characteristic of American and European thinking. Europe has a culture that is thousands of years old; America's computation of time, on the other hand, begins in 1789 when the first president, George Washington, took office. No past, only future.

Orestes Augustus Brownson, America's tireless activist, philosopher, preacher and publicist in the first half of the 19th century, regarded America as having been freed from any sort of past, and postulated: "We have outgrown tradition."[15] No tradition; forward into the future! Everything is moving ahead. Openness, innovation and mobility became young America's trademark. Which is why, even

today, many of the companies that are key players in the global markets with a promising future are headquartered in the US.

One of the causes can be found in the magic triangle. The two points delineating the base of this equilateral triangle are imagination and ideas; the pinnacle represents creativity. The basis of innovation consists of imagination and ideas. But these two alone don't assure success. If there is no implementation then lots of ideas that the imagination engenders remain no more than ideas.

Whereas in Europe ideas are critically scrutinized and their good and bad points subjected to protracted debate before giving the go-ahead, America, the land detached from tradition, is a lot quicker with the creative implementation. And the digital future will take place where speed can generate the thrust to achieve breakout.

The magic triangle assures an advantage. Malcolm Gladwell, corporate consultant, journalist *(New York Times)* and best-selling author *(The Tipping Point)* sees the workings of the "Matthew effect" (named after the Christian Apostle) being played out in the Internet: "He who has, to him will be given. Whatever is successful on the internet will become even more successful. ... Via the principle of linkage, ideas that initially have a small advantage quickly achieve a large advantage. This is not necessarily good. I am very concerned that the Internet distorts debates according to the 'winner takes all' principle."[16] And thus, the title of Abba's 1989 hit goes down in the history of the Internet!

The latest study by the management consulting firm EY of the 300 largest companies in the US and in Europe confirms the US's clear dominance in technologies with great future promise: "33 of the 300 US companies with the highest revenues are in the IT sector. Their gross revenues in the first half year [2013] were approximately $420 billion [€323 billion]. In the European Top 300, on the other hand, there are only 11 companies in the IT sector, and their gross revenues during the same period were €75 billion."[17] €323 billion versus €75 billion—that makes a clear statement indeed.

So, let's address ... *what it takes to change* ... once more. How will technology and society change? In John Brockman's anthology *This Will Change Everything,* Steven Pinker of Harvard University answered the question in a single sentence: "Technology may change everything, but it is impossible to predict how."[18]

1 http://www.linz.at/zahlen/040_Bevoelkerung/070_Auslaender/
2 Patrick Tucker, *The Naked Future: What happens in a world that anticipates your every move?* New York, 2014, p. 6
3 Neil Gershenfeld, JP Vasseur, "The Promise (and Pittfalls) of The Internet of Things," in *Foreign Affairs,* March / April 2014, p. 62
4 Ray Kurzweil, *The Age of Spiritual Machines,* New York 2009, p. IX
5 Martin Ford, *The Lights in the Tunnel,* Acculant Publishing, 2009, p. 9
6 Ibid., p. 180
7 Thomas Piketty, *Capital in the Twenty-First Century,* Harvard Press 2014
8 Lawrence H. Summers, "The Inequality Puzzle," in *Democracy. A Journal of Ideas,* spring 2014
9 Obama's speech highlights rise of 3D-printing, http://www.cnn.com/2013/02/13/tech/innovation/obama-3d-printing/
10 Marc Kowalsky, "Wie 3D Druck die Welt revolutioniert," in *Bilanz,* 9 / 2014, p. 35 ff
11 Shane Taylor, Trend Evolution: 3D Printing Trends. http://3dprintingindustry.com/2014/02/28/trend-evolution-3d-printing-trends-part-2/
12 Eric Schmidt, Über das Gute an Google: Die Chancen des Wachstums. http://www.faz.net/aktuell/feuilleton/debatten/eric-schmidt-ueber-das-gute-an-google-die-chancen-des-wachstums-12887813.html
13 Mathias Döpfner, An open letter to Eric Schmidt: Why we fear Google. http://www.faz.net/aktuell/feuilleton/debatten/mathias-doepfner-s-open-letter-to-eric-schmidt-12900860.html
14 Sigurd Gabriel, Unsere politischen Konsequenzen aus der Google Debatte. http://www.faz.net/aktuell/feuilleton/debatten/die-digital-debatte/sigmar-gabriel-konsequenzen-der-google-debatte-12941865.html
15 Michael Kammen, *Mystic Chords of Memory: The Transformation of Tradition in American Culture,* New York 1991, p. 85
16 Malcolm Gladwell, *Was macht eine gute Idee aus?* http://www.zeit.de/2009/23/Idee-Kreativitaet-23
17 EY Studie: US-Unternehmen hängen europäische Konkurrenz ab. http://www.ey.com/AT/de/Newsroom/News-releases/PM_2013_EY-Studie--US-Unternehmen-h%C3%A4ngen-europ%C3%A4ische-Konkurrenz-ab
18 Steven Pinker, "Personal Genomics—or maybe not," in John Brockman, *This will change everything. Ideas that will Shape the Future,* New York 2010

Prix Ars Electronica 2014

Christine Schöpf, Gerfried Stocker

In 1987, when the Prix Ars Electronica awarded the world's first prizes for computer art, there were only three categories but already over 700 submissions. Since then, creativity in media art has developed dramatically in numerous respects. What has emerged is a global movement, and the Prix Ars Electronica has moved along with it over the years.

In 2013, artists from 73 countries entered more than 4,000 projects, a new record. Then 35 jurors in seven categories spent five days assessing and discussing the short-listed works, deliberating, and selecting deserving recipients of more than 100 prizes: Golden Nicas, Awards of Distinction and Honorary Mentions. As impressive as this résumé is, it also marks Prix Ars Electronica's arrival at the limits of its capacity to effectively manage all the submissions vying for prize consideration. So the time has come to make a few organizational changes in order to continue to assure consummate quality in the conduct of the world's first and foremost competition in the cyberarts.

To do justice to the increasing number of entries and the constantly expanding spectrum of the forms of expression media artists employ, but also to be able to give competition entries the consideration they deserve and showcase them appropriately, in future, beginning in 2014, we have decided to conduct the competition with four of the categories alternating on a biennial basis. Kicking things off this year were Interactive Art and Digital Communities. The number of submissions in both categories has risen once again. Hybrid Art and Digital Musics & Sound Art will be back in 2015.

This adjustment enables us to react to dynamic developments and to continue to live up to our quality standards with respect to selection and presentation. Furthermore, it affords us the opportunity to respond optimally to the increasingly important historical dimension of media culture.

What began as a technological revolution has since developed into a new culture and a social reality with its own specific forms of communication and cultural techniques, the roots of which extend far back into the past and lead us to encounters with remarkable, extraordinary personalities.

To visionary pioneers whose artistic creativity and experimentation not only anticipated these developments but often decisively shaped them. In many respects, these men and women thus established the foundation of media art as we know it today. In order for them to receive the respectful recognition commensurate with their accomplishments, we have created a new prize just for this purpose: the Prix Ars Electronica's Golden Nica for Visionary Pioneers of Media Art.

The nominating and the decision-making process to select the recipient of this very special Golden Nica were left up to the individuals who have themselves been honored since the Prix Ars Electronica's inception in 1987. Prior recipients nominated their favorites and then cast their ballots to choose the inaugural prizewinner.

Now, with a total of eight categories, the Prix Ars Electronica not only reflects the tremendous breadth and global dynamism of media art but also spans an arc from up-and-coming young talents to the founders and pioneers of this increasingly significant contemporary art form.

A total of 2,703 entries from 77 countries were submitted to the 2014 Prix Ars Electronica for prize consideration in the Computer Animation / Film / VFX, Interactive Art and Digital Communities categories, the u19–CREATE YOUR WORLD competition, and to determine the recipient of [the next idea] voestalpine Art and Technology Grant. A grand prize (including a Golden Nica statuette and €10,000), two Awards of Distinction and 12 Honorary Mentions were awarded in each category. The Golden Nica in u19–CREATE YOUR WORLD comes with a €5,000 first prize. [the next idea] voestalpine Art and Technology Grant is €7,500 and support from the Ars Electronica Futurelab to help the winner further develop his/her idea. The prizewinners were selected by a five-member jury of international experts in each category. The jurors were also entitled to nominate candidates.

A total of 117 men and women were nominated for the first Golden Nica in the new Visionary Pioneers of Media Art category. The voting was preceded by fascinating discussions online.

The Prix Ars Electronica is made possible by funding from government agencies as well as private sector sponsors. We would especially like to thank the City of Linz for the generous support it has provided since 1979 to the Ars Electronica Festival, the Prix Ars Electronica and the Ars Electronica Center. We are most grateful for the continuous backing we have received from the Province of Upper Austria. voestalpine has been a sponsor since the very beginning of Ars Electronica, and, in recent years, the benefactor of [the next idea] voestalpine Art and Technology Grant. We would also like to thank Casinos Austria, Cubus, KulturKontakt Austria and Linz AG for their support and cooperation over the years.

The prizewinning projects are being presented to an international audience at the Ars Electronica Festival, in the catalog you now hold in your hands and online at the Ars Electronica Archive.

Computer Animation

/ Film / VFX

Intangible Worlds

Suzanne Buchan, Joe Gerhard, Jürgen Hagler, Sabine Hirtes, Quayola

This year the pre-selection process for the Computer Animation / Film / VFX competition was changed: for the first time, jurors were given access to all 843 submissions through an online portal provided by Ars Electronica. The jurors (Suzanne Buchan, Joe Gerhardt, Sabine Hirtes, Jakub Jabłoński, who was unable to attend and was replaced by Jürgen Hagler and Davide Quayola) were asked to consider more than 100 entries each, sorted by date of submission, and thus a conglomerate of randomly assorted works. Each of us selected about 20 for the jury meeting in Linz, a total of 140 works. Despite some concerns on the part of the organizers, this did not take too much time and effort for the jurors; it worked very well and the jury was able to begin on time with a pre-sorted set of submissions selected in advance. Before we started we were also asked to look through all submissions by title and creator, in case any work of importance had not been preselected by one of the jurors, so we could bring them back into the jury sessions. This actually happened, but none of these made it to our final selection. Overall, this newly established process proved to be quite productive.

The variety of submissions was so diverse that a clear assignment to the categories of Computer Animation / Film / VFX was hardly possible. Nowadays it is rare for an animated film to be made without computer animation or VFX, and VFX works often contain animation. We observed a number of themes this year: there was less "pure" and web-based animation, an increase in amalgamation of animation with projection mapping, animation as installation in a more sculptural sense, and animation in conjunction with high-tech or low-tech. This was why so many works were listed in the "Other" category. Playful, innovative handling of familiar and new technology and its conversion to create new visual experiences of intangible worlds was also an element of many works. This reflects the increasing fusion of art, technology and research that last year's jury commented on, a process which has been observed for many years and is steadily increasing. Since its founding in 1979, presenting this entanglement and its relevance for society and the arts remains an important focus of Ars Electronica, and this distinguishes Ars from other festivals, also in its comprehensive category of Computer Animation / Film / VFX. The striking increase and growing complexity of this interweaving has to do with the more widely available access to high technology, previously only accessible to specialists, as well as the cost-effectiveness of potent hardware and software and its ever expanding features and increasingly intuitive interfaces. The Internet provides a huge database of knowledge and tutorials, open-source communities publish their knowledge, and ever-growing communities supply their constituencies with new features and insights every day. Online courses, but also the still increasing availability of media courses in schools and universities, add to this development as well.

But narrative forms also change accordingly; linear narration, which has been represented in a large proportion of submissions in the last few years, was less pronounced this year and we saw more nonlinear storytelling, implicit narrative strands or parallel storylines and temporalities. This also reflects trends in fast-living global societies that are growing in complexity, where a multitude of information and big data is instantly available. As attention spans shorten and social networks and Twitter relentlessly provide us with information, the need for nonlinear narrative forms and interactive applications is becoming absolutely essential to understand and engage with the complex structure of our involvement in space and time.

Along with skilful presentation of technical achievements, there were a few shared themes and subjects throughout the submissions. Some visualized the intangibilities of the macrocosm and microcosm, others presented creative interpretations of physics, "big data", artificial life forms and imaginative evolutionary systems based on organic or biomimetic growth. Others foregrounded artificial intelligence, human relations and diverse examinations of consciousness and perception. We also discerned a more mature and refined, technically created camera; "slowing" and "observing," rather than guiding the viewer. This "camera" direction / movement also contributed a range of points of view, alien or

of space itself, particularly in the digital works. And as is often a popular viewer expectation for animation, there was no lack of humorous interpretations of the human and the flora and fauna of our and other worlds.

To do this wide variety justice, we agreed selection criteria that took into account aspects of excellence and distinctiveness in the works, regardless of technique, technology, style or narrative form. We started by going through all 140 pre-selected titles; if just one jury member wanted to keep a work it stayed in the selection. Then at the end of the first day we reduced from 140 to about 90 through a democratic process based on a majority vote; by the end of the next day, which was full of vibrant discussion, we had our 22 favorites. The final step was to choose fifteen of the 22, and this was the most challenging step. Defining our three winners was almost the simplest task—but we still needed to let go of some personal favorites and that became painful. Ultimately, at the end the jury selection, we all had the feeling of having chosen well. The technical standard of all the entries was excellent, and the school submissions could easily compete with professional productions. The increasingly photorealistic game trailers were impressive and we saw many other excellent works that did not quite make it into the last round—but that is the hard duty of a jury and we really tried to be very diligent and considerate. The high proportion of independent artists or small groups submitting work compared to only a few large production companies was also noticeable—but this also is a promising sign, as it shows the increasing production of demanding work within smaller frameworks and hopefully encourages more submissions of this kind of work in the coming years. In our final choices we have tried to recognize the wide range of submissions and thus a hopefully representative survey of the international works in the field of Computer Animation / Film / VFX and "Other."

Golden Nica

Walking City · Universal Everything

Universal Everything's *Walking City* blurs the boundaries between design, animation, sculpture, fashion and architecture. A walk cycle, an iconic archetype of traditional animation, becomes the starting point for a complex, beautifully crafted and extremely coherent visual and aural journey. The modularity of a natural walk cycle becomes a time-signature for the whole audiovisual composition.

Walking City is a time-based object of contemplation, a true celebration of form and geometry ... from sharp to soft, solid to liquid, simple to complex, figurative to abstract ... everything and vice versa.

Awards of Distinction

Box · Bot & Dolly

Bot & Dolly's *Box* is a beautiful manifestation of the merging of art and technology and presents as yet unseen visual experiences. Using large-scale robotics, software engineering and animated projection mapping, an amazing performance is orchestrated on stage. The robots become the puppeteers of a perfectly aligned show of coordinated movement in time and space. Like a continuation of the classical magic show, Bot & Dolly open up new artistic realms by transforming the real world. This combination of high-precision camera and target movements also made the stunning visual effects of the Oscar-winning 3D film *Gravity* by director Alfonso Cuaron possible. Without the skilful programming and conversion of the heavy-duty industrial robots to highly specialized VFX filmmaking equipment, his vision of weightlessness for the film could not have been made reality.

Shadowland · Kazuhiro Goshima

Shadowland is a wonderful combination of what we call "found animation" with an innovative use of stereoscopic technique. Focusing on naturally occurring, ephemeral moving images cast by passing traffic, the artist Kazuhiro Goshima literally adds a new dimension, swapping our place within the layers and narratives of our urban cityscape from pedestrian to active involvement. As the city becomes distorted within the focus of the moving lights, space and time are also unhinged and animated in front of us. A dreamlike experience where shadows with an unknown future and past enliven the nocturnal city and entangle us in their passing flow.

Honorary Mentions

The Chimera of M · Sebastian Buerkner

The *Chimera of M* is a psychedelic film noir that explores the limits of visual perception, through a beautifully hand-drawn computer animation style. Sebastian Buerkner's visually stunning work plays with the interference of light and shadows through flat graphic forms in space. The many complex overlapping layers create a challenging 3D stereoscopic style (the Chimera being a three-headed monster) that successfully accentuates the troubled three-way relationship of M, our protagonist. Being continuously inventive, surprising the viewer with unique approaches and observations in every scene, this is one of the rare films that justifies the 3D stereoscopic film genre.

Late for meeting · David Lewandowski

This work takes great pleasure in destroying the conventions of CGI character animation. Simply by removing the joints and bones this humanoid becomes a refreshing take on typical character animation and creates something extraordinarily expressive in a most unexpected way. Its conflicting styles of high-quality production but with obviously wrong techniques has earned David Lewandowski a huge viral Internet status with over fifteen million hits.

Thing · Anouk De Clercq

A thought-provoking meditation from the viewpoint of space itself, that moves through perspectives and volumes of objects, large-scale 3D scans of rooms, urban landscapes out into a universe. With a very raw and fragmented quality and a sparse, pointillist style of white on black, we are left to decipher our own sense of perspective while trying to find points of reference in this compelling rendition of a non-human point of view. Anouk De Clercq's balance between a poetic voice-over and the almost celestial imagery holds our attention within a dreamlike state.

Cellular Forms · Andy Lomas

In this work the award-winning technical director and software developer Andy Lomas tries out the boundaries of "what's called Dynamical Systems, which is sort of the math behind Chaos Theory and Complexity Theory–the math of how things change over time when you almost reapply the same rule again and again and again". But the "things" he creates have an amazingly lifelike appearance–beautifully reduced to black-and-white imagery, they seem to develop their own life and evolutionary destination. By slight changes in the rules, amazingly different "beings" are created from the same basic structure and allowed to become immersed in a never-ending process of evolution and change.

Land · Masanobu Hiraoka

The Japanese illustrator and animator Masanobu Hiraoka, who was already appraised for his music video series the *'RGB' trilogy* and *The Abe Chang and the Sea,* has created a new jewel of classical 2D animation in his unique, colorful and fluid aesthetics. This time in collaboration with the Spanish composer Aimar Molero. Seamless metamorphosis and abstraction in perfect unison and rhythm with the music allow the observer to delve into an imaginative and ever transforming world. Frame-by-frame animation at its best.

Recycled · Lei Lei, Thomas Sauvin

The Chinese animator Lei Lei created this animated short from thousands of photographic negatives found at a recycling zone in Beijing and saved from destruction by the artist Thomas Sauvin. The photos were taken by amateur photographers between the mid-1980s and the mid-2000s, and in the film this edited detritus is transformed into a compelling narrative for outsiders: it melds Roland Barthes' concepts of the photograph's emotional, personal punctum, and with it a culturally and politically charged study. As voyeurs of intimate and complex relationships between the unseen photographer and the people photographed, it is hard not to wonder what became of these smiling families, serious and happy young men and women and perturbed-looking infants posing for the camera. By assembling these negatives digitally, with their analog signs of physical destruction and combining them in animated sequences frame-by-frame, a story about 30 years of Chinese history and urban development is told in a new and deeply emotive way.

5 Mètres 80 · Nicolas Deveaux

The extremely talented writer and director Nicolas Deveaux has two deep passions: animation and the animal world. In *5 Mètres 80* he creates an absurd poetic piece in the tradition of orchestrated water ballet of the 20th century and the surreal worlds of René Magritte. The beautifully arranged music by Olivier Militon performed by the WDR Sinfo-

nieorchester adds profoundly to the persuasively realistic appearance of something impossible: giraffes enjoying themselves by high diving in a deserted, architecturally fabulous swimming pool. The elegant but also massive and slightly awkwardly moving animals are perfectly convincingly animated and the audience can only watch this unbelievable wondrous and joyous spectacle completely enthused.

Futon · Yoriko Mizushiri

Futon shows a moment of supine well-being, of dozing thoughts and dreams under the covers. Yoriko Mizushiri's film is a graphically delicate presentation of how animation can represent an experience and at the same time show the implicit feelings behind it. Surreal images as well as a soft and pleasing "strawberries and cream" color palette merge and give the film a sensual and very female touch, and its slow, flowing movements and liquids are underscored by an enchanting soundtrack. Wrapped memories emerge from the futon, images of the future are painted and the senses are recovered. The female body is itself the futon and becomes the vehicle of dreamy fantasies. A pure paint on paper animation, *Futon* shows the compelling expressiveness of animation to perfection.

Birds · Zeitguised

Zeitguised describes itself as "the irregular twin of Zeitgeist Imagineering: high-gloss art school 3D punk that blends complex geometries, surreal objects, artificial behavior and the recycling of digital readymades into a distinct hallucinatory narration style." In *Birds* they also conceive this in a funny, lighthearted essay on character animation and the essence of birds, not in flesh and blood but the most un-birdlike components such as coconuts and petals, for example, but with the utmost birdlike movements. A funny, non-narrative, playful approach to animation, superbly designed, animated and rendered.

Columbos · KAWAI+OKAMURA

In *Columbos* the directors KAWAI+OKAMURA have created a meta-mystery movie containing fragments of crime and suspense in a refractive world. By referencing one of the icons of detectives in the history of the TV series (Columbo), in this case very nicely integrated as a stop-motion puppet in the multilayered film, they achieve a feeling of suspense from the very beginning. The story is illustrated through a schizophrenic montage of "time and space" along with "fantasy and reality." Linearity is substituted by simultaneity, retrospectives show different realities. *Columbos* represents the essence of mystery and suspense.

The Rise and Fall of Globosome · Sascha Geddert

This beautifully illustrated story of evolution, exploitation, mutation and final destruction also tells us the story of human impact on our earth's delicately balanced ecosystem if we are not careful in the coming centuries. Compellingly animated, simulated, staged and rendered, this diploma work by Sascha Geddert and his team of Filmakademie Baden-Württemberg fellow students achieves the highest professional standards and can compete with high-end VFX productions. But it also tells us that in the end evolution will win, with us or without us.

Light Motif · Frédéric Bonpapa

Frédéric Bonpapa's *Light Motif* is conceived as a synaesthetic experience based on a visual transposition of *Music for 18 Musicians, Section II,* by the American composer Steve Reich. In the tradition of visual music, artists such as Wassily Kandinsky, Oskar Fischinger, Norman McLaren or John Whitney, the film seeks to cinematically capture the extraordinary life force that animates this essential work of contemporary music, by offering a truly hypnotic experience where music can be "seen." Like the photorealistic chimp, a metaphor for consciousness, the audience is captured by the complex concepts of rhythm, melody, harmony, pitch, timbre and intensity in the music as well as the images.

Walking City

Universal Everything

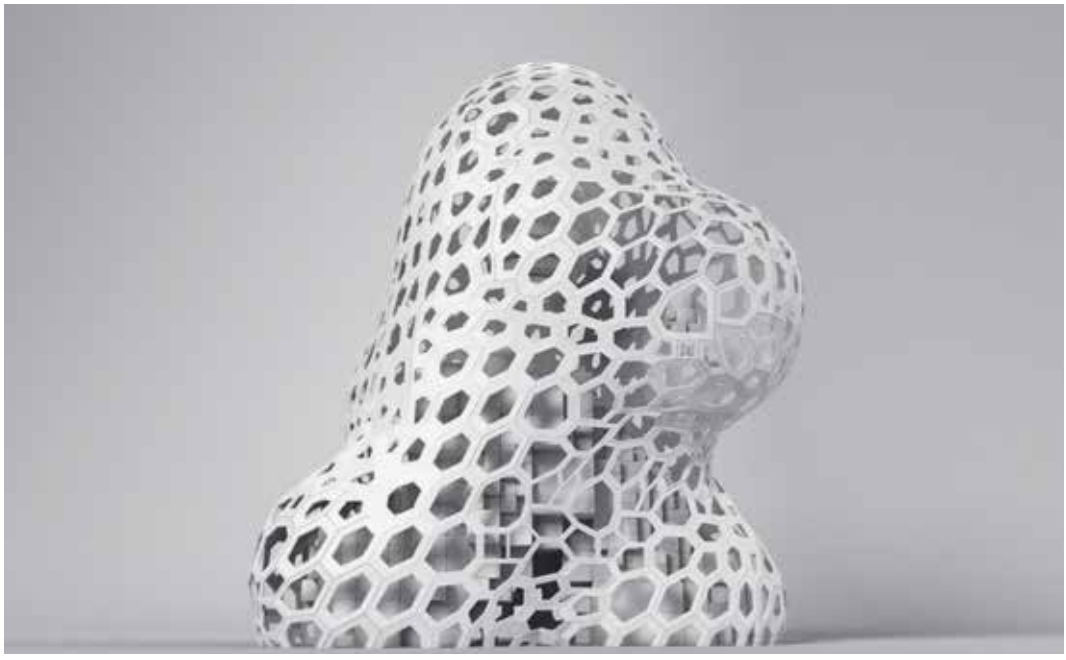
Walking City is a continuation of Universal Everything's artistic line of enquiry, investigating human movement, emotional design, architecture and sound. It is inspired by the sense of walking through a city, how absorbing your surroundings alters sensation and emotion. How you become part of the fabric of the city, a man-made eco system.

Referencing the utopian visions of 1960s architecture practice Archigram, *Walking City* is a slowly evolving video sculpture. The language of materials and patterns seen in radical architecture transform as the nomadic city endlessly walks, adapting to the environments it encounters.

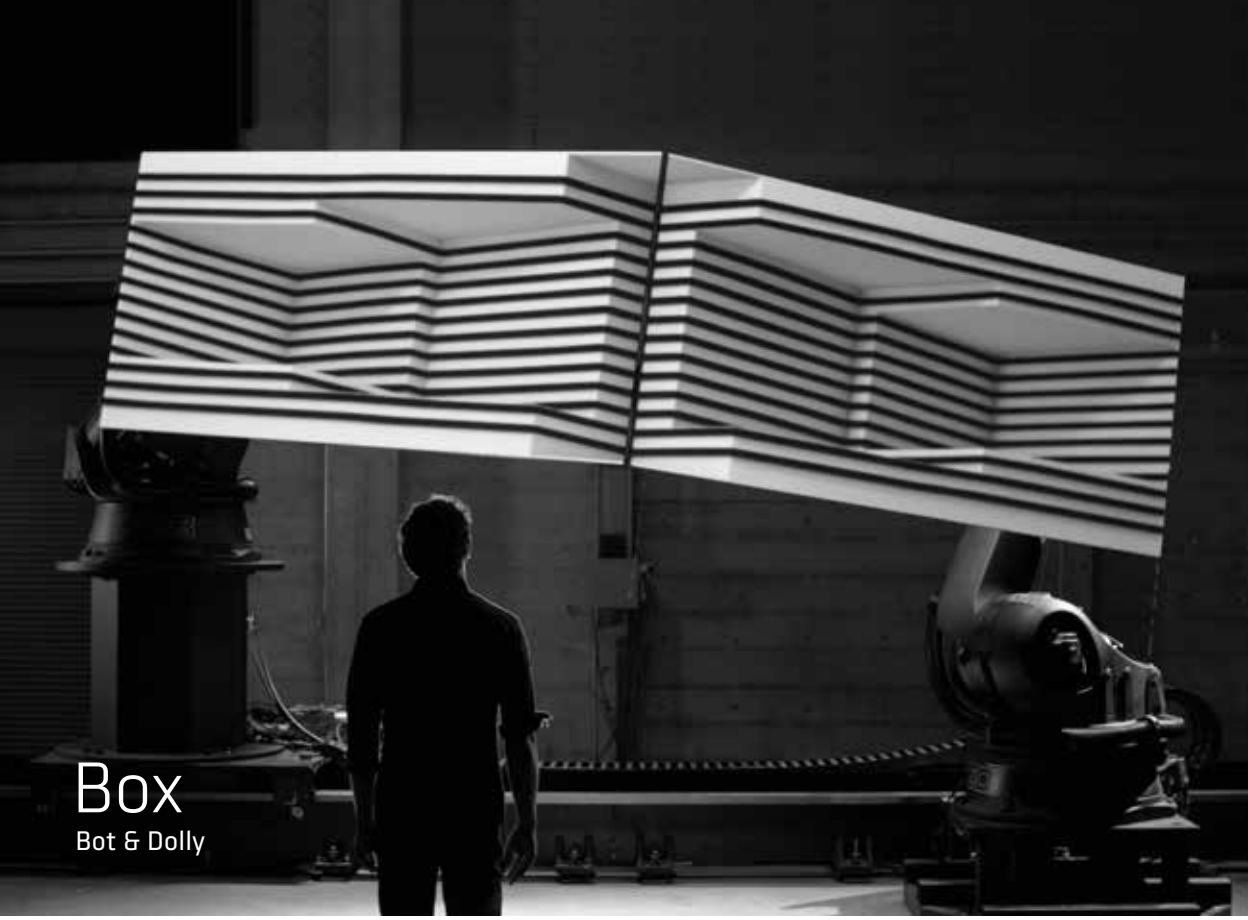
What appears as a 3D person, shrouded in a digital costume, shifts and breaks, reshapes and endlessly evolves into a video sculpture continuously walking in the center of the screen: creating an artificial form whose movement feels alive, not synthetic. It explores the structural processes found in modern architecture, which have led to a multitude of aesthetic outcomes. From Buckminster Fuller's domes to Richard Rogers' inside-out buildings, Daniel Liebskind's angular public museums to Future Systems' biomorphic structures.

Created using Houdini, *Walking City* utilizes a procedural process to seamlessly change into different costumes—moving from faceted shapes, through contours and brutalism—as the walk cycle anchors the piece.

Creative director: Matt Pyke
Animation: Chris Perry
Sound design: Simon Pyke (Freefarm)



Universal Everything is a UK-based digital art and design studio founded by Matt Pyke in 2004. Their distinctive visual approach and pop-sensibility has made them a studio much sought after both by leading institutions in the art world and by sophisticated commercial brands. Their work explores the tension between abstract and figurative form and the synthesis of sound and image, leading to expressive, vibrant digital work imbued with emergent life and anthropomorphism. Central to the studio's practice is the exploration of human and emotional presence.



Box

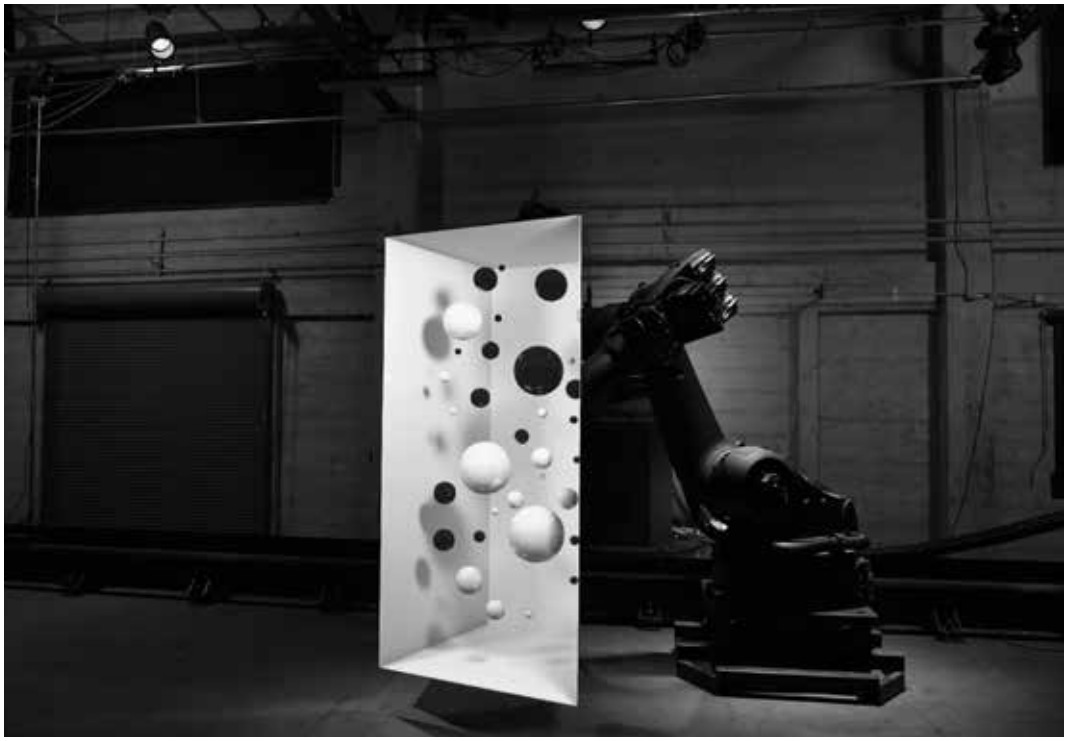
Bot & Dolly

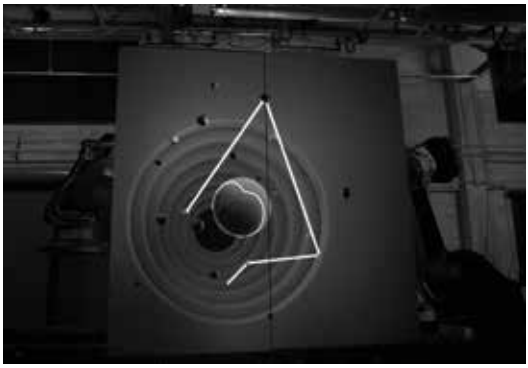
Box explores the synthesis of real and digital space through projection mapping on moving surfaces. The short film documents a live performance, captured entirely on camera. The abstract narrative is divided into five categories of classical magic that flow together in a single five-minute shot.

In the first chapter a performer transforms a flat panel into an open box, blurring the line between two-dimensional and three-dimensional space. The illusions build as objects intersect, levitate and transform, ultimately immersing the performer and viewer in an alternate graphic reality. In the final chapter the performer exits the scene through a portal and the camera reveals the robotic mechanism behind each illusion.

By combining animation, robotics and projection mapping, *Box* is able to turn conventional CG filmmaking on its head: Instead of filming a human subject to be composited in a CG world, CG elements are brought to the human world, enabling a live performer to interact with them. The result is a hybrid of art, technology and experimental filmmaking.

Directed by: Bot & Dolly. Executive producer: Julia Gottlieb. Producers: Bill Galusha, Nick Read. Creative and technical director: Tarik Abdel-Gawad. Design director: Bradley G Munkowitz. 2D and 3D artists: Scott Pagano, Bradley G Munkowitz, Jason English Kerr, Conor Grebel, Ben Hawkins, Pedro Figueira. Director of photography: Joe Picard. Projection / touch designer: Phil Reyneri. Robotics animation: Tarik Abdel-Gawad, Brandon Kruysman, George Banks, Michael Beardsworth. Editors: Ashley Rodholm, Ian Colon. Music / sound design: Keith Ruggiero. Sound mix: Joel Raabe





Bot & Dolly (US) is a design and engineering studio that specializes in automation, robotics, and filmmaking. It is our mission to advance motion control and automation as a creative medium and build world-class tools that enable others to do the same. At the core of our technology is an integrated software/hardware platform that provides precise and expressive control of six-axis industrial robots. On top of this core platform we provide industry-specific toolsets such as IRIS to support in the creative process, from prototype to production. To date, our tools have been used in feature films, national television ads, Las Vegas shows and large-scale art installations.

Special thanks to Sachiko Kawakita for her music selection and piano performance, to my wife Yumi for her explicit and valuable advice, and to all my friends for their attentive cooperation.

This is a 3D (stereoscopic) film shot with one DSLR camera. Only the shadows become 3D, without any digital special effects. "Shadows" are cast on the streets by the headlights of cars driving through the city. These are another substance in the streets. Every night, the city itself is overwritten like a retina thousands of times, and no one can decipher its memories. One of the themes of my works is to express a feeling that cannot be there. The 3D shadow can have peculiar presence simply because it has neither color nor texture.

3D films using one SLR camera

I have made three 3D films since 2010—all of them shot with a traditional 2D camera, for example a Pentax K7, a Sony HDR-CX700V or a Canon EOS Kiss X5(D600). The essential factor of 3D vision is binocular parallax. I derive parallax from the slight time lag between the movies projected onto the right and left eyes. There are no digital special effects. I show the same movies to each eye, but there is slight time lag (1-5 frames). If the object in the footage moves sideways (or the movement of the object has a horizontal element), the parallax is produced. It is like the "Pulfrich illusion". In the first 3D film, *Tokyo Three Dimensional Suite,* I moved the camera position horizontally by walking (i.e. stop-motion animation). Because of the delay between the image for left eye from that for right eye, the distance moved becomes the parallax. In the second film, *t2z,* the camera was moved on a handmade motorized dolly. In this film I shot close-up 3D vision, which is difficult with a twin-lens 3D camera.

The mechanism of 3D shadows

In *Shadowland,* I shot footage using one fixed camera. The moving element as the source of parallax is the car headlights. The moving lights draw the shadows on the wall in the night-time city. The shadows move dynamically as the cars drive down road. The parallax arises from the horizontal movement of the shadows. The extent of parallax is influenced by many factors. The shadow moves faster according to the speed of the car, if it is close to the wall, if the object is near the car or if the object is far from the wall. The depth of the shadow is inverted by the direction of movement. There are many cars on the road and many objects throw shadows on the wall. This all gives rise to the complex 3D harmony.

Technical details

In general, processing of images for this work is very simple. I shot the footage with a Canon EOS Kiss X5(D600). The format is 720p/50fps, because of slow motion and to reduce AC flicker. Although it seems bright to the eye, in a large town at night the light is insufficient to shoot a movie. The limits of my equipment were F1.4-1.8 stop, 1/50 sec. and ISO1600. I searched for a place without unnecessary light. Car headlights are designed to illuminate the ground, they seldom shine upwards. So I looked for a wall on a slight uphill slope. It was difficult to find an ideal place, and it took more time than expected. The footage lasts 20 hours or more. The converted movies run at 24fps (half speed). After noise reduction, I adjusted the soundtrack. The shadow contrast is sometimes very low and sometimes very sharp. If the contrast is too low, it is hard to feel a 3D illusion. There are also elements apart from a shadow in a frame where I carefully emphasize contrast. The tone-adjusted movies are copied to the right and left eyes as a parallel 3D format. After this, I can process and edit in stereoscopic view, sending the 3D video preview of AfterEffects and FinalCutPro7 to Sony 3DTV. In ex-3D work, I adjusted the depth of field to a screen by fine tuning the horizontal position of right and left images. An image looks large if it is far away from a screen. But in *Shadowland* it is important that elements apart from shadow are visible in 2D, because the 3D illusion of shadows is very sensitive. It will easily break down if other 3D elements are shown on screen. It is important that only the shadow is solid. Finally, the 3D shadow is completed by attaching a brief time lag to images on either side.

Finally, I adjust the time lag between images on either side to optimum 3D viewing and edit the movie timeline at the same time.

Kazuhiro Goshima (JP), a visual creator, produces videos and multimedia content. His 3DCG work, *Fade into White #2* ('00), won the grand prix at the 2001 Image Forum Festival. *Fade into White #3* ('01) received an award at the Annecy International Animation Film Festival and also won the excellence award at the Japan Media Arts Festival. A number of his visual works have also been highly regarded at film festivals abroad.

5 Mètres 80

Nicolas Deveaux

A herd of giraffes embarks on a sequence of high-flying acrobatic dives! They lope up a spiral ramp and get into position. The first one takes a running start onto a diving board that extends out above an Olympic-size indoor swimming pool. Another giraffe—this one suspended upside-down from the ceiling—is on hand to help. Its job is to sling the giraffe on the diving board into the air. One after the other at regular intervals, the giraffes dynamically execute the most awesome rotations and twists before knifing perfectly into the water and swimming to the edge of the pool. Then they hop out and line up in preparation for their second dive ...

This film is to be understood above all as playful. The absurdity of the situation comes as a surprise, and then quickly dissolves to make room for a healthy dose of humor. There is something communicative about the obvious exuberance the giraffes display in performing their tucks and pikes. We are not watching a film about diving that ends with a gag; we are experiencing a moment that is absurd, funny and poetic at the same time.

Software: Maya (Arnold), After Effects, Nuke, Photoshop. Director: Nicolas Deveaux. Cube Creative Productions: Lionel Fages, Bruno Le Levier, Majid Loukil. Cube Creatives Computer Company Production: Majid Loukil, Léa Barrot, Aurélia Sellier. CG supervisor, lighting artist: Laurent Borenstein. Lighting artist: François Lorain. Technical supervisor: Julien Stiegler. Modeling, texturing, camera: Nicolas Deveaux. Set up, skinning: Christophe Petit. Animator: Benoît Moranne. VFX: Thomas Hullin. Compositing: Gaëlle Bossis, Yannick Castaing. Music and sound design: Olivier Militon. Recorded by L'Orchestre Symphonique de la WDR de Cologne, led by Conrad Van Alphen. Music mix: Frédéric Finand. Mixing studio: Studio Pilon Cinéma. TV channels: Orange, Arte France. With the participation of: CNC, Mairie de Paris, Procirep/Angoa

Nicolas Deveaux (FR), author and director of animation films (CGI and 3D), has a very personal universe around two passions: the image and the animal world. In 2003, just graduated from the Supinfocom School of Computer Graphics, he directed his first professional short film *7tonnes2,* featuring a realistic elephant trampoline champion. The success of this (selected in various international festivals, including the famous Annecy Festival in France) allowed him to carry out many projects ranging from documentaries *(Sea Rex,* Imax 3D, *The Lazy Giant,* documentary TV), advertising (Kinder, Okay Lotus, Lipton, SuperCroix etc.), through the theme-park films *(City of the Sea* in Biarritz, *EANA* in Normandy etc.). Already confirmed in a realist style, at the same time he developed graphic and poetic writing inspired by old graphic prints and lithographs, always with a view to showing the best of nature ... from animals to plants.

Birds

Zeitguised

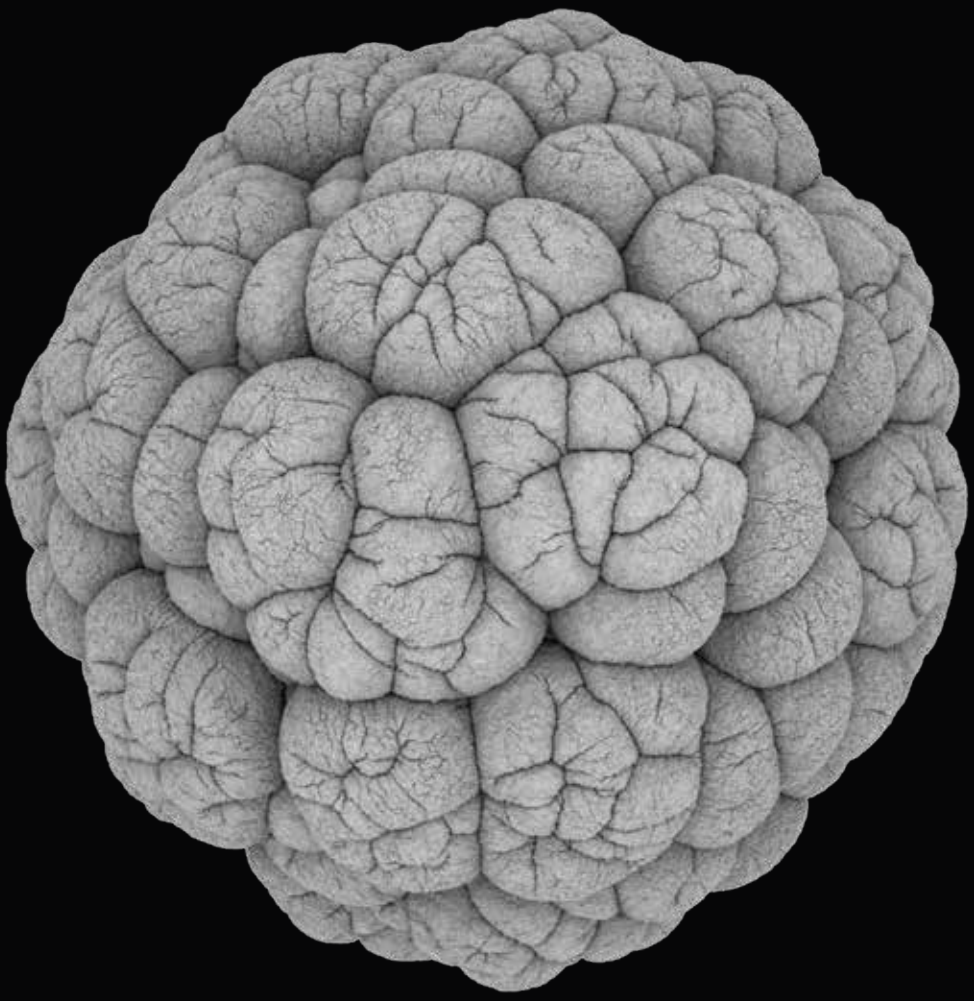
A lighthearted essay on the contextualization of familiar and unassuming animals. Two strands in the work of Zeitguised merge in this piece. One strives for character design with little or no recognizable anthropomorphisms or animal features. The other is a synthetic construction of images through deconstructed fragments of the prevalent photo realism in CG. The work saw its first sketches around two years ago as a pitch for a rebrand of a TV channel. Back then it was planned to film and track live birds and augment the pictures with 3D CG in composition. However, our preferred workflow is pure CG animation, and we thus set out to revise the topic and animate the birds by hand. The final ideas came about while working on the actual film. In the end what tied the film together conceptually was the subtle humor emerging from blending the realistic motion of the birds, which was hand animated by Matt Frodsham, with the wrong and surreal materials and objects associated with these animals in a wider context. This is why we coined our approach of "contextualized characters", as the design stems from their own context and is therefore also a humorous reference to the prevalent self-referentiality as a ubiquitous device in contemporary art.

Software: Cinema 4D with Octane Render Engine, Remotion Uniflex, Remotion Phyfluids, XParticles, ZBrush, After Effects
Concept, art direction, design, animation: Zeitguised with Matt Frodsham, Chris Hoffmann, Katha Niedermeijer
Lead animation: Matt Frodsham
Music/sound: Matt Frodsham and Marian Pramberger (Zeitguised)

Zeitguised (DE) is an award-winning studio for contemporary art, founded in 2001 by American sculpture and fashion designer Jamie Raap (US) and German architect Henrik Mauler (DE). Their collective is based in Berlin, where they craft organic-synthetic image constructions on the frontier between abstraction and realism. Their work has been exhibited in international art galleries such as the Vienna Film Museum 2014, La Gaité Lyrique, Paris 2014, the Victoria and Albert Museum, London 2014, After Squat, Paris 2012, the Volta Art Fair, New York 2011, the Museum of Contemporary Art, Barcelona 2011, and the Art Center Nabi, Seoul, 2009 (selection). After studying architecture and design, **Henrik Mauler** (DE) taught experimental digital design and game concepts at the University of Stuttgart. After working and living in Chicago and London, together with Jamie he opened the Zeitguised studio in Berlin in 2010. **Katharina Niedermeijer** (DE) was born in the early 80s. It is said that David Bowie blinked into her baby stroller with both eyes! In 2011 she graduated from the Potsdam University of Film and Television with a diploma degree in animation studies. She focuses on the visualization of moods and sound in various animation techniques (3D, stop-motion, pixilation, drawn) and works at Zeitguised Berlin as a freelancer. **Matt Frodsham** (UK/DE), born 1986, is a motion designer based in Berlin. He studied graphic design at the University of Salford and has been working in the design industry since 2008. After graduating he worked as a freelance 3D animator in Manchester before landing in Berlin. He balances commercial design work with art projects, short animated films and collaborations within the punk community. **Chris Hoffmann** (DE), born 1983, is a freelance animator/designer based in Berlin, he joined Zeitguised in 2013 while still running his own visual laboratory UglyStupidHonest.

Cellular Forms

Andy Lomas

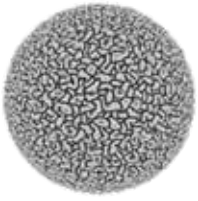
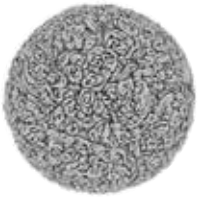
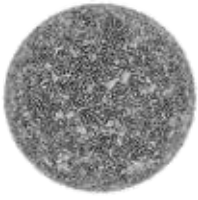
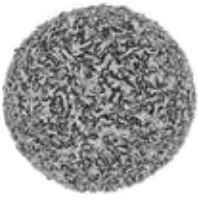


Cellular Forms uses a simplified biological model of morphogenesis, with three-dimensional structures generated out of interconnected particles to represent cells. Each form starts with a small initial ball of cells which is incrementally developed over time by adding iterative layers of complexity to the structure. The aim is to create forms emergently: exploring generic similarities between many different shapes in nature rather than emulating any particular organism, revealing universal archetypal forms that can come from growth-like processes rather than top-down externally engineered design. Cell division is controlled by accumulated nutrient levels. When the level in a cell exceeds a given threshold the cell divides, and various parameters control how both the parent and daughter cells re-connect to their immediate neighbors. Rules can also be adjusted for how nutrient is created, such as by being randomly uniformly created by each cell, or by incident light rays creating nutrient in cells hit by photons. Nutrient can also be allowed to flow to adjacent cells. The simulation process is repeated over thousands of iterations and millions of particles, with typical final structures having over fifty million cells. A number of internal forces affect the structures, including linear and torsion spring forces between connected cells. Additional forces repel cells that are in close proximity but are not directly connected.

Many different complex organic structures are seen to arise from subtle variations to the rules governing the systems, with selection of forms based on aesthetic considerations rather than optimizing a conventional fitness function.

All the software used to run the simulations and render the resulting images was written and designed by the artist and implemented using C++ and CUDA.

Software and Visuals: Andy Lomas
Music: Max Cooper

Andy Lomas (UK) is a mathematician, digital artist and Emmy award winning supervisor of computer generated effects. *Cellular Forms* is the latest part of *Morphogenetic Creations:* a series of work which explores how complex organic structures, such as those seen in nature, can be the emergent generative products of growth processes. He has had artworks exhibited in over 40 joint and solo exhibitions, including Siggraph, the Japan Media Arts Festival, the Ars Electronica Festival and the Centro Andaluz de Arte Contemporaneo, and was selected by Saatchi Online to contribute to a special exhibition in the Zoo Art Fair at the Royal Academy of Arts. His production credits include *Walking With Dinosaurs, Matrix: Revolutions, Matrix: Reloaded, Over the Hedge, The Tale of Despereaux* and *Avatar.*

Columbos

KAWAI+OKAMURA

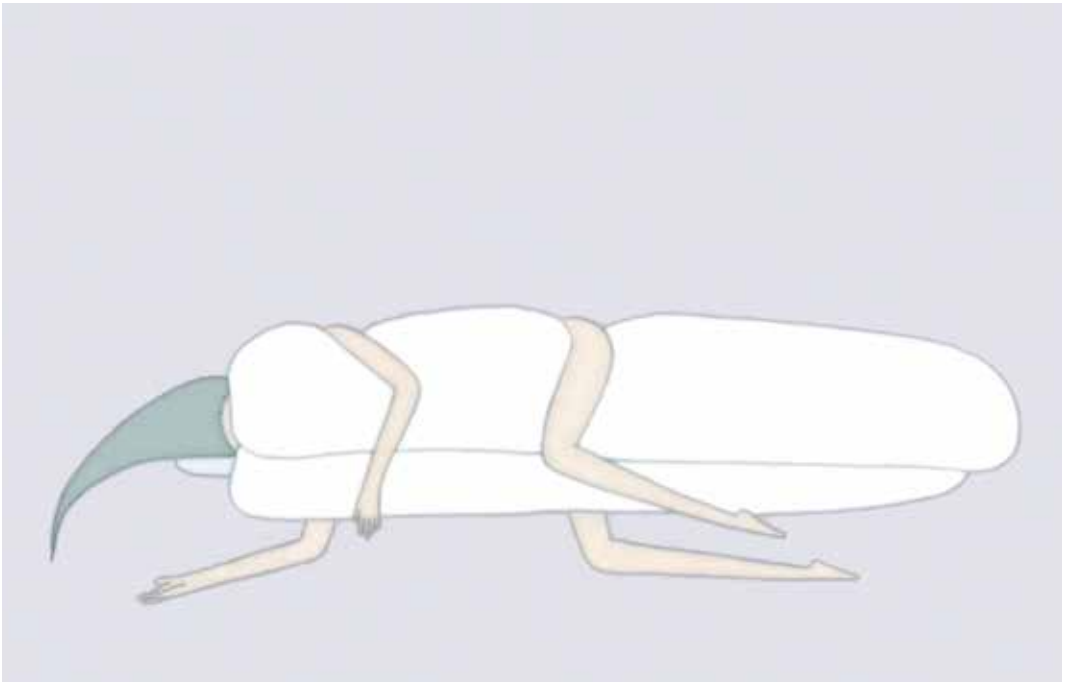
A homicide scene with the corpse of an actress dressed in red, a man with a gunshot wound, and an internationally well-known detective. Is this the climax of a play? Or is it a murder that took place during the shooting of a film? *Columbos* is a meta-mystery movie containing fragments of crime and suspense in a refractive world. The story is illustrated through a schizophrenic montage of "time and space" along with "fantasy and reality."

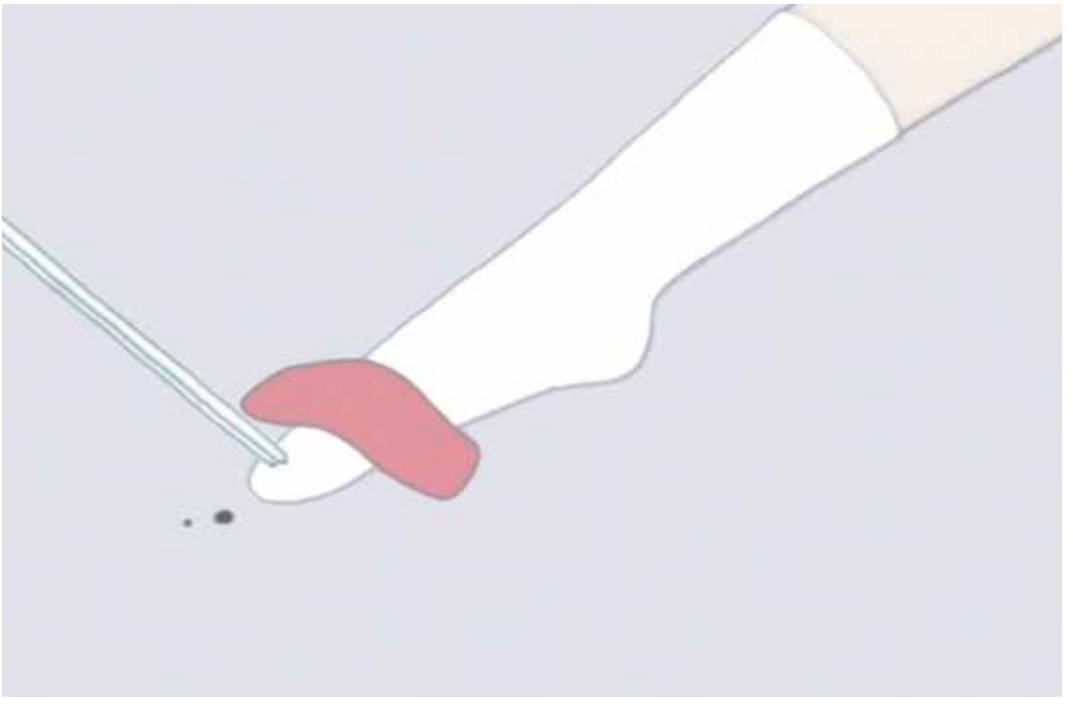
Our work is constructed of many layers, such as dreams, memories and bodies. It also includes music, arts, nonsense comedies and pop culture, especially from the 60s and 70s, which we love. The various elements inspired us and we tried to pay respect to them through our work. We chose animation for our projects because it allows us to create a natural environment with a unique sense of time, crossing the layers through the blending of the elements of the essence and structure.

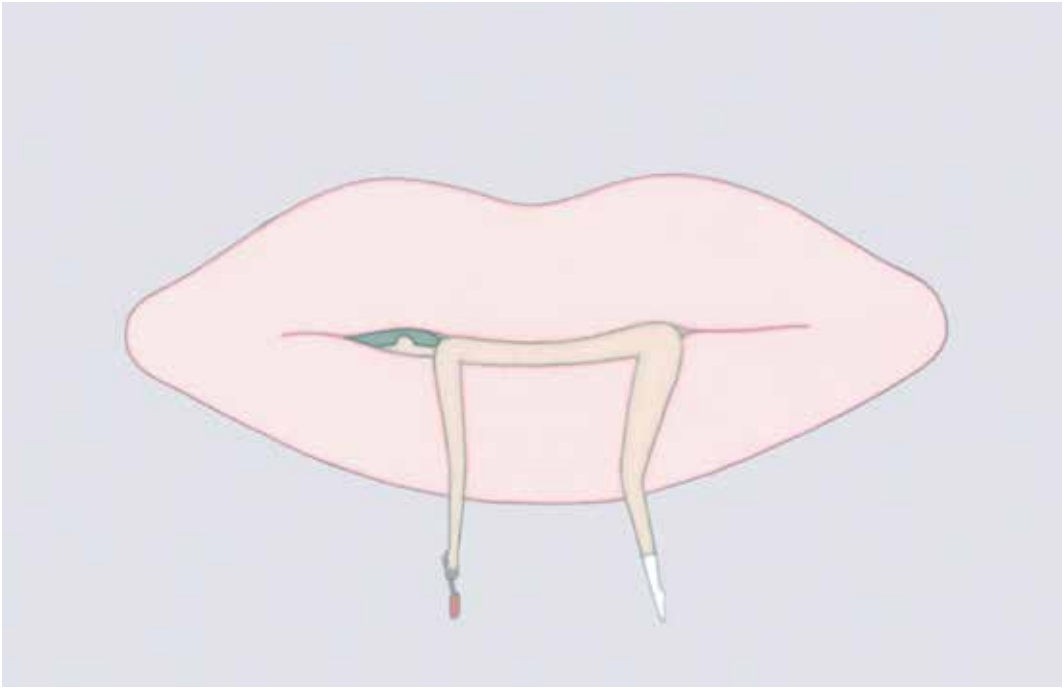
Hiroki Okamura (JP), and **Takumi Kawai** (JP), born in 1968, graduated from the Kyoto City University of Arts in 1992 and received their MAs from the Kyoto City University of Arts Graduate School in 1994—Okamura in oil painting and Kawai in sculpture. They formed KAWAI+OKAMURA as a visual art unit in 1993. Their film *Ficfyon 7* (2004) won the grand prix at the Under 10 Minutes Digital Cinema Festival, and *Head Wrest–3001 series* (2000) won the special prize at the Chofu Cinema Festival in Japan. Their works have also been presented as visual art installations in various venues around the world, such as the École nationale supérieure des Beaux-Arts de Paris, the National Taiwan Museum of Fine Arts and the Mito Contemporary Art Gallery in Japan. Currently, Hiroki Okamura is a lecturer and Takumi Kawai is an associate professor in the Department of Information Design at the Kyoto University of Art and Design.

Futon

Yoriko Mizushiri







Wrapped in a futon ... memories come to mind, the future is imagined, senses are recaptured, physical feelings like a woman are deeply ingrained ... Everything melts together pleasantly. In the futon, the body wanders, seeking for these senses ...
The film is composed of linking movements and senses, representing a sensation between dream and reality, just like the moment of fading into sleep. My focus is on the comfort provided by a free association of flowing movements and sense of feeling soft to the touch, as well as the balance of the tension emerging from the expression with minimal elements. A flavor of the simplicity, calm and fleeting transience also akin to traditional Japanese aesthetics.

Short film, Japan (2012), 6'02" stereo, HD CAM-1.78–color, animation technique: drawing on paper/2D computer
Music: *Dark End,* arranged by Seiji Toda, original music from the album *Karaukuri* by Mari Fukuhara

Yoriko Mizushiri (JP) born in 1984, received a BA in design from Joshibi University of Art and Design in 2007. Her solo exhibitions *Anime in the Room* took place at Central East Tokyo, in 2007, *Anime maternity* at the Nike Gallery, Tokyo, in 2008. She directed the TV animation series *Lena Lena,* which was shown on Tokyo MX TV in 2009. Her films *Osushi* (2011), *Fusuma* (2009), *Enyogu* (2007), *Kappo* (2006) and *Shiri Play* have been shown at animation film festivals all over the world.

Land

Masanobu Hiraoka

The word “land” always made a great impression on me. The land, which seemed to be very wide, but was very limited. The land, which is quiet, yet very powerful. Someone is living there alone—a selfish, and lonely human being.
My intention was, to express these images in an animation; I always made animations with an image that looked into a certain miniature garden inside me. So I tried to use animation to express a view of the world like poetry.

I used Photoshop and did the editing in After Effects. I drew everything without using any specific effects, frame by frame. I wanted to express motion graphics and graphic design in a hand-drawn animation. I love 3D animation, but I still believe in the possibilities of 2D animation.

Directed by Masanobu Hiraoka
Music & sound design: Aimar Molero
Voice: Marina Herlop

Masanobu Hiraoka (JP) is an animation director, designer and illustrator. He graduated from university in 2010 and then started work as a freelancer in Tokyo. He has worked on projects for Volkswagen, UNIQLO and many others.

Late for Meeting

David Lewandowski

Late for Meeting is the first companion piece to the 2011 short film *Going to the Store,* which featured a silly, disjointed journey through Sunset Park in the traditions of Dadaism and surreal humor in film. The unnamed man has somehow reached East Los Angeles, now traveling through the areas of Highland Park, Glendale, Cypress Park and Eagle Rock, California.
This film was photographed with a Canon 5d2 using the magic lantern firmware to enable raw shooting, mostly shot on Canon Prime L lenses and in native 2:1 aspect. The matchmoving was carried out using PFmatchIt and it was animated using Maxon's Cinema 4D, rendered using Vray for C4D. Edited and composited in After Effects on an Apple Mac Pro.

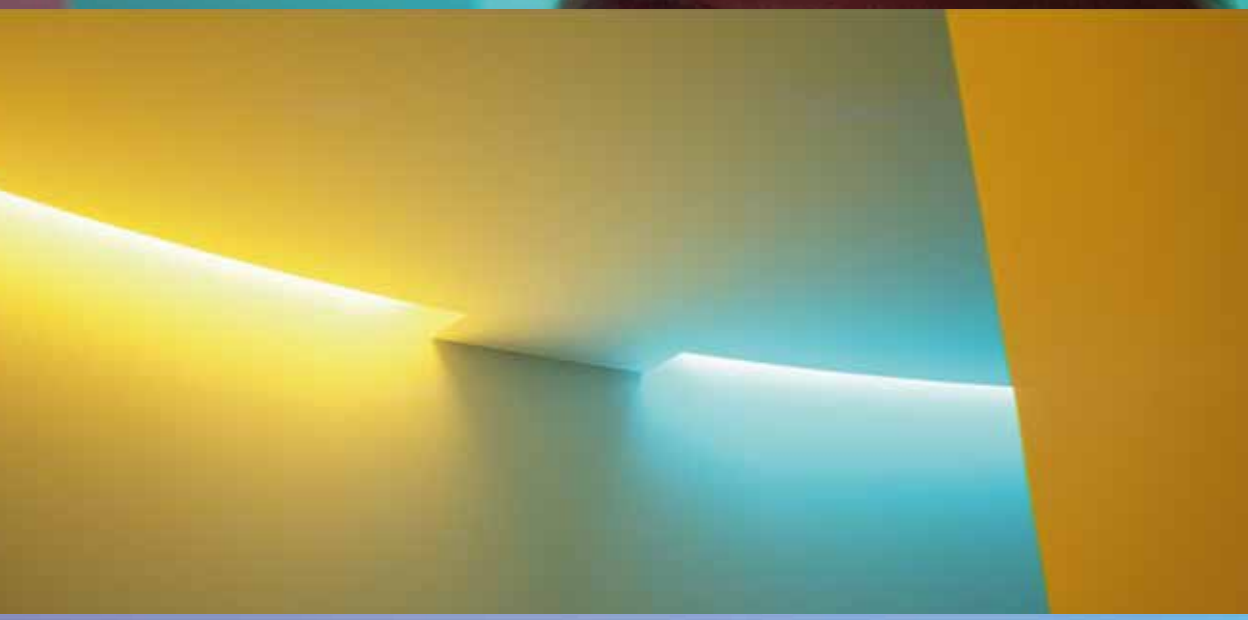
Short film, 2013, US, 1'40", digital, 2:1
Music: *The Mexican Cactus* by Jean-Jacques Perrey (UMPG).

Sound designer and original grocery-store music composer: Jamie Vance *http://jamievance.me*
On-set VFX assistant: William Mendoza *http://hoax.cc*
Fluids artist: Josh Johnson *http://www.vfxdaily.com*
Colorist: Christian Sprenger

Special thanks to: David Estis, Karina Benesh, Maxim Lazarov, Zachary Johnson, Jeffrey Max, Fatalfarm, Superior Grocery, Meea's hotdogs, The Oinkster and CVS Eaglerock

David Lewandowski (PR/US) is an American director born in Puerto Rico, raised in Central Florida and living in Los Angeles. He studied film before moving west to pursue a career in animation and began experimenting in making his own videos while establishing himself as a freelancer. In 2008, he began a three-year intensive collaboration with Fatal Farm, a comedy group in Los Angeles, where his visual effects, writing and directing skills flourished while helping create *Lasagna cat 2.0, Tales of the Old West, Infinite Solutions,* and several short films. David simultaneously reached a career high in commercial animation, playing a major role in the opening title sequence and motion graphics for the films *Tron: Legacy* and *Oblivion.* With these projects he gained the experience essential to creating his own pipeline and process for creative projects of his own. His focus has shifted away from graphics and towards developing original artwork and narrative. After attracting seventeen million online views, his first short film *Going to the Store* was a part of the SXSW film festival and has been licensed by Adult Swim, VH1, and several European television networks. This year he was also recognized by MTV with a VMA nomination for "best visual effects video," for directing *Flying Lotus–Tiny Tortures,* and nominations at the UK MV awards for best foreign video and best visual effects.

http://dlew.me
https://vimeo.com/78424222
http://youtu.be/wBqM2ytqHY4



Light Motif

Frédéric Bonpapa

Light Motif is conceived as a synaesthetic experience based on a visual transposition of *Music for 18 Musicians–Section II,* by the American composer Steve Reich. The ambition of the film is to cinematically capture the extraordinary life force that animates this essential work of contemporary music by offering a truly hypnotic experience where music can be "seen".

The inspiration for the project stems from the relationship between music and the visual arts, illustrated by artists such as Wassily Kandinsky, Oskar Fischinger, Norman McLaren or John Whitney. These works try to establish precise connections between sounds, shapes, colors and movements, to visually translate the concepts of rhythm, melody, harmony, pitch, timbre and intensity. *Light Motif* proposes applying the construction principles of Steve Reich's compositions to visual language. Rigorously architected, his compositions are based on the repetition of short melodic patterns subjected to the gradual processes of dephasing, lengthening pattern, rhythmic saturation and tonal changes. The result of these subtle variations in the repetitions is a sound texture in constant transformation. The listener passes progressively from a polyphonic perception to a global perception, from the perception of a discontinuous sound phenomenon to a continuous one. In *Light Motif* it is this perceptual phenomenon that is transcribed into images. Procedural generation techniques are used to transpose the motifs and compositional processes into a semi-abstract visual form made of colored lights and geometric shapes. *Light Motif* explores the possibilities of synergy between music and image through a subjective experience that can speak directly to the subconscious of the viewer.

Producer / director / editor: Frédéric Bonpapa. CG supervisor: Frédéric Bonpapa. Character modeler: Eric Prebende
Character TD: Frédéric Bonpapa. Character animators: Barthélémy Boirot, Frédéric Bonpapa, Mathilde Fabry, Romain Pamart
FX Animators: Olivier Barré, Frédéric Bonpapa, Jon Uriarte. Shading / lighting TD: Frédéric Bonpapa
Compositors: Frédéric Bonpapa, Jon Uriarte

Frédéric Bonpapa (FR). Following a Master Arts et technologies de l'image at the University of Paris 8 in the late 90s, he embarked on a career in animation and visual effects spanning over twelve years. 2012 saw his move to London and the birth of ModernEye, a creative studio to experiment in new aesthetics and techniques. *Light Motif* is his first film as a director.

Recycled

Lei Lei, Thomas Sauvin

The following images are from negatives salvaged from a recycling plant on the edge of Beijing, where they had been sent to be filtered for their silver-nitrate content. Over the years French collector Thomas Sauvin built this archive of more than half a million 35mm negatives, showing the capital and the everyday lives of its inhabitants over the last 30 years. Between 2011 and 2012, the Chinese artist Lei Lei selected over 3,000 photos to create this animation, an almost epic portrait of anonymous humanity.

Commentaries from the Director of Animation

Through a chance encounter I came across French art collector Thomas Sauvin's Silvermine project when I visited his studio in winter 2011. It was a massive undertaking. Sauvin spent over three years collecting discarded film negatives from recycling sheds around the outskirts of Beijing. Each of the half a million negatives was then painstakingly scanned and archived. During the scanning process, I noticed how this massive collection of damaged negatives has some unique colors and a totally unexpected sense of beauty. There also seemed to be many interesting connections between all these photographs taken by different people at different times. For instance, many would take group shots in front of Tiananmen Square or McDonald's. Or they would have specific pose and facial expression for photos at tourist spots or for family portraits on the couch. I thought perhaps I could find some kind of theme

to relate these photos and turn them into a movie or an animation. After all, if we had not discovered them, perhaps no one would ever have had a chance to see them again, which is why we called the project *Recycled*. After six months working on the project with Sauvin I began to realize that it was simply not enough to just collect and arrange these materials. The method was too rigid, and would only create a boring and monotonous work. As a creator, I lacked the familiarity with the photos. Even though new photos kept appearing, and I saw these new faces, scenes and stories in the photos, the excitement of seeing them for the first time slowly subsided. The history from the 1980s to the early 21st century felt completely strange to me. China has gone through rapid development in the past two decades, and Beijing had now become a modern and colorful migrant city. The gears keep on turning. And who has time for history anyway? I have grown accustomed to the unrestrained imagination, the rich and detailed paintings of my previous work. I felt completely alien to the historical and literary expressions in *Recycle*. Since there was no way I could find a quick solution, I thought the best way was to use the simplest method. I went to Kodak Express to develop the negatives I had selected. Six-inch prints for 0.8 kuai each. Then I tried find the places where the photos had been taken. So I went back to Tiananmen Square, the McDonald's, Beidaihe, etc. and I would hold the picture in one hand and take another picture at the same spot. After I had the pictures developed and took them back to the places where they were taken, I noticed how they became more familiar: My family, too, would take family portraits on the couch, my friends would also have dinner at a round table, and I, too, took pictures with Ronald McDonald and stood up straight when posing in front of tourist spots. These photos are like a mirror of our own lives: simple, without being imposed as something artistic, revealing how estranged we are even from our own selves.

Animation: Lei Lei, Thomas Sauvin
Sound: Zafka

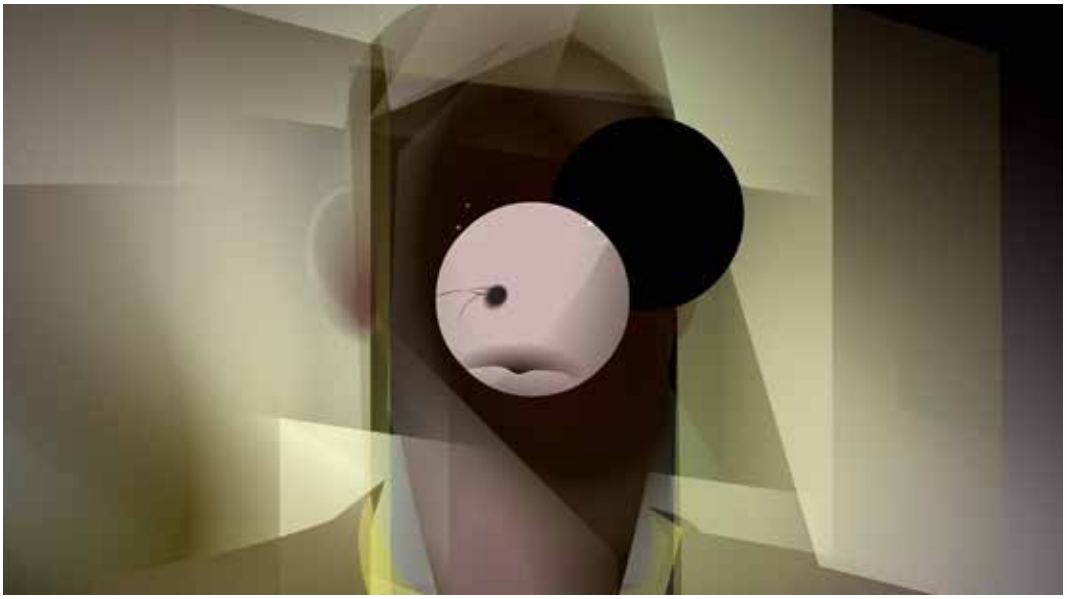
© Matjaz Tancic

Lei Lei (CN) is a 27-year-old up-and-coming Chinese multimedia animation artist involved in graphic design, illustration, short cartoons, graffiti and music. He got his master's degree in animation from Tsinghua University in 2009. In 2010 *This is LOVE* was awarded the 2010 Best Narrative Short at the Ottawa International Animation Festival. In 2013 *Recycled* was selected by the Annecy Festival and won the Grand Prix for best non-narrative short at the Dutch International Animation Film Festival. *www.raydesign.cn*

Thomas Sauvin (FR) is a French photography collector and editor who lives in Beijing. Since 2006 he has worked exclusively as a consultant for the UK-based Archive of Modern Conflict, for whom he collects Chinese work, from contemporary photography to period publications to anonymous photography. In May 2009, Sauvin started his *Beijing Silvermine* project. Taken by ordinary, anonymous Chinese, these photos offer us slivers of daily life during the peak period of popular silver-nitrate film usage in China and complete more than half a century of this chain of images.

The Chimera of M.

Sebastian Buerkner



At its core the digital animation *The Chimera of M.* attempts to wed its physical constitution to its narrative ambition. Viewers find themselves behind the eyes of an unseen and distinctly unreliable protagonist, so evasive that he and his motives can hardly be identified. He moves through the old haunts, seemingly attempting to re-engage with two abandoned relationships, one with a man, one with a woman.

The very fractured and expressive manifestation of the three-dimensional space in this stereoscopic film, combined with the protagonist's point of view, puts the viewers inside these contorted relationships. The spatial and visual ambiguity of the film seems to evade definition and induces a personal investment by the viewer in unraveling the perceived imagery.

In contrast to camera-shot 3D filmmaking, where space tends to be hyperdefined and "sculpted," in *The Chimera of M.* the animation, objects and places have been dismantled and redistributed in space to fit their expressive purpose in the visual landscape. All the elements were initially animated in 2D through multitudes of transparent layers and later suspended in space. This process amplified the fertile interplay between the visual appearance and its representation.

Director, animator: Sebastian Buerkner
Script: Sebastian Buerkner, John Moseley
Sound editing and mix: Gernot Fuhrmann
Voices: James French, Martina Schmücker, Micheal Grime
Additional animation: Peter Caires, Timothy Divall, Natalie Rose Young
Motion-capture performers: Nissa Nishikawa, Junya Ishii

Sebastian Buerkner (DE), born in 1975 in Berlin, studied fine art at the HKD in Halle/Saale in Germany. Then he moved to London to complete his fine art education with an MA at Chelsea College of Art and Design in 2002, where he was awarded a fellowship residency the following year. His work has been exhibited in several group and solo shows internationally. Since 2004 he has worked exclusively on animation. He has had solo exhibitions in London at the Lounge Gallery in 2006 and the Whitechapel Project Space in 2007 and The Showroom in 2008. He is a part-time visiting teacher and visiting lecturer at several colleges and universities in London

The Rise and Fall of Globosome

Sascha Geddert

The first Ideas for the *Globosome* actually started in 2005, my first year at the Filmakademie. I read a lot about climate change. It was before Al Gore's *Inconvenient Truth* and I wondered why nobody else seemed to be worried. I started asking how we humans are intellectually superior to bacteria in a Petri dish if we exceed our natural limits? I also wondered whether there are other civilizations out there–which seems plausible given the number of planets we see in our known universe–and if they might go through the same struggle to become renewable after millennia of growth. Maybe civilizations are dying all the time in the universe. So I made a small film where I interviewed climate scientists and I showed it to my fellow students. I feel that I am part of a few generations that have the responsibility to ask these radical questions. Humans are definitely at the crossroads right now and our collective decisions will determine the well-being of many generations to come. Over time, these questions condensed into a story of these little dots and their rise and fall on a small planet covered in plants. After a long phase of scribbling and tossing around ideas, the actual production of the *Globosome* started in late 2009.

My main influences for the project were books and documentaries. For example there is a mind opening book *The Global Brain*, by Howard Bloom, about the evolution of cells. Also I am a big fan of BBC documentaries, especially their time-lapse photography and their short documentary *Britain from Above.* For other animated short films that inspired me, I should mention *Krapooyo* and *Theros* and the works by my fellow Filmakademie students from *Polynoid*.

I assembled a team of about ten people to work on the film, including technical directors and stereographers as well as for music and sound design.

Alongside the film, we developed a game, *Globosome: Path of the Swarm,* which allows you to control these little spherical beings yourself. It has been in the App Store since May 22, and was one of those "Wouldn't it be cool … ?" ideas that are easily said and much harder to pull off. Fortunately the Animation and Interactive Media departments had just moved into the in the same building together when we had the idea, which made collaboration a lot easier. We liked the idea of being able to control a swarm in an intuitive way and with the iPad and the Unity game engine this was actually possible.

Creator/director: Sascha Geddert. Producer: Philipp Wolf. Stereo lead: Andreas Feix. Technical director: Thomas Hartmann, Tonio Freitag, Patrick Schuler, Björn Mantelars. Music: Patrizio Deidda. Sound design & mix: Namralata "Nami" Strack. Compositing: Johannes Peter, Silke Finger, Manuel Rivoir

Sascha Geddert (DE) was born in 1984, the son of artist/painter Sabine Geddert in Hamburg, Germany. He started making films while still young, also winning prizes at youth video festivals. In 2005 he started studying at the Baden-Württemberg Filmakademie, where he made the *Fallen* and the 2012 FMX trailer based on his ideas for the short film *The Rise and Fall of Globosome.* The actual film was finished in 2013. The iOS game *Globosome: Path of the Swarm* was finished in 2014. He now lives and works in Berlin.

Thing

Anouk De Clercq

In *Thing,* an architect talks about a city he has built. Gradually, however, we realize that the city is imaginary and that his account is an attempt to give his ideas a fixed shape.

Anouk De Clerq: "I'm fascinated by the power of words and their influence on our imagination. With words, you can build another world, another life, another time. ... One of my inspirations was the book *The Poetics of Space* by Gaston Bachelard. In it he stated that a good writer is not necessarily someone who writes one beautiful sentence after another, but rather is someone who leaves space for readers to fill in their meaning using their imaginations."

But *Thing* is not only about words and imagination. De Clercq adds it to her fascination for architecture, an influence we can also see in her other works such as *Building* (2003) and *Oh* (2010). At first sight, there seems to be a striking contrast between the temporary character of the imagination and the massive, solid character of a building.

Anouk De Clerq: "I had a talk with architect Paul Robbrecht. The way he talks about a building, about architecture and about the drawings he makes is pure poetry. I realized that imagination and architecture are not two opposites at all: the construction of a building always starts from an image and imagination. A very clear example of this is the Danteum by Giuseppe Terragni. It's an architectural translation of Dante's *Divina Commedia:* all the chapters in the book are re-created in an architectural space. The Danteum, however, was never built, and exists only in wonderful sketches. I was given a guided tour through the Danteum by professor of architecture Dirk De Meyer. In the process, I obtained a clear view of the building, even though it was a tour through drawings. ... This perhaps was the greatest inspiration for *Thing."*

Together with Scanlabprojects, Anouk De Clerq made scans of very concrete, solid buildings in order to create images with a more sketch-like character and imaginary places. Her method reminds one of forensic research, where the details are scanned in order to form the bigger picture, creating a sort of puzzle out of the details.

Anouk De Clerq: "In fact, the scanning of the buildings pulverizes them. The scanner wasn't programmed to scan with precision, as it normally is. This is because I wanted to obtain the artifacts, faults and noise in the images that you normally don't have. For me, it is important that it looks forensic: I want viewing it to evoke a feeling of depth. With the scans, I searched for the soul of a building. I'm intrigued by this idea

of a city with a phantom limb: it gives the city an organic feeling, revealing it as something more than simply dead bricks and walls."

The film, as well as De Clercq's idea of imagination, can be summarized in a quote from De Clercq: "The eye does not see things, but images of things that mean other things. What we read in these accidental shapes depends on our capacity to recognize in them things or images we find stored in our minds."

Produced by: Auguste Orts
With the support of the Flanders Audiovisual Fund, CERA Partners in Art, Kaaitheater, Academia Belgica (IT), Nomas (IT) & Le Fresnoy, studio national des arts contemporains (FR). This work is part of *The art of ~scaping*, a research project by Anouk De Clercq, funded by the Research Fund, University College Ghent.

Anouk De Clercq (BE), born in 1971, studied piano in Ghent and film at the Sint Lukas Brussels University College of Art and Design. Her films explore the audiovisual potential of computer language to create possible worlds, many of which have a strongly architectonic character. She has received several awards, including an award from the Future Imprint International Animation Competition, Taipei (2003), the International Backup Award New Media in Film, Weimar (2004), and the Illy Prize at Art Brussels (2005). Her works have been shown in the Tate Modern, Whitechapel Art Gallery, Centre Pompidou, Museo Nacional Centro de Arte Reina Sofia, Transmediale, Ars Electronica and at the Biennale de l'Image en Mouvement, among others. Anouk De Clercq is affiliated to KASK School of Arts, University College Ghent, as an artistic researcher. She lives and works in Brussels.

INTERACTIVE ART

A New Criticality?

Óscar Abril Ascaso, Irini Papadimitriou, Enrique Rivera, Maholo Uchida, Michel van Dartel

Reviewing nearly 700 submissions to eventually award one big prize poses challenges as well as opportunities. The challenges are practical: How to work your way through 700 submissions while making sure that every project receives the attention it deserves? And how to reach a decision when you are comparing apples with oranges? The opportunities, however, are directly related to these challenges: reviewing almost 700 new projects is a wealth of input to the practices of each jury member, and paying attention to every work is rewarded by spotting high-quality projects and emerging or promising artists. And although comparing apples with oranges may be difficult, this is also where the opportunity lies to update how different artistic qualities weigh up against each other in the contemporary field of Interactive Art. This journey of reviewing and collectively working through all these submissions also slowly unfolded a series of interesting conversations among the jury members, which informed the discussion about selection criteria and the process of reaching a final decision.

Although a project's novelty, urgency, conceptual clarity and aesthetic quality likely play a role in any art jury, it is probably less common that the main selection criterion for an award is as much in flux as the notion of interactivity is. While it is tempting for an Interactive Art jury to dive into a heated discussion on the correct definition or timely interpretation of interactivity, this year's jury instead first asked itself the question if the award for Interactive Art should really go to the project that best fits that definition or interpretation? Certainly not, the jury concluded. The award should go to the project that uses interactivity to create the best artwork, and the discussion should focus on what *that* means. The resulting selection may in turn have an effect on what we understand as interactive art, but only by updating how different artistic qualities of Interactive Art weigh up against each other in the contemporary field.

A large number of the 700 submissions incorporated stunning, novel technologies or used interactivity to achieve astounding aesthetics results. Most of them, however, did not answer a very simple question to the satisfaction of the jury: Why now? In a world facing global crises and inequality, is it still enough as an artist to merely demonstrate what technology can do or what kind of beauty it can produce?

Perhaps artists should never cease to explore these functional and aesthetic boundaries of technologies, but in any case it is not the kind of Interactive Art that urgently requires encouragement at the moment. Over the years a relatively large audience has developed for this kind of work and it will survive as long as people are willing to pay to be amazed by technology or to enjoy its aesthetics. What does need encouragement right now, however, is the type of Interactive Art that critically engages with the great challenges of our times, but may *not* meet such popular demand, since it perhaps shows the dark side of technologies or sketches a picture that is not at all enjoyable to watch. It is these "not so pretty pictures" that need our attention and support; the projects that confront us with the reality we live in, that create awareness around critical issues, or even better, that address such issues by instigating real change. The projects selected by the jury therefore engage us in ongoing debates and discussions on social and environmental challenges and invite us to explore the role of technology in art and in social change, but also the ethical implications of emerging technologies from genetic engineering, neuroscience and identity, to agriculture and food production.

It was not just the jury that seemed to think such criticality is urgent, as besides the gadgetry and pretty images that are common to the Interactive Art category, another clear trend could be identified among this year's submissions: a range of concepts based on critical inquiries into the social impact and ethics of technology. Could this mean that a "new criticality" is emerging in the field of Interactive Art? Let us at least hope so, nourish it, and support it where we can.

Golden Nica

Loophole4Aall · Paolo Cirio

It is common knowledge that our global tax system allows large international companies to avoid tax by channeling their profit through states or countries where taxes are low or even non-existent, making the tax burden fall disproportionately on individual taxpayers and smaller companies. *Loophole4All* is a clever artistic intervention in our global tax system that empowers ordinary people to avoid tax the same way as these companies do. Using the identity of a company registered on the Cayman Islands, anyone can in principle invoice from this tax haven

and consequentially avoid tax. *Loophole4All* provides such identities basically to anyone, creating a tax loophole for all.

The legal owners of these identities could of course protest against this illegal use of their registered company names, if it were not for the fact that their anonymity is what makes it possible for big international corporations to hide behind such identities to avoid tax. Using this anonymity against them, *Loophole4All* outsmarts these companies on their own turf. The project thereby corrupts this practice from the inside out, raising both discussions in the public realm—about the ethics of such corporate tax avoidance—as well as in the corporate realm—where tax avoiding companies feel threatened in their highly profitable tax schemes. *Loophole4All* does not raise this discussion on the basis of a mere prototype or proof of concept, but through an intervention in the actual tax system at work, with real consequences for the interactions between states, legal bodies and individuals that make up the global taxation system. Its effectiveness in corrupting the system probably increases with the attention generated around the project, as each new *Loophole4All* user brings us closer to the collapse of this unethical practice within the global tax system. The 2014 Golden Nica for Interactive Art therefore not only represents an appreciation of Paulo Cirio's artwork of exceptional quality and timeliness, but is also a support in the protest against the unethical behavior of corporations that avoid tax. The jury urges Ars Electronica to seriously consider invoices sent from the Cayman Islands for the prize money this year.

Awards of Distinction

Disarming Corruptor · Matthew Plummer Fernandez

Disarming Corruptor is a 3D rendering software and free tool for concealing the identity of 3D printing files to allow users to share banned items. The software application runs an algorithm used to both corrupt and disguise STL files, which describe 3D surfaces in computer-aided design and manufacture, and allow users to reconstruct them back to their original form. The files can only be decrypted by the designated receiver. Matthew Plummer Fernandez, the artist behind *Disarming Corruptor,* is exploring the artistic possibilities of 3D printing. This might sound like another project in a universe of works evolving around the rapid prototyping trend, but instead *Disarming Corruptor* provides an important and critical addition to the realm of digital manufacturing that highlights the limits of freedom on the web, raises issues around digital surveillance and opens up an interesting debate about encryption, file distribution censorship and Internet control, while at the same time offering a free tool to help subvert such censorship and control.

Balance from Within · Jacob Tonski

Relationships are balancing acts. Just like the sofa in *Balance from Within* however, we are never truly *in* balance with each other, but instead continuously act to counter small imbalances to prevent impending fall. *Balance from Within's* scenography emphasizes the romance of this delicate unstable character of our relationships, but also reminds us that such balancing acts are the fabric of human history. At the heart of this history of balancing acts are the technologies we create to mediate them and, as happens in *Balance from Within,* these technologies occasionally fail to maintain the balance when external influences push it too far. *Balance from Within* is much more than a mere poetic sculpture; it is an urgent and critical reminder. To ourselves, but for instance also to our global politicians, who seem to sometimes forget that despite all the technologies that nowadays mediate global relationships, they are still delicate and unstable balancing acts that may collapse when pushed too far.

Honorary Mentions

Avena+ Test Bed—Agricultural Printing and Altered Landscapes · Benedikt Groß

Innovative technologies are already being used in agriculture and by farming communities, but can they be used to benefit the environment and improve production and future farming? *Avena+ Test Bed* shows how digital manufacturing might be used by agriculture in the future, while the project also highlights changes in our countryside, in particular the shift from food to biogas production. Benedikt Groß works around precision farming and digital mapping, he uses custom software, GPS tracking and repurposed farming research equipment to map the landscape and "print" the seeds with an efficient pattern promoting diversity, reducing vermin and therefore the use of pesticides. *Avena+* speculates

on the idea of future landscape and agriculture being transformed into a digital activity.

Captives · Quayola

Captives is a series of digital and physical sculptures made using custom software, digital sculpting tools and robotic milling technology that pays homage to Michelangelo, in particular the great master's unfinished *Prigioni* sculptures. Quayola, captures the figures in a state of metamorphosis and continuous and transforming movement, as they emerge, taking shape and life from the surrounding material only to collapse again back into it. In virtual form, the sculptures evolve from computer-generated formations into surging and receding classical figures, while the physical sculptures show various "worked" stages sculpted by industrial robots, from a block of almost plain rock to a block morphing into a figure revealing the beauty of artistic process.

Clouds · James George, Jonathan Minard

Clouds is an interactive documentary about data, engaging an all-star community of international media artists in discussions about digital art and the beauty and creativity of working with code.

The documentary exists like a database of interviews and conversations, so the viewer can ask a question and the code will generate footage tagged with keywords. This means the viewer will experience the film in infinite ways following every time a different path, exploring conversation subjects with different questions, which will bring new results. *Clouds* not only brings together a community of inspirational founders of free creative coding platforms to share their ideas with the public, but it also gives rise and inspiration to initiatives around open-source 3D filmmaking.

Das Vergerät · Boris Petrovsky

A collection of domestic appliances, from vacuum cleaners, hair dryers, electric toothbrushes and drills to blenders, a microwave, shaving machines and many more, are grouped together and all connected to each other. These are machines that surround and dominate our domestic lives. Ordinary objects that we routinely use in our everyday lives and easily replace. The machines are working, but in an unusual way, as if they are struggling to function and with interrupted moves. In fact, what the appliances are trying to do is communicate with the visitors, repeating their messages or commands spoken into a microphone, which is then "translated" by speech synthesis in the machines' noises. In *Das Vergerät* (a German neologism meaning something like "dis-appliance") the machines embody the visitors' speech in a language formed by electrical noises, they "become" and are shaped by the visitor.

Epiphyte Chamber · Philip Beesley

An epiphyte is a plant species that can grow without soil support. In a similar way *Epiphyte Chamber* consists of a breathing, responsive environment, a suspended world of complex, interwoven structures that form this organism. This nearly living space is formed by thousands of digital components, sensors, chemical systems and microprocessors. While moving around this "womb" space, visitors can trigger minute changes or motion, reflecting relations with our natural environments but also mirroring the cosmos, while creating a very personal architecture space responding and engaging differently with each visitor.

Peace Can Be Realized Even Without Order
teamLab

A big dark space is filled with hologram dancers simulating scenes of the ancient Japanese dance festival Awa Odori. It still is one of the biggest dance festivals in Japan and a symbol of music and organic dance harmony. The unorganized crowd of holographic dancers keep dancing, independently interacting with music and achieving movement and musical harmony. When visitors enter the space, the dancers stare at them as outsiders interrupting their order, only to resume it after a break of interaction and relive harmony in peace. This work is a combination of large-scale holographic and interactive technologies, high visual and auditory content and human-like interactive algorithms. It manages to achieve a highly poetical and peaceful musical space with the illusion of dancers that connect us to a primitive scenery. This experience shares a deep hope for peaceful social system in the present by connecting us to the essential human ability and ancient social systems keeping the peace.

Sound of Honda / Ayrton Senna 1989 · Kaoru Sugano, Sotaro Yasumochi, Yu Orai, Nadya Kirillova, Kyoko Yonezawa, Kosai Sekine, Taeji Sawai, Daito Manabe

Using driving data from 24 years ago, the project re-lives the legend of one of the Formula One driver Ayrton Senna's record-breaking laps. *Sound of Honda* produces an accurate sound and visual system by

setting the speakers and LED lights plotted on data of Senna's use of the accelerator and engine revs on a same race circuit as he recorded the world's fastest lap during the 1989 F1 Japanese Grand Prix.The work, combined with a pure idea of using sound data and challenging engineering systems physically set in the space, presents a very simple but powerful site-specific large-scale installation, live performance and experience of motor sports. *Sound of Honda* gives us not only the visualized experience of the data, but also a surprisingly strong emotional connection to the beauty of Senna's life. The work opens up new ways of using engineering data and technology in art showing the future of our relation to time and a hope of communicating and interacting with the invisible past and spirit in the big-data era.

Sports Time Machine · Ryoko Ando, Hiroshi Inukai
Have you ever wished you could run along with an elephant? Have you ever imagined running with yourself when you were a child? The *Sports Time Machine* uses a simple interactive installation to realize such wishes. The work makes use of sensors, projectors and computer systems to record every participant's running data. Participants can choose who to run with, competing with animals, people and even themselves in the past; in any given time they can interact with someone's archived data in the system or memory. In other words this project allows the runners' bodies to travel through past and present and communicate with others in a different way, by creating a new type of community. *Sports Time Machine* offers a unique approach in present time when everything seems to be happening in the digital space. It provides absolute experience, absolute memory as participants seemingly have sweat on their cheeks.

Swarm · James Coupe
Swarm monitors and records and, with the use of profiling algorithms, rearranges museum visitors' footage into demographically similar groups shown in a real-time video installation. The installation monitors display these homogeneous groupings of visitors, while cameras in the gallery detect people in the space, capture and identify characteristic features on them and match them with fitting crowds of similar people, based on race, age group, gender etc. *Swarm* is a very interesting work that shows our paradoxical relationship with surveillance in a world surrounded by cameras, monitoring devices and social media, while it also addresses how this culture and in particular social networking services create an illusion of community, organizing people into social categories.

The Machine To Be Another · BeAnotherLab
The Machine To Be Another does exactly what it says, putting people in each other's shoes! Two users each wear an immersive Oculus Rift headset displaying real-time video feeds from the camera attached to the opposite headset, allowing each of them to see the other person's synched movements and hear each other's thoughts. The participants engage in an act of embodiment, seeing the other person's body as if it were their own. They become the other. *The Machine To Be Another* is a fascinating open-source experiment exploring self realization, gender identity and empathy. By using a video-game device and accessible, low-budget technologies it connects people in innovative ways, helps them experience somebody else's perspective, but it also looks at the prospect of using the device in the treatment and rehabilitation of disabled people.

There is the sun · Ief Spincemaille
Sint Maartensdal, a large residential complex in Leuven, was constructed in the 60s in order to offer quality living space to the community. But despite the good intentions behind the project, due to its orientation half of the residents in block one were deprived of sunlight. With his ingenious project Ief Spincemaille brought the residents' community together. By installing a set of motorized mirrors in front of the building and creating a website, residents could "book" their sunshine slot, moving the mirrors to reflect light into their apartments, he returned the building and community to the utopian ideas that originated this construction project.

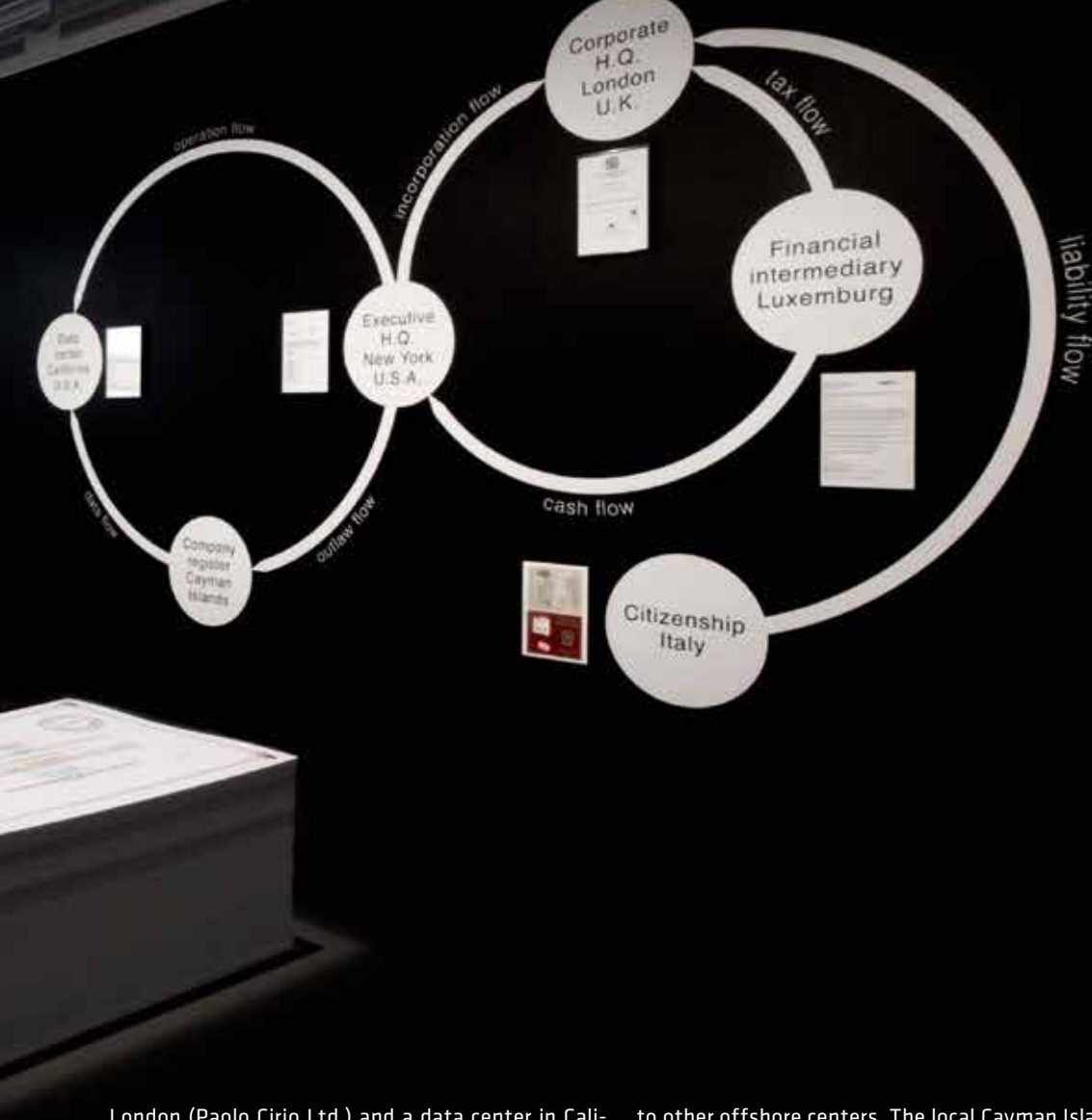
Transfigurations · Agi Haines
Transfigurations is a fascinating project presenting us with the possibilities of altering the human body. Animatronic sculptures of babies show how their bodies could be surgically modified or enhanced to prevent medical problems or to solve other potential issues such as adapting to environmental change. Biotechnological innovations can create extraordinary possibilities for healthcare in the future, from limb prosthetics to producing replacement organs, but also for "improving" the human body to benefit our lives. Eventually, advances in science, design and technology will allow us to design (perfect) bodies. *Transfigurations* offers us a glimpse into these future possibilities, opening up room for important questions to address, such as the risks of these technologies and their ethical implications.

Loophole for All

Paolo Cirio

Loophole4All.com promoted the cheap sale of the real identities of over 200,000 anonymous Cayman Islands companies in order to democratize the privileges of offshore businesses in tax havens. Paolo Cirio hacked the government website of the Cayman Islands company register to compile a list of all companies registered in the major Caribbean offshore center. He published the data for the first time, and then exposed it by digitally creating counterfeit certificates of incorporation for each company, all issued with his real name and signature.

The counterfeit certificates were published on the *Loophole4All.com* website, where everyone was invited to hijack companies' identities by buying certificates of incorporation, starting at 99 cents, enabling them to avoid tax. This massive corporate identity theft benefited from the legitimate anonymity of Caymans companies: the secrecy surrounding their real owners allows anyone to impersonate them. In short, this idea turned the main feature of offshore centers into a vulnerability, which was subsequently exploited by forging the certificates of incorporation. This performance generated international media attention, engaged an active audience, and provoked outrage from authorities on the Cayman Islands, global banks, the companies' real owners, international accounting firms and law firms. Ultimately the artist attracted ten international legal threats and two cease-and-desist letters against his artwork from Chinese companies. Using aggressive business strategies to compete against the Caymans' incorporation services, the project set up a scheme to publish the stolen information through a company incorporated in City of



London (Paolo Cirio Ltd.) and a data center in California, while the identities of the Cayman companies were sold through Luxembourg via PayPal to route the profit from the sale to Cirio's operational headquarters in Manhattan. The scheme took advantage of specific jurisdictions for legal liability, financial transactions and publishing rights. The artist used physical mailboxes in the Caymans, London and New York and set up most of the scheme using his passport, ultimately shielding his personal legal liability through his Italian citizenship. After three weeks of selling the conceptual artworks in the form of limited editions of the companies' identities, PayPal banned the account, claiming the sales activity was in violation of its acceptable use policy. This marked the end of the sale and the loss of the funds the artist had been able to collect to expand the project to other offshore centers. The local Cayman Islands press reported on the project in two newspapers and national TV, interviewing the senior registrar of the Caymans' companies register, who publicly downplayed the action and data leak and accused the artist of "scamming people." Meanwhile, a headline in Bermuda's national newspaper warned that the artist could attack the country with the same strategy. The project has also been covered in major newspapers in Spain, Greece, Italy and beyond, in relation to the causes of the severe economic crisis that affected Europe.

Cirio considers *Loophole for All* to be a performance that has both a voluntary and an involuntary audience. Some owners of Cayman companies who had asked to be removed from the website became his involuntary audience, whom he then engaged


ENERGY - TOT : 1186
OIL - TOT : 539

through e-mail and telephone conversations. Many did not contact him directly but subscribed to the project's newsletter using anonymous e-mail addresses or from the domains of global financial companies such as ey.com, hsbc.com, citi.com and kcs.com. Another audience took part in this participatory civil disobedience voluntarily by buying services provided on the website. More than 900 orders were made on *Loophole4All.com.* The artist engaged in conversations with many individuals who wanted to hijack companies to avoid onshore taxes themselves, to set up small offshore businesses or simply support the project's cause. Another form of audience participation was the project's viral nature, which generated a high level of traffic and attention by the threat to the Caymans' financial secrecy and tax exemption. An interactive element of the project included the investigation of the database, which received over 25,000 queries in the year since its publication. Keyword searches revealed that many of these were made by the owners of companies, journalists, activists and just curious people. Ultimately, several media outlets have reported names of companies that were found on the database that Cirio compiled. In addition, Paolo Cirio interviewed major tax-haven experts and produced a video documentary investigating offshore centers, exposing their social costs and suggesting solutions to global economic inequality. On the documentary section of the *Loophole4All.com* website, the artist also assembled a list of other uses for offshore centers apart from hiding assets and avoiding tax, such as misusing intellectual property or insuring high environmental and health risks. The list is the result of three years of the artist's independent research into the subject. Cirio's artwork provocatively questions the transparency, secrecy and anonymity of the global financial industry, highlighting the mechanics of institutionalized illegality and the inequality of globalization, as well as some of the origins of austerity measures such as budget cuts in public services and jobs in western countries. In particular, the website received significant traffic from India, Hong Kong, Singapore and China. Not coincidentally, these countries are frequently involved in offshore centers such as the Cayman Islands. Such offshore centers facilitate political corruption, misreport manufacturing costs and retail prices and obscure foreign investments as tricks to maximize profit from the development of these new economic powers. Yet the Cayman Islands is a UK-dependent Crown territory and can be considered the major offshore center for American and British companies during the last twenty years of the global expansion of neoliberalism.

The project's paper trail is displayed in the offline art installation with prints of the documents of the scheme set up for the operation and thousands of the counterfeit certificates of incorporation, which can be taken away by the audience. Excerpts from the video documentary are displayed on one channel, while the second channel features excerpts from an interview with the artist and an introduction to the project. Ultimately, a list of a few thousand companies selected from the database is printed on a paper wall, giving a glimpse into the vastness of today's global economy.

Supported by: Eyebeam, Creative Times in NYC

Paolo Cirio (IT) is a provocative conceptual artist working with various media and domains. He works with the idea of shaping flows of social, economic and cognitive structures, and in doing so explores systems of distribution, organization and control of information. Cirio's artworks often engage power structures, global mass media and the general public in art performances that enact contemporary socio-economic conflicts. Owing to his artistic provocations Cirio has often been subject to investigations, legal and personal threats from governmental and military authorities, powerful multinationals and financial institutions, as well as from crowds of ordinary people. For instance, his controversial artworks have unsettled Facebook, Visa, Amazon, Google, the Cayman Islands and NATO, among others. Cirio's artworks have been presented and exhibited in major art institutions, including the V&A Museum, London, 2014, the Museum of Contemporary Art, Sydney, 2013, ZKM, Karlsruhe, 2013, CCCB, Barcelona, 2013, CCC Strozzina, Florence, 2013, the Museum of Contemporary Art of Denver, 2013, MAK, Vienna, 2013, the Architectural Association, London, 2013, the Museum of Modern Art, Rio de Janeiro, 2012, the National Fine Arts Museum, Taichung, 2012, the Wywyższeni National Museum, Warsaw, 2012, SMAK, Ghent, 2010, the National Museum of Contemporary Art, Athens, 2009, the Courtauld Institute, London, 2009; PAN, Naples, 2008, MoCA, Tapei, 2007, the Sydney Biennial, 2007, and NTT ICC, Tokyo, 2006. He has had solo shows at the Casa Gallery, Istanbul, Turkey, 2013, and at Aksioma | Project Space, Ljubljana, Slovenia, 2011 and 2013. Cirio has also curated panels series at The Kitchen, New York, 2012, and Eyebeam, New York, 2013.

Balance From Within

Jacob Tonski

Balance is delicate, and sometimes we fall down. A 170-year-old sofa balances precariously on one leg, constantly teetering, responding internally to external forces.

Relationships are balancing acts, and delicate ones at that. This idea turned into a balancing sofa as I was thinking about how all our social interactions can be found on these humble pieces of furniture: dinner, chatting, sex, job interviews, even death. Is it surprising that we construct such a solid footing to support the delicate dance of relationships, so prone to losing their rhythm and falling down? These ideas of foundation and fragility seemed so distinct and yet inseparable that I became interested in trying to illuminate it a bit. The result emerged as something both sincere and absurd.

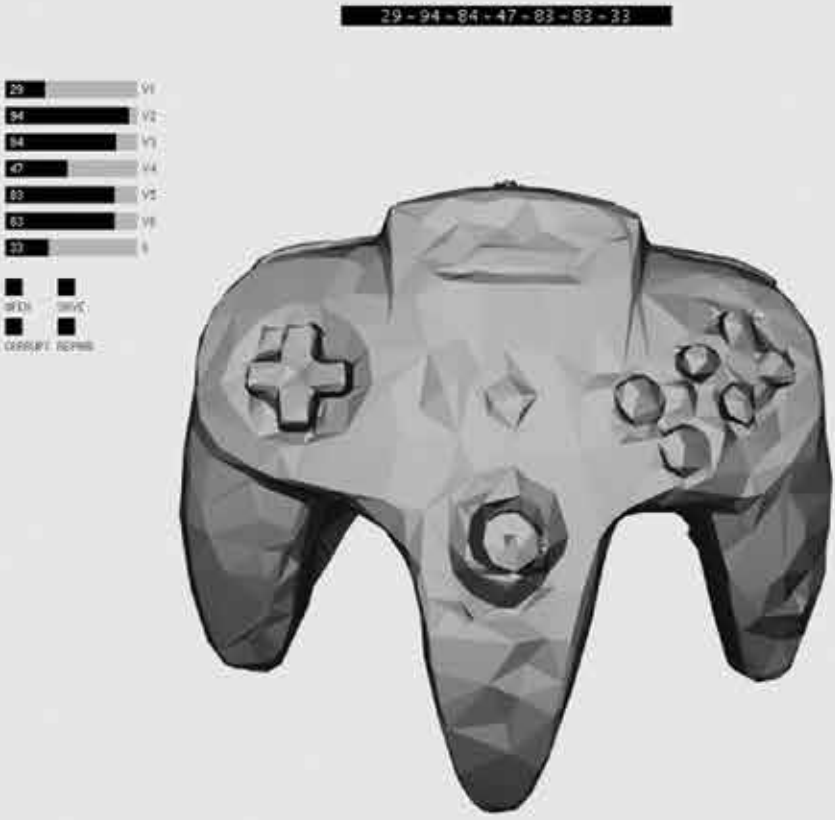
This sculpture is a sofa, stood semi-upright, which balances on one leg, via an internal robotic mechanism. A low groan, the volume below that of normal speech, is emitted intermittently by the motors as the piece struggles to remain upright. There is a box on the floor enclosing batteries and controls, connected via a flexible steel cable conduit.

The project had two unique technical and artistic goals. The primary one was to create a kinetic metaphor for the inherent risk in social relations, which was authentic, rather than illusory. Secondarily, I was interested in whether an object could actually be balanced perpetually on a fixed point.

The internal mechanism of the sculpture is based on a concept known as a reaction wheel, a technology most often deployed in satellites to correct spatial orientation. Rather than shift its center of mass in reaction to falling, or employ gyroscopic forces, freely spinning motors apply torque to the frame of the sofa, causing it in turn to attempt to rotate in the opposite direction, effecting a weight shift about its foot on the ground.

Supported by: Frank-Ratchye Studio for Creative Inquiry, Miami University College of Creative Arts

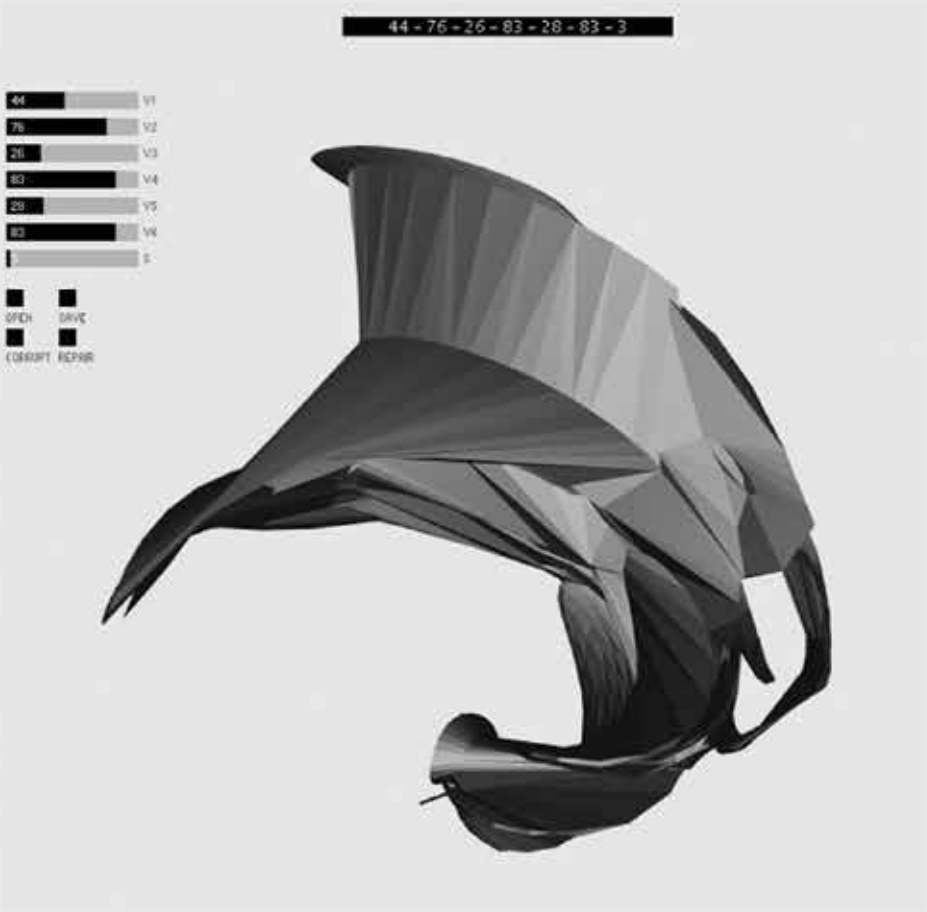
Jacob Tonski (US) has an MFA from the design | media arts department at UCLA. He studied computer science at Brown University and worked as a technical director at Pixar Animation Studios. Recently he has presented at the Haystack Mountain School of Craft and The School for Poetic Computation. He was awarded a 2013 Sustainable Arts Foundation grant and was a 2010 fellow at the Carnegie Mellon University Studio for Creative Inquiry. He is currently an assistant professor of art and interactive media studies at Miami University, Ohio, and in 2015 will be joining the faculty of the Art and Technology Studies Department at the School of the Art Institute of Chicago. His creative work has been exhibited in China, Brazil and throughout Europe and the United States.



Disarming Corruptor

Matthew Plummer-Fernandez

Disarming Corruptor is a tool for doing reversible damage to your STL mesh file—the file format that describes the 3D surfaces used in computer-aided design and manufacture. This means you can obliterate it into something totally unrecognizable, share it online under its new guise, and selectively distribute the key code to recipients so they can reverse the damage and retrieve the original object. In a time of prolific online espionage, crackdowns on file-sharing and a growing concern for the 3D printing of illegal items and copyright-protected artifacts, DC is a free software application that helps people to circumvent these issues. Inspired by encryption rotor machines such as the infamous Enigma Machine, the application runs an algorithm that is used both to corrupt STL files into a visually illegible state by glitching and rotating the 3D mesh and to allow a recipient to reverse the effect to restore it to its original form. The file recipient would need both the application and the unique seven-digit settings used by the sender, entering the incorrect settings would only damage the file further. When patent trolls and law enforcement agencies find these files on sharing sites they will only see abstract contortions, but within the trusting community these files will still represent the objects they are looking for, deliberately in need of repair. *Disarming Corruptor* was released with deliberate ambiguity as to whether it was a serious app for IP circumvention or an art project commenting on the issues it highlighted through its apparent purpose. This ambiguity provoked many reactions from the press and the public. Interestingly, the proj-



ect attracted people both interested in protecting IP and in circumventing it, as the software's key-code access could also be appropriated as a crude digital-rights management system.

The unknown corrupted artifacts created and distributed by public users are also considered part of the artwork. In this sense *Disarming Corruptor* functions like a generative art app that generates new 3D artifacts, under the guise of an encryption tool. Since the app retains the file format and distorts the form into something new, the objects can be considered new remixes of the original form, forms created as a by-product of another purpose.

The app was created with Processing.

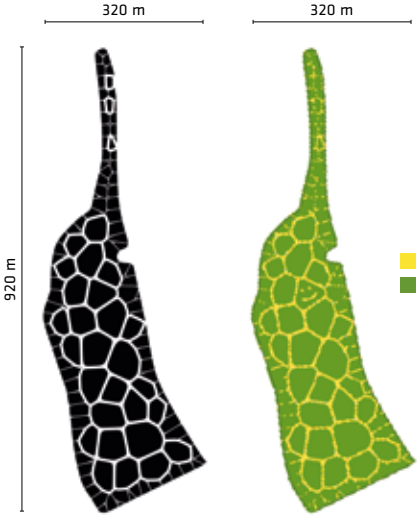
Matthew Plummer-Fernandez (UK), born in 1982 in London, makes art in order to critically and playfully examine emerging technology and culture. Plummer-Fernandez received his MA from the Royal College of Art in 2009, after a BEng in computer-aided mechanical engineering at Kings College London and an unfinished BA in graphic design from UCCA. His work has been exhibited and published globally, including relevant articles in *The Guardian, Wired, Forbes, Creative Applications, Rhizome,* and *The Creators Project,* and has received commissions from Abandon Normal Devices, Arts Co, It's Nice That, and Selfridges. He is currently based in South East London, working in research at the Interaction Research Studio, Goldsmiths, University of London.

Avena+ Test Bed Agricultural Printing and Altered Landscapes

Benedikt Groß

Avena+ Test Bed explores the relationship between landscape, agriculture and digital fabrication. With the advent of precision farming, agriculture has become fully mapped and will transform farming into a highly digital activity. In combination with other changes underway in the countryside, mainly the paradigm shift from food to biogas production and various EU subsidy schemes to promote diversity, within the next few years this will lead to disruptive changes for the (European) countryside. The project uses the idea of "agricultural printing" to explore the possibilities of digital fabrication carried over into farming. The experiment applies algorithms to partition and to create an environmentally beneficial structure in a standard biomass/energy production field. These additional areas establish or improve the connectivity between habitats for fauna and flora. This increased diversity also eases typical problems of monocultures, e.g. fewer vermin → reduced usage of pesticides. Furthermore a farmer could "rent out" the areas for several months a year as a compensatory area in the same way as the CO_2 emissions trading scheme works (in the EU all new building land has to be compensated; there is already a market for these areas). Hence in the near future a farmer might not just produce oats, peas, beans and barley, but also print "environment compensations areas" into his fields. The overall aim of the project is to look into the potential of these changes (already underway), especially in terms of design opportunities. The emphasis lies in speculating about new models that would enhance current agricultural practices, and to then imagine their possible implications.

The project was made possible with the generous support of:
Maximilian Erbgraf zu Königsegg-Aulendorf
Hubert Geser, administrator Hofgut Stefansreute
Lorenz Riegger, project engineer/AGCO
Advice and special thanks: Roland Groß



15% eleven different flowers and herbs
Plants: 85% oats (Avena sativa)

Dimensions: 11.5 hectares (320 m x 920 m)
in Unterwaldhausen, South Germany

Benedikt Groß (DE) is a speculative and computational designer who works in an antidisciplinary way. His work deals with the fascination of relationships between people, their data, technology and environments. He is particularly interested in speculating about these relationships in the near future. He uses design as a vehicle to visualize potential implications and scenarios. Most of the time Benedikt's working mode can be described as "thinking through making;" his preferred making material is software. In 2013 he graduated from the Design Interactions course at the Royal College of Art. He is co-author of *Generative Design,* in 2010 one of the best-selling German design books with translations into English (Princeton Architectural Press) and French (Design génératif, Editions Pyramid). He now lives in Stuttgart, Germany, and runs a studio working with commercial clients and self-initiated research projects on the intersection between data, computational design and speculative design. Currently he is also a visiting tutor for digital culture and data visualization at the Hochschule für Gestaltung, Schwäbisch Gmünd.

Captives

Quayola

Captives is an ongoing series of digital and physical sculptures, a contemporary interpretation of Michelangelo's unfinished series *Prigioni* (1513–1534) and his *non-finito* technique. The work explores the tension and equilibrium between form and matter, man-made objects of perfection and complex, chaotic forms of nature. Whilst referencing Renaissance sculptures, the focus of this series shifts from pure figurative representation to the articulation of matter itself. As in the original *Prigioni,* the classical figures are left unfinished, documenting the very history of their creation and transformation. Mathematical functions and processes describe computer-generated geological formations that evolve endlessly, morphing into classical figures. Industrial computer-controlled robots sculpt the resulting geometries into life-size "unfinished" sculptures. By redeploying historical works, *Captives* foregrounds a series of contemporary shifts between mathematical and figurative description, situating objecthood on a continuum without a natural beginning or end.

Co-Production: Elmsly–MU Gallery
Manufacturing: Odico
Software: Natan Sinigaglia, Matt Swoboda, Julien Vuillet
Sound: David Kamp
Z-Brush: James Hardingham
Assistants: Matteo Zamagni, Aymie Backler
Supported by: MU Gallery, Eindhoven, Holland
Manufacturing, CyberArts Exhibition: voxeljet AG

Quayola (IT). Highly regarded for his enigmatic video installations, Quayola creates hybrid spaces of animated painting and sculpture. Engaging a practice of audiovisual performance, drawing, photography and software programming, he explores a fine boundary between the real and the artificial. Special institutional commissions of Quayola's work have allowed him exceptionally rare access to the art and architecture of churches, theaters and museums in Europe, such as Notre Dame and the Vatican. In his work, original masterpieces and collections become the raw canvas, as Quayola anchors a video-based exploration in a conversation about archives, collage, intellectual property and the appreciation of an object. Also a frequent collaborator on musical projects, Quayola has worked with composers, orchestras and musicians including the Ensemble Intercontemporain, Vanessa Wagner, Mira Calix, Plaid, Matthias Kispert and the National Orchestra of Bordeaux. In 2005 he was awarded a BA from the University of the Arts London.

Clouds

James George, Jonathan Minard

Clouds is an interactive, generative, documentary that allows the viewer to explore different perspectives at the intersection of code and culture. Filmed using a new 3D cinema format called RGBD and created entirely with open-source software, *Clouds* uses a data-driven "story engine" to present an endless, ever-changing conversation. The interview subjects in *Clouds* are an intergenerational community of more than 40 artists, designers, hackers and thinkers. They discuss the challenges of developing new forms of expression that resonate at a deeper human level. The documentary captures the story of collaboratively inventing open-source tools that form the foundation of a global creative culture. Interview subjects include founders of free creative coding platforms, such as Casey Reas and Zach Lieberman, as well as critical perspectives from thinkers like Bruce Sterling and Régine Debatty. *Clouds* is not a linear film, but a real-time executable that generates sequences of dialog based on interactive input. Each of the interviews has been edited into individual fragments and richly tagged. An algorithm then leaps from clip to clip, creating new conversations on the fly, while preserving continuity of ideas and themes. Viewers use gesture and spatial interaction metaphors to chart a course through the rhizomatic content space. Developed entirely with openFrameworks, the *Clouds* interviews are intercut with illustrative "visual systems": real-time graphic modules contributed by leading computational artists and designers. *Clouds* also features a completely generative score, whose timbres and motifs are governed by the story engine as well.

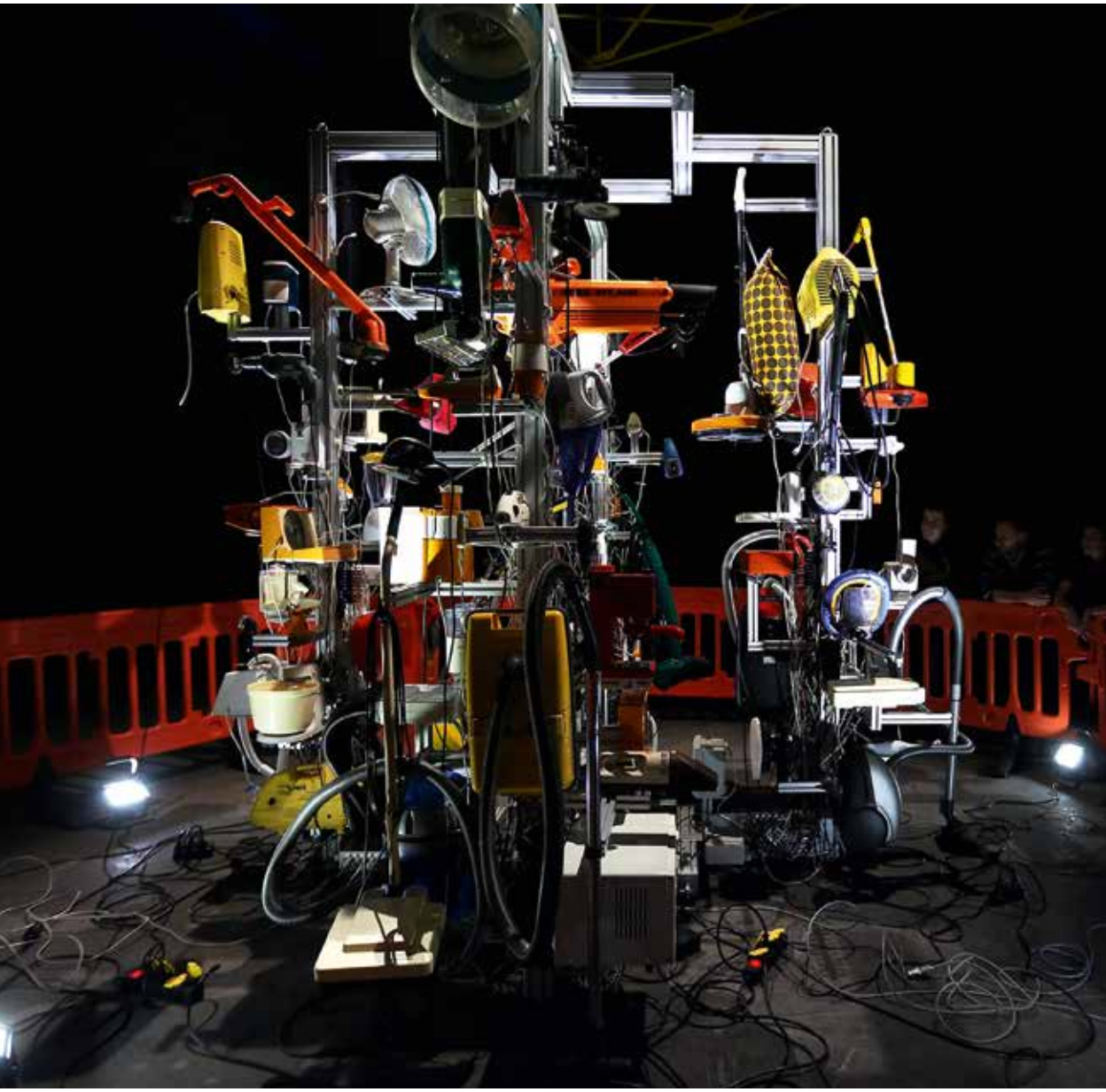
Clouds is presented as an interactive installation where visitors select an initial question to seed the story engine with their topic interest. They are then presented with a stream of interviews and interactive visualizations illustrating a response to the topic. Interaction is done through gesture using a Kinect and a large screen, or through gaze when using an Oculus Rift virtual reality head-mounted display. The list of interview subjects includes Aaron Koblin, Andres Colubri, Bruce Sterling, Casey Reas, Chris Sugrue, Damian Stewart, Daniel Shiffman, Diederick Huijbers, Elliot Woods, Fernanda Viegas, Golan Levin, Greg Borenstein, Javier Fadul, Jen Lowe, Jer Thorp, Jesse Louis-Rosenberg, Jessica Rosenkrantz, Joel Lewis, John Maeda, Josh Nimoy, Julia Kaganskiy, Julian Oliver, Karolina Sobecka, Karsten Schmidt, Kevin Slavin, Kyle Chayka, Kyle McDonald, Lauren McCarthy, LIA, Lindsay Howard, Marcus Wendt, Marius Watz, Martin Wattenberg, Paola Antonelli, Patricio Gonzalez-Vivo, Philip Whitfield, Rachel Binx, Ramsey Nasser, Regine Debatty, Shantell Martin, Sofy Yuditskaya, Theo Watson, Vera Glahn and Zach Lieberman. *Clouds* also features original visualizations contributed through code commissions by Shantell Martin, Zach Lieberman, Nervous System, Marius Watz, Karolina Sobecka, Casey Reas, Satoru Higa and Josh Nimoy.

Directors: James George, Jonathan Minard. Executive producer: Golan Levin. Producer: Winslow Porter. Design director: Bradley Munkowitz. Music: R Luke DuBois. Lead programmers: Elie Zananiri, Lars Berg, Surya Mattu. Interface design: Sarah Hallacher, Erica Gorochow. Additional music: Julian LaPlace, Tony Lim. Additional programming: Patricio González Vivo, Reza Ali, Gal Sasson, Omer Shapira, Michael Allison, Jeff Crouse. Sound mixing: Brett Murphy
Supported by: CMU Frank-Ratchye Studio for Creative Inquiry. CMU Center for Computational ThinkingKickstarter. Microsoft. Eyebeam Art + Technology Center. Yamaguchi Center for Arts and Media. NYU Interactive Telecommunications Program

James George (US) is an artist who uses code to discover creative potential in emerging technology. Recently he has been applying computation and photography towards portraiture and narrative. James created the DepthKit, a widely used open-source software for exploring the application of depth sensing cameras to 3D cinema. James holds a BSc in computer science from the University of Washington, Seattle. His work has been supported through residencies at the Studio for Creative Inquiry at Carnegie Mellon University, Eyebeam Art and Technology Center, Yamaguchi Center for Arts and Media, and Microsoft Research. **Jonathan Minard** (US) is a new-media documentarian who approaches technology through an anthropological lens. His work follows cultural shifts at the frontiers of science and art, and develops new cinematic techniques for crafting stories of invention and discovery. At the Carnegie Mellon Robotics Institute he was a filmmaker in residence in a lab competing in the Google Lunar X Prize to send a robot to the Moon. He is a fellow at Eyebeam Art and Technology Center and the Studio for Creative Inquiry in Pittsburgh.

Das Vergerät

Boris Petrovsky



Das Vergerät addresses the relationship between humans and machines, technology as a social construction and its visual, metaphorical and verbal language. Visitors can initiate communication via software; the message is translated by the interconnected blenders, coffee grinders, espresso machines, vacuum cleaners, microwaves, drills, electric toothbrushes, shavers, hair dryers, drying hoods, knives, epilators, knife sharpeners, massage machines, fans, fan heaters, high-pressure cleaners, floor and car polishers, lawnmowers, leaf blowers, chainsaws etc. and repeated in machine idiom. The strong physical presence of the appliances and their processes triggered by the software leads to the hidden or non-addressed aspects of technology in daily life, which are usually covered up by the fancy, colorful product design of their interface. They transform surroundings and the domestic realm into technotopical spaces. And they become body and speech organ extensions of the "users." *Das Vergerät* (a German neologism) means something like "dis-appliance." 100 used electric household appliances are interconnected and spatially configured as a meta-machine or meta-appliance or as a model of smart homes. 100 is the average number of appliances found in a middle-class household. If "users" record an up to ten-second message into a microphone, the appliances repeat it with their noise, or they try to. What sort of understanding is there between men and machine? Is understanding possible? The phrases of the "users" become commands that run the appliances, controlled by the timbre of their voice and the melody of a spoken message and selected by the phonemes. The words and content of a message become a "significant" control without a controllable meaning. At the same time the messages will be repeated by a speech synthesis based on the noise of the appliances. When they start running and repeat the user's message, it is as if they are confirming a command by repeating it. Then air is mechanically mixed, cut, ground, sucked, compressed, blown, drilled, rolled, stirred up, vibrated, heated up and cooled by the appliances as they consume electricity. The human voice is translated into machine idiom and at the same time "incarnated" by the appliances. Boris Petrovsky's work deals with the connections between idea, sign, concept and object in a media-centric world. His objects and installations, which become "processors" of communications, information and their contexts through light, sound and kinetics, are characterized by the investigation of the construction of reality. They are frequently virtually extended or networked across different locations over the Internet. Petrovsky's art thus invokes a critical state between work, tool and raw material, between chaos, cluster and form, between illusion, manipulation and conspiracy.

Programming, interface: Georg Nagel, Nina Martens
stereomorph.net
Supported by: MAC Maison des Arts de Créteil
Kunstkommission der Pädagogischen Hochschule Kanton Thurgau

Boris Petrovsky (DE) studied at the University of Fine Arts (HfBK) Hamburg. He lives and works in Konstanz. He received awards at the Prix Ars Electronica 2010 and the Japan Media Arts Festival 2012, exhibited at the Center for Art and Media in Karlsruhe (ZKM), in the festivals Mikro Makro 2014 and Paranoia 2010, the DEAF Biennale (Dutch Electronic Arts Festival) 2014 in Rotterdam, the Mapping Festival 2011 in Geneva, the Center for International Light Art in Unna 2013 and the Kunstmuseum Celle 2014, Scheinwerfer-Light Art in Germany in the 21st Century. He was represented in the media art collection of the ZKM and in the German National Library in Leipzig.

Epiphyte Chamber

Philip Beesley

Epiphyte Chamber explores a new generation of interactive and responsive spaces, raising fundamental questions about how architecture might behave in the future. Might future buildings begin to know and care about us? Might they start, in very primitive ways, to become alive? The work is conceived as an "epiphyte," an aerial plant species that can grow without the support of soil. Across each floating island, densely interwoven structures and delicate canopies made of thousands of lightweight digitally fabricated components are drawn together in nearly synchronized breathing and whispers. Audiences walk into highly sensual, intimate sculptural spaces that support small clusters of activity interlinking into larger gathering areas. The installation was part of the inaugural Aleph Exhibition at the Museum of Modern and Contemporary Art in Seoul. *Epiphyte Chamber* features interactive lighting systems and kinetic mechanisms that use dense arrays of microprocessors and sensors. The work contemplates the ability of an environment to be near-living, to stimulate intimate evocations of compassion with viewers through artificial intelligence and mechanical empathy. Like any ecology and any material system, these environments are partial, reacting only to certain excitements and evincing awareness only of certain things. The viewer will become aware of subtle impacts: air, moving around the body, perhaps changes in surrounding magnetic fields that one disturbs as they pass. The work offers dimensions scaled close to the human body, revealing subtle phenomena and complex organizations within scales that work progressively outward from hand- and body-based dimensions toward forms of small groups and collective meeting spaces.

Epiphyte Chamber has evolved from Philip Beesley's *Hylozoic Series,* where hylozoism refers to the ancient belief that all matter has life. The new installation

offers a deeper exploration of the interpersonal and collective physical exchanges between audience and installation through investigations into human-scale gesture and auras. This pursuit points to practical work, and also an examination of the psychology of encountering and working within an interactive environment.

Epiphyte Chamber: Martin Correa, Jonathan Gotfryd, Andrea Ling
Collaborators: Rachel Armstrong, Brandon Dehart, Rob Gorbet
PBAI Studio: Sue Balint, Matthew Chan, Vikrant Dasoar, Faisal Kubba, Salvador Miranda, Connor O'Grady, Anne Paxton, Eva Pianezzola, Sheida Shahi, May Wu, Mingyi Zhou,
Supported by: Social Science and Humanities Research Council of Canada, Natural Sciences and Engineering Research Council of Canada, Waterloo Architecture, Ontario Arts Council

Philip Beesley (CA) is a Toronto-based interdisciplinary artist and experimental sculptor/architect who pursues near-living qualities in immersive interactive sculpture environments. Beesley is also a professor of architecture at the University of Waterloo. Dedicated to expanding the role of the arts integrated within architecture, for the past three decades Beesley has worked in sculpture, next-generation digital media and cross-disciplinary experimental visual art. His experimental projects over the past decade have increasingly focused on immersive digitally fabricated lightweight "textile" structures, while the most recent generations of these works feature interactive kinetic systems that use dense arrays of microprocessors, sensors and actuator systems to explore interactions between individuals and environments.

Peace Can Be Realized Even Without Order

teamLab

The interactive digital installation *Peace Can Be Realized Even Without Order* consists of a seemingly endless number of holograms. The figures shown in the holograms exist independently of one another, they play instruments and dance, and each individual is influenced by the sounds from the figures close to them. There is no lead figure that oversees or can influence all the other dancers, and there is also no center or order imposed on the crowd. External events can cause disorder, but then in time peace will gradually be restored.

When someone enters the installation and a figure senses the viewer, the figure responds to their presence and stops playing music. The figure passes on this information to other figures close by. After a short period of time the figure will start playing music and dance again, but this disturbance will have disrupted the harmony. If, however, the viewer stands still or leaves, the dancers will begin to re-form into one harmonious group and the feeling of peace will return.

In Japan there is a primitive festival called the Awa Dance Festival that dates back so far that its origins are unknown. Groups of individual dancers play music and proceed around the town arbitrarily. Groups play their own music as they like and dance as they like. Interestingly, for some reason the music forms into a peaceful order across the whole town. Dancers who randomly meet other groups of dancers gradually and unconsciously match the tempo of their music to the others'. This is not due to any set of rules; it just feels right and happens unconsciously. It seems that people are freed of their inhibitions, and an extraordinary peaceful feeling prevails despite the lack of any order to the dances. Perhaps this is how people in ancient times maintained a feeling of peacefulness.

Sound: Hideaki Takahashi
Vocals: Yutaka Fukuoka, Yumiko Tanaka

TeamLab (JP, CN, ROC) was founded in 2001 in Tokyo. TeamLab is an ultra-technologists' group made up of specialists including programmers (user-interface engineers, database engineers, network engineers, hardware engineers, computer-vision engineers, software architects), mathematicians, architects, CG animators, web designers, graphic designers, artists, editors and more. We create works through "experimentation and innovation," making the borders between science, technology, art and design more ambiguous.

Peace Can Be Realized Even Without Order

http://www.team-lab.net/en/all/pickup/peace_sg.html
http://youtu.be/OUQ9L5ELPwo

Sound of Honda / Ayrton Senna 1989

Kaoru Sugano, Sotaro Yasumochi, Yu Orai, Nadya Kirillova, Kyoko Yonezawa,
Kosai Sekine, Taeji Sawai, Daito Manabe

Honda's Internavi car navigation system designs drivers' journeys using vehicle log data. *Sound of Honda / Ayrton Senna 1989* used 24-year-old Formula One data to bring an Ayrton Senna race back to life in sound and light. The data from the then world's fastest lap, by Senna in the qualifiers for the 1989 F1 Japanese Grand Prix, was digitally reconstructed and analyzed. By matching this with recordings of MP4/5 cars, reproductions were created of the engine sounds at the time. Installing speakers and LED lights along the 5,807-meter Suzuka circuit, the reproduced engine sounds were paired with motion data from the race. The 1:38:041 lap time was recreated on a website in 3D computer graphics using WebGL (an API for displaying 3D graphics in a browser), enabling viewers to experience Senna's performance online. A smartphone app also allowed drivers to enjoy the sounds of Senna's lap in their cars.

Supported by: Dentsu Inc., Qosmo Inc., Rhizomatiks Co., Ltd.

Kaoru Sugano (JP), creative technologist at Dentsu. **Sotaro Yasumochi** (JP), planner and copywriter for TV commercials at Dentsu. **Yu Orai** (JP), art director at Dentsu. **Nadya Kirillova** (RU). Born in St. Petersburg in 1984 and grew up around the world. Copywriter at Dentsu. **Kyoko Yonezawa** (JP), creative technologist at Dentsu. A cat-lover. **Kosai Sekine** (JP), video artist. Directs TV commercials, music videos and films. His output is distinguished by its international range, including cross-cultural storytelling and experimental work. **Taeji Sawai** (JP), sound artist and a director at Qosmo. He focuses on effects that produce sounds in a range of environments, and works across many fields, including product design, advertising, web design and film. In his solo work he also produces performances and installations at overseas festivals such as Sonar. **Daito Manabe** (JP) works as an artist and a programmer. Director at the Rhizomatiks design company and the hackers' space 4nchor5 La6. He does groundbreaking work in entertainment and a variety of other areas through sophisticated programming technology, exhaustive research and audacious ideas.

Sports Time Machine

Ryoko Ando, Hiroshi Inukai

The *Sports Time Machine,* a device that lets you race against previous running records that are projected onto the wall, was premiered as part of the tenth anniversary celebration for the Yamaguchi Center for Arts and Media. Runners can attempt to break their own records, as well as racing against family members, friends and animals, with race records simultaneously saved as 3D data. It focuses on the act of running as not only a memory but also how it can remain as media, offering physical communication through sports, across the past, present and future. The venue was set up in a shopping street in cooperation with many Yamaguchi citizens and artists. The Media Undokai (Great Media Sports Fest) festival and workshop were held during the event, while citizens organized a conference, and the online features are continuing to expand. Looking ahead to Rio 2016 and the 2020 Tokyo Olympics, it will develop as a project that connects with the future. Unlike memories, which can never be retrieved, the machine preserves and stores the experience as a medium and can share it with others in the future. With the machine, you experience physical communications where the past, present and future intersect through sports. The machine also continuously updates its function in the same way as traditional sports have from their very beginnings. While it is shared in local communities, the machine is simultaneously developed, maintained and revised by reflecting the way it is being played. When we exhibited in Yamaguchi, those playing a keen part in the milieu of the machine included IT engineers, families, people who worked nearby and kids who became very curious about it. What the machine actually did in Yamaguchi was to expand the concept of sports in a local community through IT, and as a result it blended technologies further into people's everyday lives. People who came to the exhibition familiarized themselves with the idea of what future sports would be like in the IT era, and willingly participated in making it. Players of the game became the key players in the Yamaguchi City's local community.

After playing, the data were collected and uploaded to the cloud-based servers on which players can manage data on their personal pages. Such ubiquitously expanded functions are another important aspect of the machine. We believe that this openness is distinctively similar to what conventional sports have done in our societies, and this is one way in which future sports will contribute to communities.

Ryoko Ando (JP), an interior designer, mainly designs clothing and food shop interiors, but also produces/directs exhibition spaces, shop displays, brand CIs/VIs and packages among other things. She specializes in playful, handmade design, and has been involved in the production of installations, DIY workshops and the creation and sale of braided flowers (hanaami) with her Wakayama-based grandmother, and other activities aimed at making practical use of designs and ideas in everyday life. **Hiroshi Inukai** (JP), a game director and e-sports producer, studied under film director Masashi Yamamoto and later became a game director. He focuses on the creation of competitive games exclusively based on his perception of video games as communication tools connecting individuals. He hosted the Japanese qualifications for "computer-game Olympics" types of games, such as WCG or CPL, and participated in the world championships. Recently he has been focusing on "e-sports", which are emerging from the marriage of IT (games) and sports as a type of sport for the information society, He advocates "spacemanship" as contemporary sportsmanship and is researching a next-generation form of "play" that involves artificial intelligence

Swarm

James Coupe

Swarm takes the logic of social media—demographically organized communities based around common interests, habits and markets—and transposes it onto gallery audiences. Using four rows of monitors, the work generates competing panoramic representations of the gallery space that appear to be exclusively occupied by specific groupings of people—men in their 20s, women in their 50s, people of Asian descent, people dressed in black, men with beards. Each group is shown as what appears to be a live video image, with people inserted into a "crowd" alongside others who have previously visited the gallery. Some crowds are much larger than others—a large group of middle-aged white women on one panorama, standing around, waiting for something to happen, may juxtapose with a solitary Latino male on another. Different demographic groupings territorialize the gallery's spaces, their numbers dynamically expanding and contracting.

Swarm is inspired by J.G. Ballard's *High Rise* (1975), a novel in which a thousand people live in close proximity in a modern apartment building. Eventually, the pressures of isolated yet claustrophobic living causes the residents of the high-rise to form clans organized around class demographics. The situation rapidly becomes monstrous, as residents begin killing each other in order to assert control of their environments. For Ballard, the residents are cool, unemotional, desensitized, with a minimal need for privacy and capable of thriving within the closed environment of this "malevolent zoo":

[The residents had] "no qualms about the invasion of their privacy by government agencies and data-processing organizations, and if anything welcomed these invisible intrusions, using them for their own purposes. These people were the first to master a new kind of late-twentieth century life. They thrived on the rapid turnover of acquaintances, the lack of

involvement with others, and the total self-sufficiency of lives which, needing nothing, were never disappointed".

Ballard's description of the paradoxical conditions of isolation and proximity in *High Rise* is analogous to the effects of 21st century social media. Virtual environments such as Facebook have successfully colonized our social existences, in part because of their efficiency and viral expansion into our daily lives. Users are willing to offer up their privacy to social media systems because they simplify the individual management of our social lives. In return, we are confronted with systems that take control over who we know, what we know about them and how those relationships are framed, remembered and proceed. Social media technologies involve a redistribution of identities based upon principles of demographic segmentation, social exclusivity and the illusion of community. Just as in *Swarm* and *High-Rise,* the collision of individual and masses involves a psycho-pathological breakdown, re-mapped by technology.

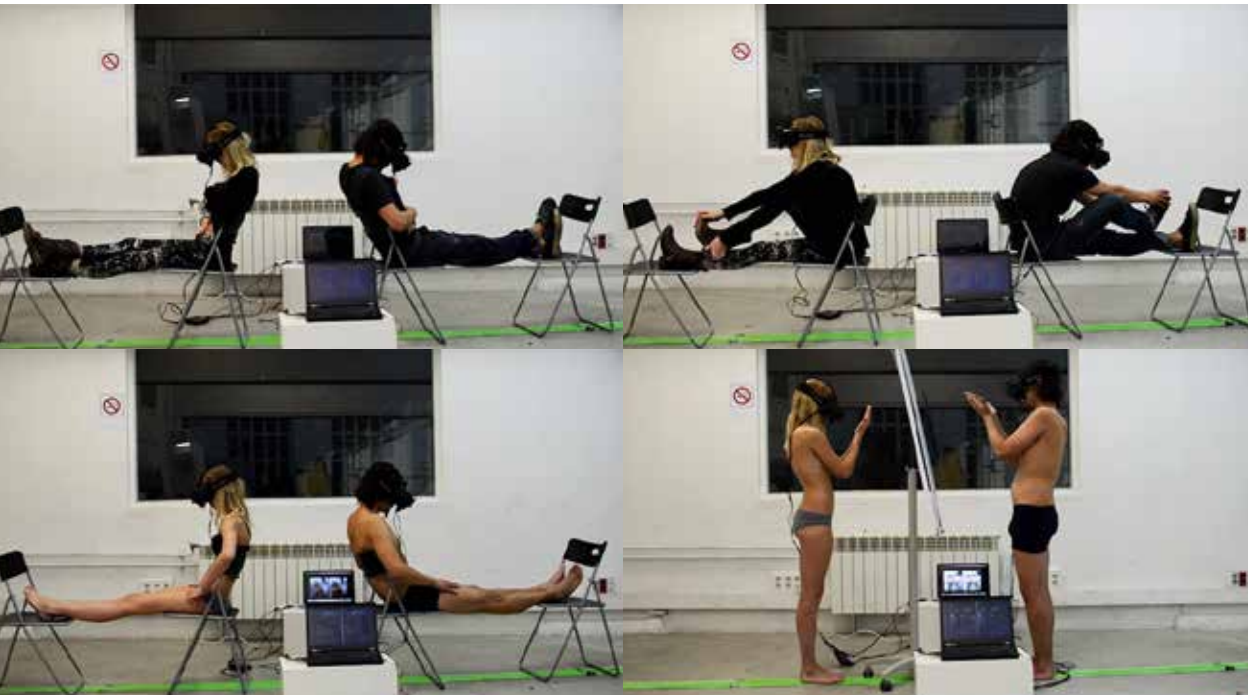
Swarm uses four stereo cameras and computer-vision algorithms to profile people in the gallery, calculate their location and add them to a database. The video panoramas are made by analyzing the database and selecting specific groupings of people. Crowds are composed by calculating the relative positions of people in each group and displaying as many as possible without occlusion. The groupings are selected dynamically–typically, one screen always shows the majority demographic, one the minority, another the same group as a person in the gallery, with the other panorama rotating between various dynamically selected demographics.

Commissioned by the Toronto International Film Festival, presented in partnership with the Museum of Contemporary Canadian Art
Co-curated by Noah Cowan, artistic director, TIFF Bell Lightbox and David Liss, artistic director/curator, MOCCA.
Created with support from Creative Capital and DXARTS, University of Washington
Programming: Yi Ding; Fabrication: Tivon Rice
Special thanks to John Robinson, University of York

James Coupe (UK) is an artist whose work is concerned with systems of observation and control. He has received numerous commissions, grants and fellowships from organizations including Creative Capital, the Toronto International Film Festival and the Mellon Foundation. His work has been exhibited widely in the UK and North America, at venues such as Camden Arts Centre, Parsons The New School for Design, and the Museum of Contemporary Canadian Art. He is an associate professor of digital art and experimental media at the University of Washington. Further documentation of his work can be found at *http://www.jamescoupe.com*

The Machine to Be Another

BeAnotherLab



The Machine To Be Another is an embodied interaction system that merges human performance with neuroscience protocols and telepresence experiments. The system offers users an immersive experience of what it feels like to be in the body of another person. At heart a long-term investigation about identity and empathy, *The Machine to Be Another* aims to work as an open tool for social relations that asks the questions: By understanding the other, can we better understand ourselves? What would the world be like if we could really see through the eyes of the other, and if we really put ourselves in someone else's shoes?

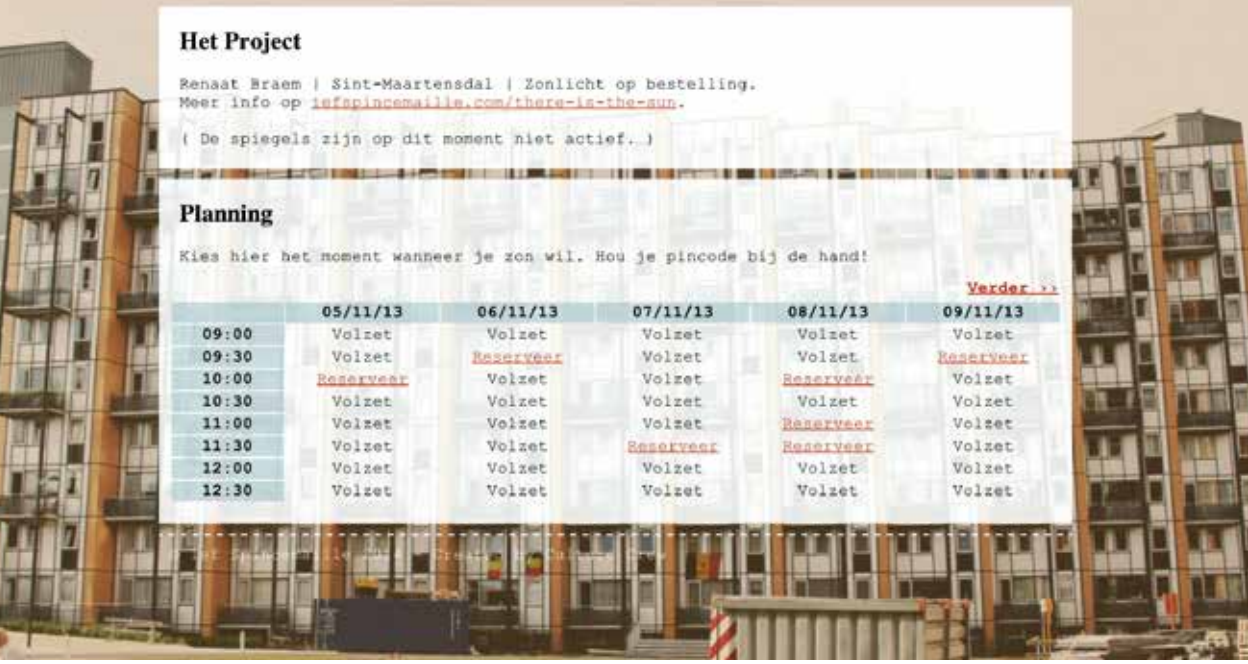
The system has been used in performances/experiments investigating bias toward immigrants, mother-daughter relationships, body extension for functional diversity, pain tolerance and gender identity. In each case, our methodology consisted of working with focus groups of interested parties, which were co-designed performances that included practices drawing from storytelling or physically integrated dance. The system ensures the multisensory integration of aural, visual, proprioceptive and haptic stimuli that produce the psychophysical phenomenon of embodiment.

Our approach stems from studies in embodied cognition; building on recent discoveries, such as mirror neurons and their relation to empathy, which reveal, among other things, that our experience of the world is deeply tied to that of others. As Giacomo Rizzolatti wrote, "How bizarre it would be to conceive of an I without an Us." Adapting neuroscience protocols from institutions such as Group Ehrsson (Stockholm) and EventLab (Barcelona), we explore embodiment techniques and technology within a dynamic artistic framework that fosters connections between diverse fields of scientific and sociological enquiry. In order to expand the reach and application of this project

we use low-budget technology, have released our code under a Creative Commons license and openly publish our results to encourage the development of other projects that build on our platform.
Our interdisciplinary approach has attracted the interest of international media and researchers ranging from anthropology and human-computer interaction to neuro-rehabilitation, queer theory and conflict resolution.

BeAnotherLab: art collective composed of Philippe Bertrand (BR), Christian Cherene (UK) Daniel González Franco (CO), Daanish Masood (SA/US/IN), Marte Roel (MX), Arthur Tres (FR) in collaboration with an open-source community of researchers, artists and members of the public.

BeAnotherLab (Transnational) is a group of six interdisciplinary investigators with backgrounds in digital arts, engineering, cognitive sciences, interactive media, conflict resolution and social relations. United by a dream of "raising empathy among individuals," they independently researched the issue for almost two years in collaboration with several artists, amateurs and researchers from anthropology to neuroscience, which led to a series of performances suggesting new avenues for the study. The group is currently creating an open-source community to investigate applications in conflict resolution and healthcare.



There is the Sun

Ief Spincemaille

Order sunlight online!
In the 60s one of the biggest residential complexes in Leuven (Belgium), Sint Maartensdal, had the goal of creating a modern social commune made of identical apartments. In spite of the architect Renaat Braem's idealistic intentions, the Sint-Maartensdal site has a fundamental inequality: only half of the occupants enjoy direct sunlight. The people living in block 1 are affected the most. *There is the Sun* aims at providing a solution to this problem. Building upon the site's renovation a few years ago, *There is the Sun* aspired to bring about a "symbolic restoration": visualizing and resuscitating the utopian dream and the social-artistic ideas upon which this project was founded. I placed three motorized mirrors to reflect sunlight towards one specific point. Using a user-friendly website, occupants could click on the date and time they wished to book sunlight for their apartment. One of the mirrors then turned to reflect the sunlight through their window. The directional aspect of the mirrors made them act like a spotlight: a mechanical system directed a small quantity of sunlight to one specific place. Check out *www.thereisthesun.be* for the online calendar with the reservations that were made. To add to the installation, I asked both Gijs Van Vaerenbergh (architects) and Wide Vernocke (illustrator) to make a personal contribution to this symbolic restoration.

In doing so, *There is the Sun* became a collaboration that created a local context within which to present these different works. This context was literally in the garden in front of my workshop and office. What took place resulted in an *in-situ* project which created a local exchange between occupants, creators, the public and bystanders.

Concept and realization: Ief Spincemaille
Produced by: 30CC, STUK Leuven, The Enbroadener, the city of Leuven, Werktank
Technical realization: Culture Crew

Ief Spincemaille (BE), born in 1976, obtained his master in philosophy at the University of Leuven and studied jazz, modern music and music and technology at L'aula de musica, Barcelona. After finishing his studies he made his first work as an autodidact in 2006: *Is the great bear a lonely bear?* Since then he has been active as an independent set designer and visual artist. In his work he mainly questions three themes: visual perception, modern media and the landscape.

Transfigurations

Agi Haines

The human body consists of practicable elements that can be easily manipulated and engineered. Through surgical procedures our bodies can be stretched, shifted and sewn, yet still be functional. What then would stop us searching for a higher level of functionality than we have now? Especially if it may have the potential to benefit the younger, more vulnerable and more malleable generation. The exhibit consists of five animatronic sculptures of babies. Each baby shows a different design for a potential body enhancement that has been surgically implemented to benefit the child. Each modification is put in place to solve a potential future problem for the baby, ranging from medical to environmental to social mobility issues. The realistic, breathing, sleeping babies have illustrated descriptions of the surgical procedure and are designed to be interactive. Holding the babies gives the audience a sense of the potential reality behind the future of modification and heightens the ethical conundrum behind the question: "In a future where forced evolution seems to be the only option for a sufficiently rapid advance, what would you do to benefit your child's life?"

Thermal epidermiplasty: a procedure designed to increase surface area of the head to allow for heat dissipation in the wake of global warming. Podiaectomy: the removal of a toe to encourage the contraction of hookworm, an allergy-reducing parasite which may lessen asthma as pollution is worsening. Extension osteogenesis: a face-shaping procedure creating a more aerodynamic facial structure, which increases the child's job prospects in sport. Epidermal myostomy: the introduction of a new orifice in a low fatty area, which may help the child medicate itself over longer periods of time. Bibuccalplasty: the extension of the cheeks, encouraging higher absorption of caffeine so the child can work for longer hours.

Agi Haines (UK). The main focus of Agi Haines' work is on the design of the human body. How might people respond to the possibilities of our body as another everyday material and how far can we push our malleable bodies while still being accepted by society? Discovering new ideas and concepts through material testing, Agi's research into the weird and wonderful things that exist inside us has become the basis of her research, talks, teaching and exhibits.

DIGITAL

COMMUNITIES

Inspiring Humanity

Ian Banerjee, Laina Greene, Leila Nachawati Rego, Salvatore Vanasco, Kazuhiko Washio

The Digital Communities category was born out of the perception of a shift in the history of the Internet towards recapturing its social functions. Today, in the context of increasing turmoil, financial crisis and rising censorship and surveillance, defending community-based responses to these threats seems more important than ever. This jury has aimed to give awards to projects that inspire humanity to rise above the current challenges.

Our main concern was to identify projects that were relevant to their communities and inspire others around them, becoming a leading force within society. Which projects have the strongest impact, which ones can be game-changers in times of increasing threats and turmoil, and radically change the social, political or economic scenario for the better? Are they sustainable, in the economic, social, and environmental sense? Do they contribute to improving the quality of human life while supporting ecosystems?

We have favored bottom-up approaches over pure top-down projects, although we regard co-creation as highly valuable. Although we understand that commercialism can be a drive for change, this category prioritizes non-commercial projects. We have favored open hardware and software.

We have valued the innovative character of the projects, framing them not only in the technological aspect, but in their implementation and within their context. Equality and inclusiveness of the projects were underscored, with strong attention to the educational component. Last but not least, we have framed the projects within the value of the commons. By regaining public spaces, finding innovative ways to make use of public resources and the common good, the value of citizenship is underscored within a context of market economy and increasing privatization.

Against the background of the fact that ever more regions of the world will be afflicted by the effects of climate change, we chose *Project Fumbaro Eastern Japan* as our winner of the Golden Nica. In addition to meeting the criteria, it also showcases a model of resilience that has high potential for replication in other parts of the world.

Project Fumbaro Eastern Japan is the local, grassroots-driven volunteer platform in Japan, which arose after the 2011 earthquake, and "fumbaro"

means “hang in there.” It crowd-sources and crowd-funds time, energy and resources of the community to meet the *real* needs of people. In the context of Japan, this initiative has the potential to catalyze governance models. *Project Fumbaro Eastern Japan* is well designed and revitalizes a strong sense of volunteerism and is also a more focused method for matching the real needs of the community. Past efforts have often led to communities receiving resources they do not need. For example, people have a tendency to donate water and food for victims of an earthquake, when what they really needed was chain saws to cut wood to keep themselves warm.

As one of our Awards of Distinction, we chose *Goteo,* a social network for crowd-funding and distributed collaboration (services, infrastructures, micro-tasks and other resources) for encouraging the independent development of creative and innovative initiatives that contribute to the common good, free knowledge and open code. We find *Goteo* to be very precisely shaped and making a difference by implementing the crowd-funding model from an open-source framework. It focuses on funding projects that can have a strong local / national / regional impact and empowers citizens and highlights the power of communities in addressing the mounting challenges of Spain in the context of financial crisis and social cuts.

For the second Award of Distinction, we have chosen *Freemuse* (The World Forum on Music and Censorship), an independent international membership organization advocating and defending freedom of expression for musicians and composers worldwide. In the words of Freemuse: “[In] countries like Sudan, Afghanistan and China, violations of musician’s rights to freedom of expression are commonplace. In the USA and Algeria, lobbying groups have succeeded in keeping popular music off the concert stage, and out of the media and retail. In ex-Yugoslavia musicians are often pawns in political dramas, and the possibility of free expression has been aversely affected.“ We believe that music is a powerful tool to bridge language and cultural barriers and convey strong messages that can help drive change. The fact that musicians are being targeted throughout the world, arrested, harassed and repressed, makes it even more relevant in a scenario of increasing surveillance and censorship to promote a community that empowers them and advocates free speech.

Project Fumbaro Eastern Japan

http://fumbaro.org/

Project Fumbaro Eastern Japan is an autonomous crowd-sourced model to cope with the critical situation by using structural constructivism and social-network services.

On March 11, 2011, Eastern Japan was hit by a massive earthquake. The great East Japan earthquake and the Fukushima No. 1 nuclear power plant accident plunged Japan into a national crisis. The numbers of missing and dead reached 18,800, and a further 2,916 died from the wider effects of the complex disaster. In all, 21,716 people lost their lives (as of June 2014).

Project Fumbaro Eastern Japan (PFEJ) is an autonomous crowd-sourced platform using social-network services (SNS) and the philosophy of structural constructivism systemized by Takeo Saijo PhD. It made it possible to cope with the critical situation by inviting people to connect autonomously and to set up various projects quickly.

Fumbaro is made up of three prefecture chapters (Miyagi, Iwate, and Fukushima) several city chapters in Tohoku and other areas as well as project-based groups and an administrator group—over 50 groups in total. *Project Fumbaro Eastern Japan* became the largest volunteer community organization, with each group having a wide range of skills and cooperating on the Internet. We would like to propagate this as a model system. Takeo Saijo therefore also called it "The Fumbaro Japan Model" (FJM). It has been used as a general-purpose method to cope with other disasters caused by heavy rain and landslides.

Project Fumbaro Eastern Japan began as an emergency supplies project. At first, the damage level

of this massive and unprecedented earthquake varied so widely depending on the area that it was extremely difficult for the government and the existing framework to identify and determine every area and provide the necessary support. Thus large quantities of supplies sent by many citizens around the country did not reach small and medium-size shelters and people in houses hit by the tsunami. What victims really needed varied from situation to situation. A shelter in a village suffering from power failure did not need large quantities of clothes or picture books but a chainsaw to cut wood to keep themselves warm. Everything in the devastated areas had been washed away, and it was difficult for the survivors to move around or access the Internet, so their actions were extremely limited.

First, Saijo visited the devastated areas and started by listening to the individual requirements. With this information he set up a homepage (HP), where he published details of the individual and unofficial shelters' needs as well as in his blog the next morning. He linked the URL of the HP to his Twitter account, publicized the fact that survivors living in small shelters and individual shelters could not receive supplies, and listed what was currently needed in the affected areas. Publishing these requirements on Twitter tended to cause an over-supply, on the other hand the HP could update the information in real time. So donors were requested to update information about their donations as soon as they had been sent, and the HP announced it as soon requirements were satisfied, thus avoiding continued unnecessary supply. Based on all this information about survivors' needs and effective means of delivery, he published a downloadable version of the *Fumbaro* brochure and asked volunteers to act as salespeople spreading the *Fumbaro* methodology when they were delivering the supplies, asking survivors about their needs and handing out the brochure. This enabled survivors to call *Fumbaro* directly, making it possible to rapidly cover hundreds of shelters scattered around a wide area and provide continuous support. As the result, direct support reached more than 3,000 small and medium-size temporary shelters with 155,000 items and more than 35,000 deliveries to places not covered by municipal support. In addition we applied Amazon's wish list to direct support, delivering more than 55,000 items. Because the administration was unable to get large quantities of supplies to affected areas, we matched these supplies to shelters in need and were able to send more than 800 tons of supplies to the victims. Since supporters put their names and phone numbers on the delivery box, survivors knew who they were receiving the supplies

from and could make a thank you call. Hearing the voices of the survivors, supporters understood how severe the situation was and how much their help was appreciated. This connection motivated supporters to further action. Some started direct support for *Fumbaro,* others visited the affected area with supplies personally. The structure thus directly connected supporters and survivors.

In an emergency, when conventional top-down administration systems did not function, we struggled to construct a structure that could establish an autonomous victim-support system connecting supporters' wishes to victims' needs.

Sharing Saijo's structural constructivism system among the volunteers made it possible to realize autonomous and organizational activities. For example, there is "the principle of methods" in the meta-theory. According to this, the effectiveness of a method depends on purpose and situation. So individuals may disagree about the right method, but there is no general method. In fact almost nobody knew what they should do in the face of the unprecedented disaster in which existing methods did not work. However, the definition of the principle of method, "the effectiveness of a method depends on purpose and situation," could be universal. So we can return to this principle any time we need to devise a good method. There was the unreasonable situation that the survivors who returned to their own semi-destroyed houses or apartments could not receive the domestic appliances delivered by the Japanese Red Cross, while the survivors in temporary shelters could. Seeing this situation, we started the Domestic Appliance Project to bridge this support gap. First, we collected domestic appliances in each area, mainly in Tokyo, and sent them to the survivors in each affected area in Tohoku. When summer came, many electric fans were needed. So we set up a special web site, and developed a new method to deliver appliances purchased by supporters to the survivors who needed them. When winter came, we proposed a new method to support survivors scattered in many different areas in Japan. We put an advertisement in the national newspapers and other media so that the survivors could send a copy of their disaster-victim certificate and let us know appliances they needed. Ultimately, the Domestic Appliance Project was successful, with 25,000 affected homes receiving appliances.

In an early phase after the disaster, many survivors who had lost their houses and workplaces were forced to spend their lives in shelters, surrounded by huge amounts of rubble. Aware of this, we started the Heavy-Vehicle License Project, aiming to help the unemployed survivors to get licenses to use heavy equipment so they could find jobs clearing rubble or in reconstruction. The project helped more than 1,000 local survivors to obtain a heavy-vehicle license. More than 3,000 volunteers were mobilized for more than 30 projects such as Study Aids for Kids, Job Assistance, Sewing-Machine Job, Teaching Traditional Nuno-Zouri Making, Hand-Made Goods, Encouragement Letters, Geiger counter Use, Entertainment, PC + Internet Use, Horticulture, the Fishery Project and the Manga/Illustration Charity Auction Project.

These projects were started and managed autonomously, utilizing existing systems such as Facebook groups, Cybozu and Paypal. *Project Fumbaro Eastern Japan* has realized the support of disaster-affected areas as the next generation crowd-sourcing model, which functions autonomously for the citizens and by the citizens, and also as an autonomous network model for civil volunteers. According to its essential principle, the effectiveness of this method depends on the situation and the aim. *Project Fumbaro Eastern Japan* maintains the approach of not clinging strictly to one model, by promptly winding up a project team when it has completed its role, even changing the organizational structure according to the situation. In the face of a massive disaster, problems of organization immobilized by precedentalism tend to surface. We have learned a lot from these lessons in our creative approach.

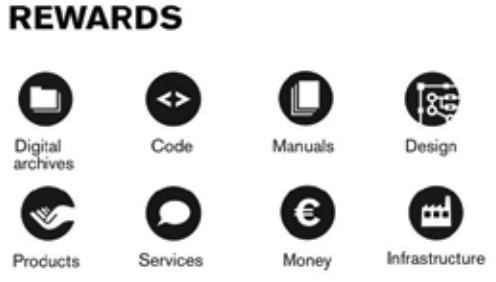
Project Fumbaro Eastern Japan (PFEJ) is a new support model constructed by Takeo Saijo, PhD to cope with the unprecedented disaster after the massive earthquake hit Japan on March 11, 2011. "Fumbaro" means "hang in there", especially used by local people in eastern Japan. Our basic purpose is supporting the earthquake/tsunami survivors. And our system using social networking services (SNS) serves to link supporters from all over Japan with the survivors. About 3,000 SNS members in the Facebook group maintain and assist our activities. There are various types of volunteer workers in PFEJ, such as businesspeople, full-time home workers, medical workers, artists and craftspeople, educators, scientists and technicians and people from the media, who use their respective skills to contribute to the maintenance, management and development of the project. In addition, over 1,000 supporters around the country donate to PFEJ regularly. Everybody works without pay and all donations go to the devastated region.

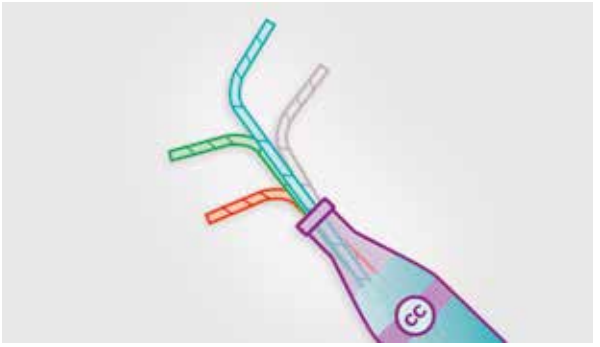

マジックプレット
デラックス
magic

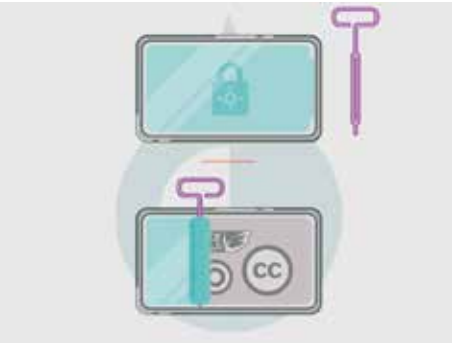

CLOUD
FUNDING


GOTEO

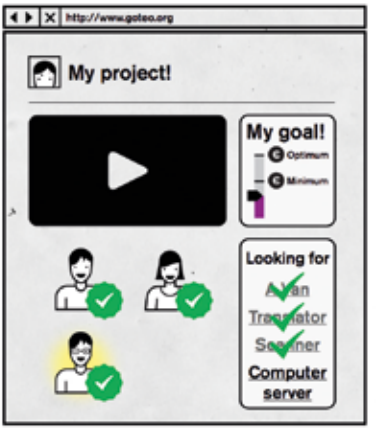

PROJECT NEEDS
MONEY
TASKS
INFRASTRUCTURE
MATERIALS GOODS


REWARDS
Digital archives
Code
Manuals
Design
Products
Services
Money
Infrastructure






NEW!
http://www.


http://www.goteo.org
My project!
My goal!
Optimum
Minimum
Looking for
Translator
Computer server

Goteo

http://goteo.org

Goteo, the open crowd-funding and crowd-sourcing platform, is an initiative that started at the end of 2011 and in two years has helped raise more than €1.5million for open-source, copyleft and commons-based projects, as well as thousands of non-monetary collaborations, configuring a community of communities. Managed by the Fuentes Abiertas Foundation, a non-profit organization created to assure the principles of openness, neutrality, transparency and independence in the development and maintenance of the project, apart from being itself *Goteo* stands out as an open-source tool for managing its "capital riego" (feeder capital fund) via specific calls with partner institutions.

We also promote an experimental laboratory and develop co-creation methodologies around the commons, open-source and free knowledge in different social, cultural and economic fields, having facilitated more than 50 #LearnByFunding workshops. This means that more than 1,000 people from cultural, social, academic, entrepreneurial, environmental and many other areas have trained and advised on collective funding, as well as being involved in facilitating discussions about openness, transparency and copyleft licensing among other things for projects they care about.

Why are we different:

- Distributed collaboration: In *Goteo,* apart from monetary contributions, people collaborate by offering services, material resources, infrastructure or by participating in specific microtasks needed for the development of projects.
- Collective return: *Goteo* seeks a social return on investment and for this reason, apart from individual rewards for backers, the system is based on collective returns for the development of the commons.
- Transparency: Each campaign must specify the details of where the money will go if it succeeds. Added to the two-rounds scheme, it makes even very successful campaigns responsible for how to use extra money obtained.
- Two co-funding rounds: Each with a duration of 40 days, the first is an "all or nothing" round for the minimum essential budget, while the second is for an optimum sum to carry out additional improvements.
- Tax-deductible: Donations to projects via *Goteo* are tax-deductible
- Training: More than 1,000 people from cultural, social, academic, entrepreneurial, environmental and many other areas trained and advised throughout the 50 workshops.
- Community of local nodes: *Goteo* grows as a community of communities, a network of local, independent, inter-coordinated nodes which serve to localize the digital, contextualizing it. The first has started already in the Basque country, supported by the Basque government. The second is in Andalusia, Spain, the next will be in Nantes, France.
- Free/open licenses: Projects that wish to be co-funded with the help of *Goteo* license the copying, public communication, distribution, modification and/or use of part or all of each creation.
- Open source: The core code of *Goteo* is freely available under a GPL3 license, allowing for the appropriation as well as participatory development of the tool: *https://github.com/Goteo/Goteo*

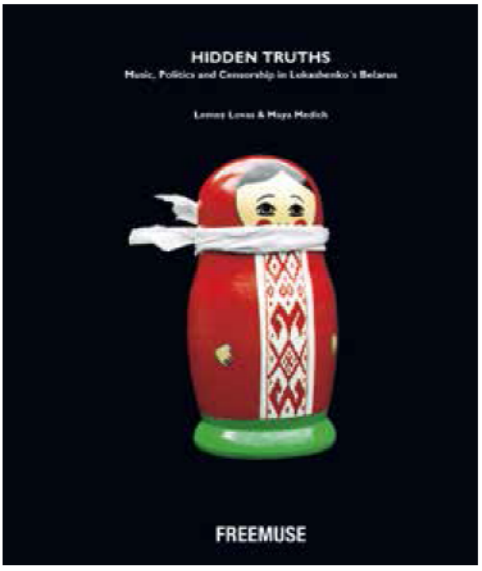
Goteo is an initiative managed by a non-profit organization Fundación Fuentes Abiertas (Open Sources Foundation), promoted by Platoniq, with a current staff of eight people in order to ensure that the core principles of openness, neutrality, transparency and independence are maintained through all its development and management. The foundation also promotes an experimentation laboratory through practical workshops which in turn are applied for the benefit of the common good, open-source code and free knowledge in various social, cultural, and economic spheres. The Fuentes Abiertas Foundation is mainly promoted by Platoniq, an international cultural association founded in 2001, which works from the social base through bottom-up processes, cooperating with public institutions, universities and companies with affinity for the collaborative economy's philosophy and the principles of free knowledge.

Freemuse

http://www.freemuse.org

Mark Stedman/Photocall Ireland

Freemuse Award Winner 2008, Tiken Jah Fakoly, Côte D'Ivoire



Front cover of the Freemuse report *Hidden Truth– Music, Politics and Censorship in Lukashenko's Belarus*

Front cover of the CD *Listen to the banned* produced by Freemuse and Deeyah in collaboration with Grappa Records

Freemuse is the world's largest database on music censorship. Its goal is to document violations of freedom of musical expression, lobby internationally for musicians rights to freedom of expression, support musicians at risk and establish a knowledge center for media, the public, artists and cultural organizations. *Freemuse* contains news stories, interviews with persecuted and censored musicians from all over the world, more than twelve reports on music censorship, and research articles and actions supporting music creators at risk.

Freemuse was born out of the 1st World Conference on Music and Censorship, held in Copenhagen in November 1998. The conference brought together professionals from diverse fields and countries—musicians, journalists, researchers, record industry professionals and human-rights activists—to examine, discuss and document a wide variety of abuses from the apparently benign to the overtly extreme. The alarmingly widespread nature of censorship of music prompted the conference delegates to initiate the creation of a new organization, *Freemuse*. Its guidelines are the principles outlined in the United Nations Declaration of Human Rights as they apply specifically to musicians and composers. The *Freemuse* Secretariat was established in August 2000.

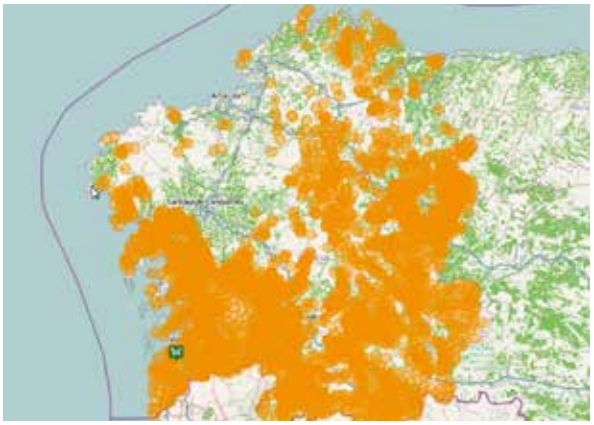
Since 2011 *Freemuse* has broadened its scope to include projects advocating freedom of all artistic expression and initiated the Artsfex global network for the protection of artistic freedom. In 2013–2014 *Freemuse* will be involved in several projects analyzing and defending artistic freedom of expression.

Freemuse is guided by its charter:
http://freemuse.org/archives/198

Freemuse is an international organization advocating freedom of expression for musicians and artists worldwide. *Freemuse* was initiated by Marie Korpe, its director from 1999 to 2013. Currently the team consists of Ole Reitov, Mik Aidt and Rikke Nagell. Over the years, numerous journalists, scholars, artists, media workers and activists have been involved.

Montenoso

http://montenoso.net



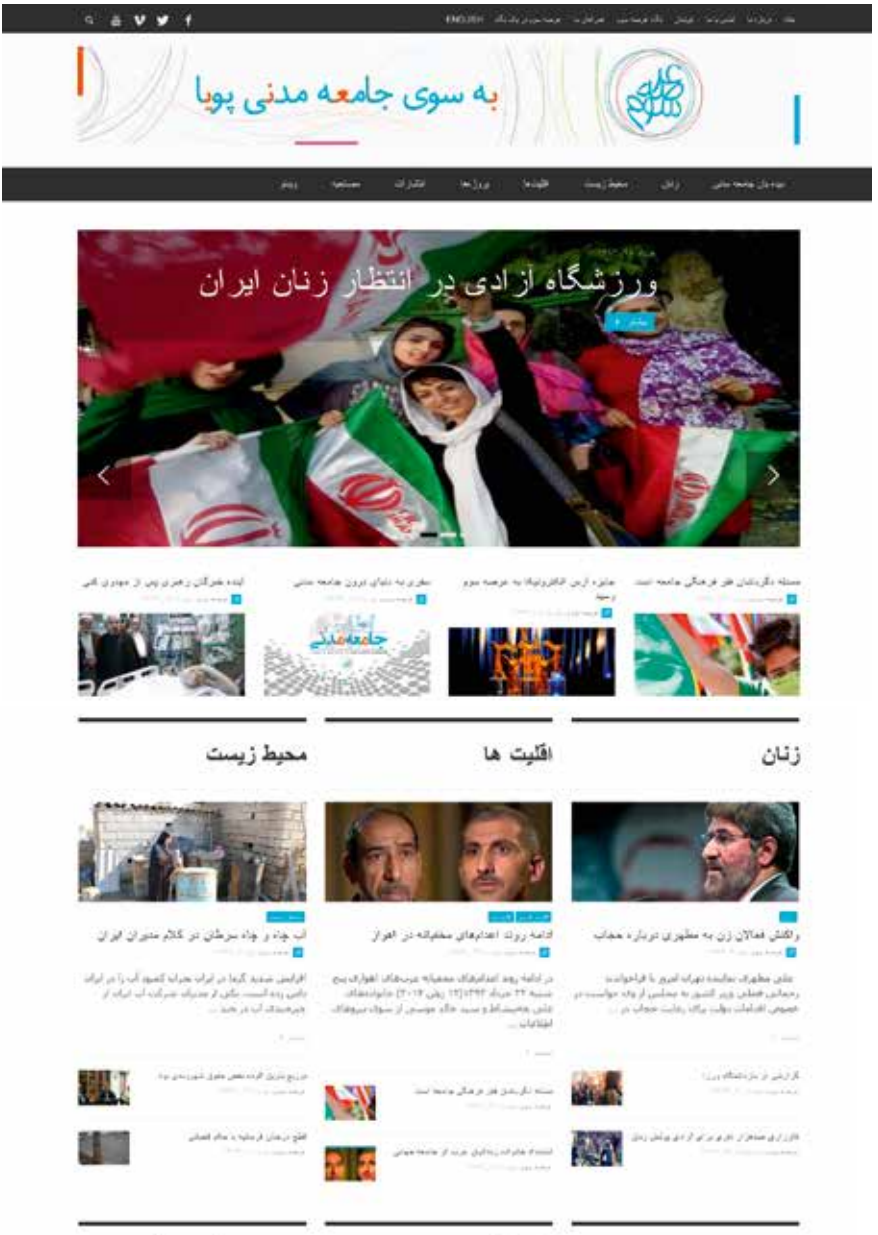
Montenoso is an open project whose main aim is to promote and highlight communal land communities (Comunidades de Montes Veciñais en Man Común, CMVMC) of Galicia, Spain. Communal land communities in Galicia represent a property modality and a type of good management that breaks the classic dichotomy of pubic against private, introducing an alternative kind of collective property. The specificity of these lands is determined by the fact that the property holders are people who live on the land and this land is not hereditary. Neighbors are those who manage their CMVMC as a whole. *Montenoso* is a community developed through the coordination of some Galician collectives and several land communities. We are a multidisciplinary group operating between digital art, commons studies, communication, rural empowerment and social architecture. Researchers and specialists in MVMC (Montes Veciñais en Man Común), geographers, lawyers, PhD students in contemporary history, philosophers, digital storytellers and art history specialists are also involved. They collaborate with *Montenoso* in a specific way for each part of the project. Today there are 640,000 hectares of CMVMC in Galicia, 25 percent of our territory. About 150,000 community members manage about 2800 communal lands, an experience of self-government. These communities have been able to create their rules to guarantee their sustainability from generation to generation. This is why we are focusing on the societal and participatory processes in these areas. *Montenoso* works from/for/with these communities from their realities with a bottom-up methodology, working at a micro level, combining the political and artistic potential of digital systems and others networks. At the same time that we keep contact with the main organization of MVMC, the ORGACCMM (Organización Galega de Comunidades de Montes Veciñais en Man Común), we have been working with some of them, focusing on visiting its common land and talking face to face about the situation, problems, cases of success and necessities. One recurrent issue is the lack of contact between them. At the same time we are creating networks with these communities and with militant researchers, social movements or institutions like Medialab Prado, Intermediae, USC University, Museo do Pobo Galego, other collectives such as Alg-a Lab and CMVMCs such as Argozón, Mántaras, Torres-Vilamateo, Mouriscados, Guillade and Ombre.

Montenoso (ES) is a collaborative project composed of the following groups / individuals: **Rural Contemporánea _ Iñaki López** is a social action collective developing cultural activities on rural environment. Their work addresses different problems in rural areas using creativity as a tool for community participation. Updating the traditional imaginary as a way to spread knowledge. *www.ruralc.com* **Asociación Artesáns de innovación _ Fran Quiroga** is an organization facilitator of innovation and creativity as a vehicle for citizen participation in its various plans: cultural, artistic, educational, leisure. *http://semillasdeinnovacion.wordpress.com/* **Fur Alle Falle _ Vanesa Castro** are agitators and cultural producers, developing events, performances, training activities and audiovisual productions. *www.furallefalle.com* **Tecnoloxías Apropiadas _Alex Mikelinos** research on appropriate technologies and rural and urban participatory processes. Their work deals with the use of traditional and natural materials from a contemporary perspective. *www.tecnoloxiasapropiadas.wordpress.com* **Constelaciones_Andrea Olmedo** is a group focused on digital media. They have participated in projects that interrelate art, science, technology and society. *www.constelacionesonline.net*

Direct collaborators: Luigi Pirelli: GIS specialist, mapping, geographic free software developer, founder of the OSGeo Italian local chapter, core and plugin developer in QGIS Project; Begoña Carrera Ríos: environmental lawyer, law, human rights, environment, migration, social movements. *http://avcabogados.com/en/*; Miriam Alonso Salgueiro: research, publications; Eliana Bouzas Collaz: social educator, specialist in digital and media literacy; Eloísa Piñeiro: project training manager, specialist in gender studies and political science; documentation and research on common lands and gender. Xeito: web developer and creative coder, mapping, cartography *www.constelacionesonline.net*

Arseh Sevom

http://www.arsehsevom.net/fa

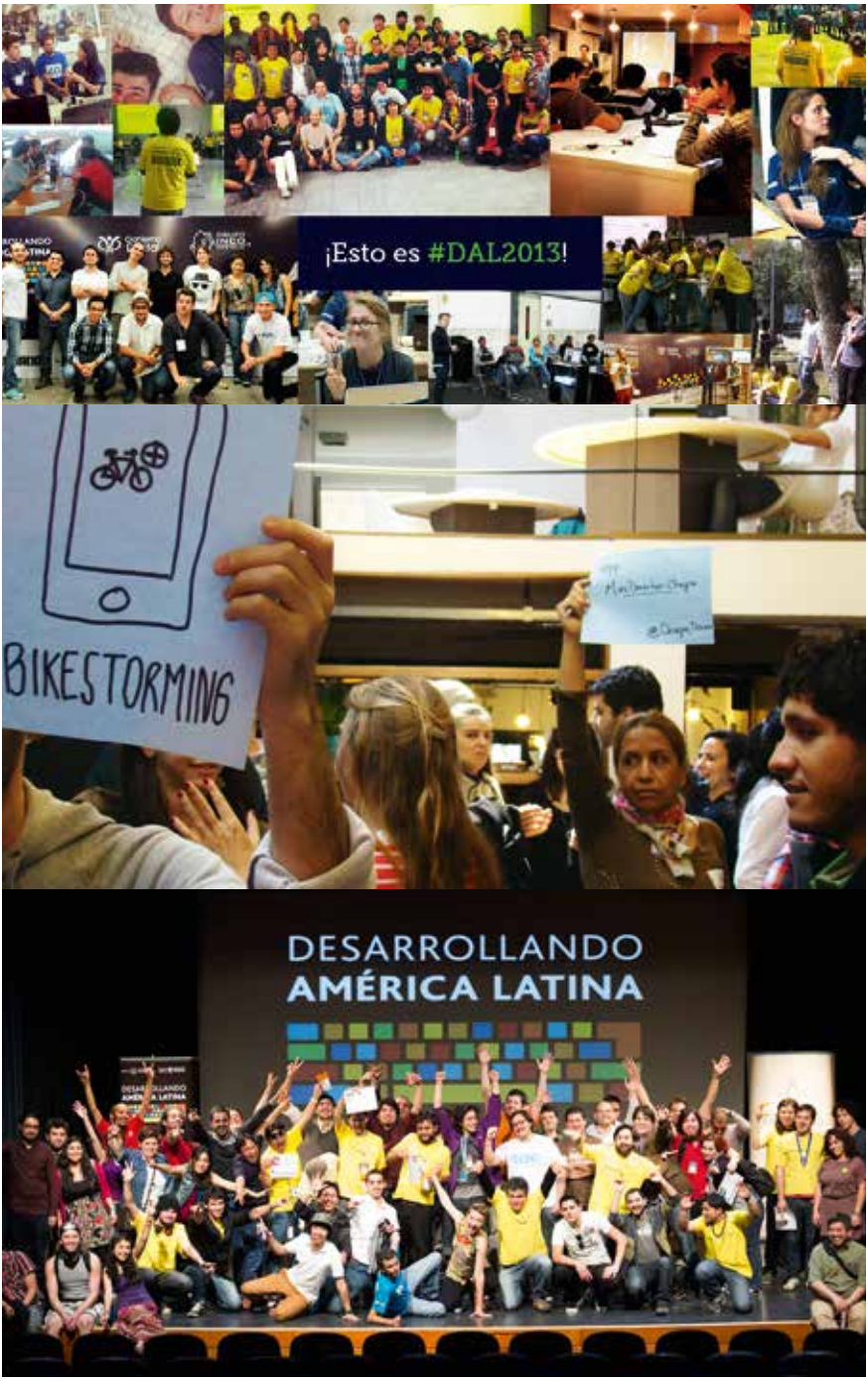


Human rights organizations and defenders in Iran have found themselves under attack, while abuses of basic human rights have continued. The unrest since the flawed 2009 presidential election has resulted in random and targeted arrests along with a shifting legal landscape that endangers academics and civil-society activists in particular. Despite this, we are currently witnessing a transformation of civil society into a growing and creative civil rights movement. In order to ensure that the movement can survive and thrive, it is crucial to offer support and training to individuals and organizations. *Arseh Sevom* (Third Sphere, which refers to the role of civil society) is a non-partisan, independent, non-governmental organization established/registered in 2010 in Amsterdam, aiming to promote peace, democracy and human rights. The organization's objective is to help build the capacity of organizations and encourage the development of a vigorous third sphere of civil activities. *Arseh Sevom* believes that cooperation among civil society organizations is the key to building a strong and coherent civil rights movement that can thrive and succeed. It aims to become a hub for organizations and individuals working together towards the common goal of free, open, and peaceful communities. *Arseh Sevom* promotes the advancement of rights for people of all beliefs, genders, ethnicities, non-violent political affiliations, and more. To make the transition to a more open society, it is important to address the cultural and political roadblocks to the implementation of the Universal Declaration of Human Rights. *Arseh Sevom* aims to further the efforts of Iran's civil rights movement by working with its leaders to build capacity and address future needs and developments. The group also plans to develop advocacy tools to address the attitude to human rights, peace, and democracy among intellectuals, activists and the general public.

The project began shortly after the 2009 mass demonstrations in Iran opposing the flawed presidential elections. At the time we felt that something needed to be done to strengthen Iran's civil society, particularly at a time when the government of Iran was shutting it down with arrests, harassment and threats. The project began with big expectations. We learned that we needed to build our audience and our capacity slowly, step by step. This was in part due to limitations of funding. We began by reporting on the state of civil society in Iran, which was used as background for Iran's UN periodical human rights review. The project grew from there with content and offline training. Especially popular on the site has been reporting on Iran's Bahai minority, the man-in-the-middle attack on Gmail and other sites in Iran, the presidential elections of 2013 and our Persian translation of *Reflections on the Ambiguous Universality of Human Rights: Cyrus the Great's Proclamation as a Challenge to the Athenian Democracy's Perceived Monopoly on Human Rights.*

In 2013, we also took on the effects of sanctions on Iran's public. We worked with the International Campaign for Human Rights in Iran and United for Iran on Just Access, a campaign to open a payment channel for medication and other humanitarian and unsanctioned items.

Arseh Sevom was founded by Kamran Ashtary and Sohrab Razzaghi. Our core team of part-timers and volunteers includes Mohammad Reza Sardari, Tori Egherman, Saffoura Elyassi and Elena Cavagni. We have an active board and an advisory board.


¡Esto es #DAL2013!
BIKESTORMING
DESARROLLANDO
AMÉRICA LATINA

Desarrollando América Latina

http://2013.desarrollandoamerica.org

Desarrollando América Latina (DAL) is changing the way Latin American citizens relate to their local communities, cities, countries and regions. We work to solve social problems common to the region, such as education, health, public security, transport, among others, using the power of technology, open data, and co-creation throughout the community.

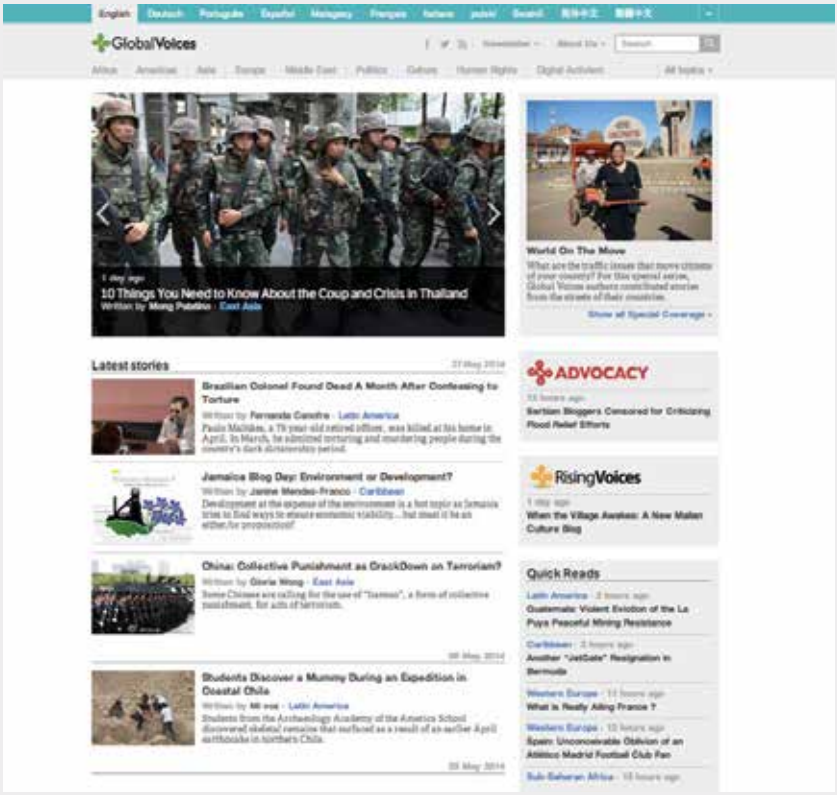
In 2011, the Chilean-based organization, Fundación Ciudadano Inteligente, collaborated with NGOs around the region (Wingu in Argentina, W3C in Brazil, Fundar y Citivox in Mexico, Escuelab in Peru, and Cubox in Uruguay,) to carry out the first ever regional Open Data Hackathon. Since that first 36-hour event, we have evolved into one of the most active, largest open-data initiatives in the region. We have created an active and engaged network in twelve Latin American countries striving for innovative and scale applications to create high social impact in their local communities. We have facilitated and strengthened an active and engaged community centered around innovation and openness. We empower the community of entrepreneurs, technologists, developers and designers, challenging them to work together with their local governments and civil society organizations to co-create solutions that may be able to make a positive change for Latin American citizens. In 2013 we implemented a new methodology to better and more efficiently achieve our goals, an Apps Challenge. More ideas, better solutions, more sustainable applications, and finally, open data start-ups. Over sixteen local leads in twelve countries coordinated our first Apps Challenge, an intense three weeks of co-creation of applications. Guided by multi-stakeholders, the participants use open data to create these powerful solutions. This primary data includes everything from local data at the municipal and city level to regional data, from national government data and studies to data from international institutions. The participants in the event also use and generate crowd-sourced data, making their applications more dynamic and community oriented. With the support of Socialab, a Latin American incubator of social projects, we are accelerating the six best Latin American applications, transforming them into disruptive, high social impact start-ups.

Desarrollando América Latina prides itself on the amazing group of people who work to fulfill our common objectives throughout the region. We even have our own hashtag, #DALfamily. Counting our entire network, this past year we partnered eighteen organizations, collaborated with over 60 local groups, and reached out to over 800 participants. There is at least one local coordinator in each country that has joined this initiative, generally either a non-governmental organization that focuses on transparency, open government issues or a tech-oriented organization that works with open data.

In 2013 we were fortunate enough to work with sixteen local leads. In Argentina, we worked with Wingu. In Bolivia, with Fundación SIM. In Brazil, with both SEA Tecnología as well as the W3C. In Chile, with the Fundación Ciudadano Inteligente. In Colombia, with Gobierno Abierto Colombia. In Costa Rica, with Grupo Inco. In Ecuador, with Fundapi. In Guatemala, with Guatecambia. In Mexico, with both Fundar as well as SocialTic. In Paraguay, with Fundación CIRD, Hackathon Paraguay, and TEDIC. In Peru, with Escuelab. And finally, in Uruguay, with DATA. In 2014, our DAL family is proud to include Venezuela, Nicaragua and El Salvador in our ranks.

The idea behind **Desarrollando América Latina** began in a café in Buenos Aires, Argentina, where Juan José Soto from Fundación Ciudadano Inteligente got together with Martin Waserman from Google Latin America to chat about how to make a positive change in the region using the tools they were most familiar with, technology and open data. In 2011, the Chilean-based organization, Fundación Ciudadano Inteligente, collaborated with NGOs around the region (Wingu in Argentina, W3C in Brazil, Fundar y Citivox in Mexico, Escuelab in Peru, and Cubox in Uruguay,) to carry out the first ever regional Open Data Hackathon. Since that first 36-hour event in 2011, we have evolved to one of the most active, largest Open Data initiatives of the region.


GlobalVoices
热门文章
德国：民众示威 反对国家监控
最新報導
法国及非洲科学研究没「钱」途的挑战
声明：全球之声要求埃塞俄比亚释放被捕的九名记者
ADVOCACY
综合报道


GlobalVoices
10 Things You Need to Know About the Coup and Crisis in Thailand
World On The Move
Latest stories
Brazilian Colonel Found Dead A Month After Confessing to Torture
Jamaica Blog Day: Environment or Development?
China: Collective Punishment as CrackDown on Terrorism?
Students Discover a Mummy During an Expedition in Coastal Chile
ADVOCACY
Serbian Bloggers Censored for Criticizing Flood Relief Efforts
RisingVoices
When the Village Awakes: A New Malian Culture Blog
Quick Reads

Global Voices Online

http://globalvoicesonline.org

Global Voices is a borderless, largely volunteer community of more than 800 writers, analysts, online media experts and translators. We curate, verify and translate news and stories from blogs, independent press and social media worldwide. Many of the most important stories today are scattered across the Internet, in blog posts and tweets, and in multiple languages. These are the stories we report on *Global Voices*—and translate into up to 30 languages, including Bangla, Aymara and Swahili. We do not have a physical office, but work as a virtual community across multiple time zones, often from our homes, cafés or public libraries. *Global Voices* is approaching its tenth anniversary this year. We began as a blog managed by only two people in 2005. In 2008 we received a Prix Ars Electronica Distinction based on our impressive global community. Since then we have transformed from a groundbreaking experiment in distributed online reporting to a respected news source with hundreds of writers and translators. Members of our community have been trailblazers of digital activism and leaders in the fight against online censorship. We work together to highlight the world's most overlooked stories through the voices of local people, and help train new bloggers in communities where there are none. We share our work as openly and freely as possible, and work with countless global media partners to distribute our stories in different languages to as wide an audience as possible. Our online community has not just survived into 2014, we have excelled and continue to push the boundaries for what is possible for an online community that is diverse, dynamic and distributed. The mainstream media have transformed to include the voices of bloggers and citizens on social media in their international reporting, but they still ignore stories that fall outside the mainstream news narrative. Our authors are experts in the areas they write about and every story published on *Global Voices* is vetted by members of our impressive editorial team. We work to find the most compelling and important stories coming from marginalized and misrepresented communities. We speak out against online censorship and support new ways for people to gain access to the Internet. Our goal is to empower people who value justice, equality and empathy. We value curiosity, honesty and connectedness in the name of understanding and friendship across borders.

Global Voices is a unique and groundbreaking online community of more than 800 people who report, translate and defend free speech rights online. These are the things we do: **Report:** Our trusted team of editors and writers reports on 167 countries in our completely virtual newsroom. **Translate:** Our international team of translators renders our stories into more than 30 languages. **Defend:** Our Advox project defends online rights and freedoms and fights censorship. **Empower:** Our Rising Voices project empowers isolated and marginalized communities with tools, skills and support. **Connect:** We organize summits for our global contributors and the public to meet face-to-face. Hundreds have met in eight different countries in the past ten years. *Global Voices* was founded in 2005 by former CNN Beijing bureau chief Rebecca MacKinnon and technologist and Africa expert, Ethan Zuckerman, while they were both fellows at the Berkman Center for Internet and Society. The idea for the project grew out of an international bloggers' meeting held at Harvard University in December 2004. *Global Voices* is incorporated in the Netherlands as Stichting Global Voices, a nonprofit foundation.


iPhone
Li-ion

iFixit

http://www.ifixit.com

iFixit is an international, open-source, online repair manual for everything. Our mission is to teach everyone to fix their things. We provide people with the knowledge to make their stuff work for as long as possible. We believe that repair saves money, fosters independence and protects the planet.

Our culture is filled with innovative engineers and beautiful designs. But our desire for new products has fostered a throwaway culture. Manufacturers are adding proprietary measures to prevent repair and our repair shops (and skills) have diminished. But people cannot afford to keep throwing away cell phones every two years or throw clothes into the trash every time seams tear. It is important to get every bit of functionality from the things we own before we safely recycle or repurpose them. If everyone had free access to repair manuals for everything—if we could replace the throwaway culture for a repair culture—we would see social, environmental, and economic improvements around the world.

The *iFixit* digital community is diverse and growing. In 2013, we taught repair skills to over 40 million people from almost every country and published over 10,000, crowd-sourced repair guides. People everywhere are providing a continuous stream of information by writing step-by-step repair manuals, participating in forums and telling their repair stories.

Every year, over 20 million tons of e-waste is produced globally. People are throwing away devices—from appliances to game consoles—just because of cracked screens or insufficient RAM. Often—if devices are not left to molder in drawers—they are shipped overseas into developing regions, where they are burned for their raw materials. Worse, communities that are burning the e-waste do not know that they are breathing in toxic chemicals such as mercury and lead. Even recycling is not as effective as we would like to think. There are critical rare earths inside every electronic device, and most are not salvageable. For example, cell phones are composed of 500-1000 components and it is too difficult or too expensive to separate them out. Recycling is better than throwing away, but it is not the solution.

Our community has banded together to fight obsolescence in many forms. Our cell-phone unlocking campaign, Free Our Phones, which involved a White House petition with over 100,000 signatures, recently led to the US House of Representatives passing a bill that could legalize cell-phone unlocking. Our repair pledge is activating people to pledge that they are moving beyond being consumers.

We cannot keep producing billions of electronic devices every year, and we cannot rely on recycling alone. Repair is necessary, now more than ever. Because repair will give your things second, third, and fourth lives—meaning less stuff in landfills, other countries, and in recycling markets.

iFixit will continue to expand its range of repair manuals. We are preparing a collection of outdoor equipment and bike repair tutorials, and developing partnerships with leading manufacturers such as Patagonia. We are expanding internationally much faster than in the US. We recently launched German, Italian, French, and Dutch versions—and we will be adding more languages and expanding our translations throughout 2014. Each of us has a responsibility to keep things working as long as possible and to dispose of them properly. Being responsible is easy: sell or donate stuff you no longer need to people who can reuse it. Repair things you can still use, and recycle it when there is no longer any use for it. We are making great progress, but we have a long way to go.

iFixit is the international, open-source, online repair manual for everything. Founded in 2003, by Kyle Wiens and Luke Soles, *iFixit's* thousands of repair manuals and product teardowns have helped teach repair to people all over the world. Their mission is to provide people with the knowledge to make their things work for as long as possible. Because they believe that repair saves money, fosters independence and protects the planet.


乐岛图书馆
[让阅读成为信仰]

Islibrary Project 荒岛图书馆

http://www.islibrary.com
http://www.weibo.com/islibrary

The *Islibrary Project* was started in 2009. Today there are 140 *Islibraries* in 56 cities in China with more than 5,500 members, 4,800 volunteers, 80,000 books and over 100,000 visitors a year. *Islibrary* is more than just a library. It is a community interaction platform for reading and communicating. Residents can enjoy reading here for free, participate in activities or be part of the volunteer team. By providing a platform like this we hope that we can help to generate communication between residents and to make a better and loving community. The credit for its huge influence in communities and the successful expansion of our library to more than 100 branches is due to the Web2.0 philosophy on "co-construction and sharing":

1. Space 2.0: Building up *Islibraries* with the support of its partners (cafes, youth hostels, unused space in residential communities) saves costs on space;

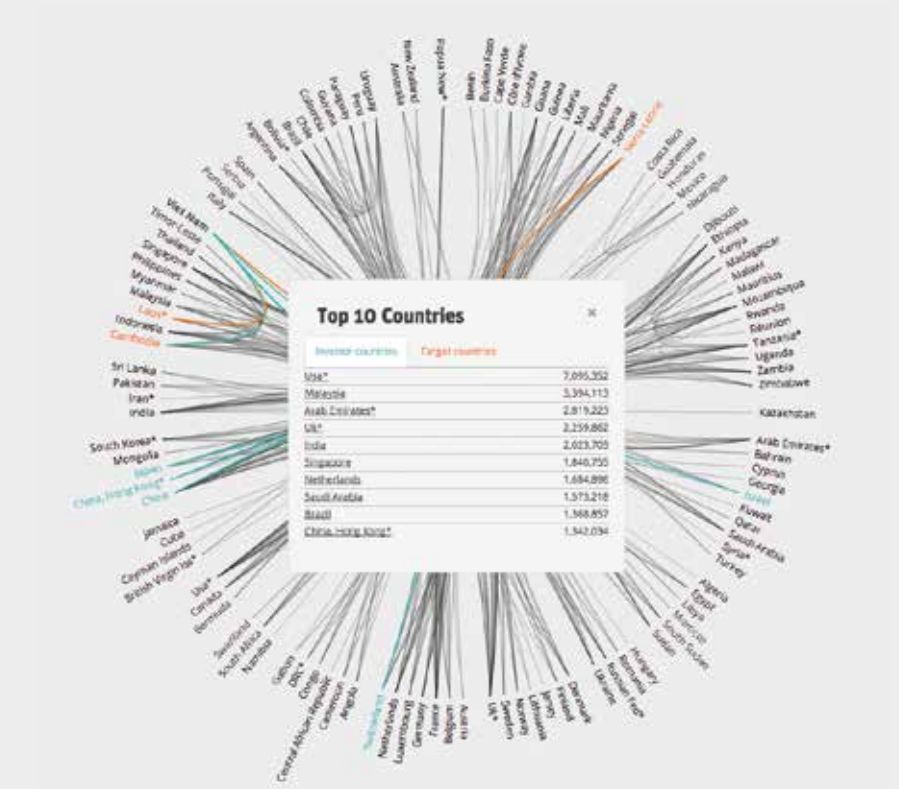
2. Funds resources: Funds provided by the space supporter, for example the real estate of the community, cover the operational funds of the *Islibrary,* and the cafes and hostels support the operation of their *Islibraries* themselves.

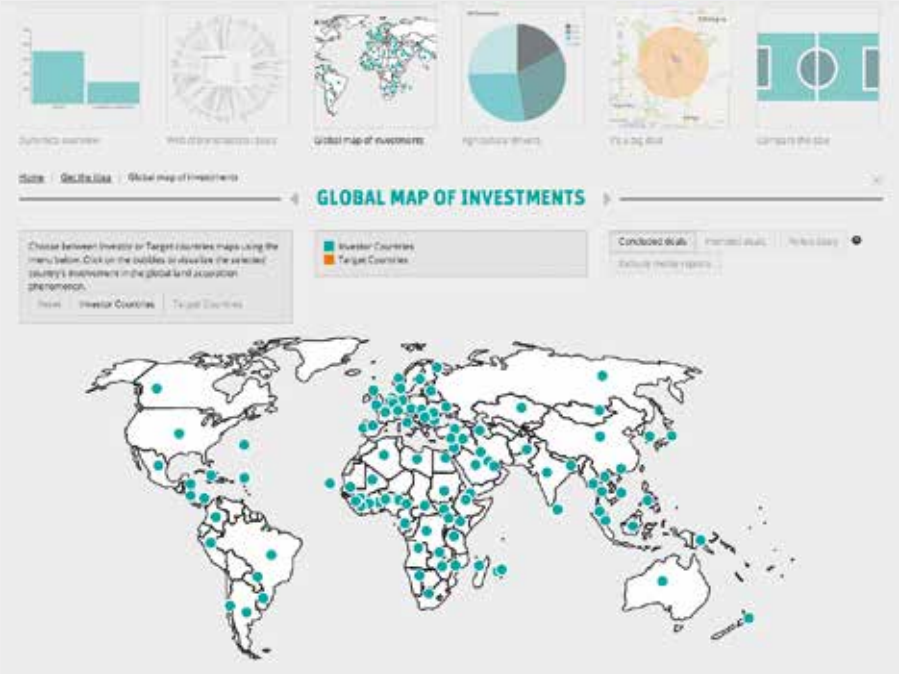
3. Books 2.0: Most of the books in an *Islibrary* are donated by readers, which not only solves the problem of the costs of book purchasing but also builds up a link between the library and the readers.

4. Management 2.0: The daily management of an *Islibrary* is assumed by volunteers. Everyone in the community is the owner of the library, they can organize activities whenever they want.

5. Promotions: Weibo, WeChat and Douban are three of the most popular social media tools in China. We have registered official accounts to maintain active interaction between our readers and all the *Islibraries.*

Islibrary (CN) was founded by Liu Qiongxiong, executive editor of Cityzine, founder of Happy Intern, LCY Management Consulting and iMart. Chief consultant: Yu Zhihai, founder of 1KG More, project leader of 1kg Box and a project leader of *Islibrary.* Executive director: Liang Jiaxin, MSc psychology, change maker, member of the Association of Science Communicators and founder of the One Minute Class. Director of project development: Zeng Yongyan, master of marketing research, leader of *Islibrary.* Project manager: He Ziwen, a leader of the Human Library project and other LCY projects, experienced in activity planning and public relations.


Top 10 Countries
Investor countries
Target countries
USA*
7,095,352
Malaysia
3,394,113
Arab Emirates*
2,819,223
UK*
2,259,862
India
2,023,705
Singapore
1,846,755
Netherlands
1,684,896
Saudi Arabia
1,573,218
Brazil
1,368,857
China, Hong Kong*
1,342,034


GLOBAL MAP OF INVESTMENTS

Land Matrix

http://www.landmatrix.org

The *Land Matrix* is a global and independent land monitoring initiative. Our goal is to facilitate an open development community of citizens, researchers, policymakers and technology specialists to promote transparency and accountability in land and investment decisions.

The *Land Matrix* initiative is led and inspired by the following principles:

Decentralized: In order to provide an unbiased, updated and representative observatory of land deals, the *Land Matrix* relies on a decentralized data-collection strategy. This is achieved through the creation of regional and national networks of information providers, as well as through crowd-sourcing.

Independent: The *Land Matrix* is a public tool independent of any single interest group other than a common belief by its partners in the importance of open data and the need for inclusive and evidence-based decision-making over land resources.

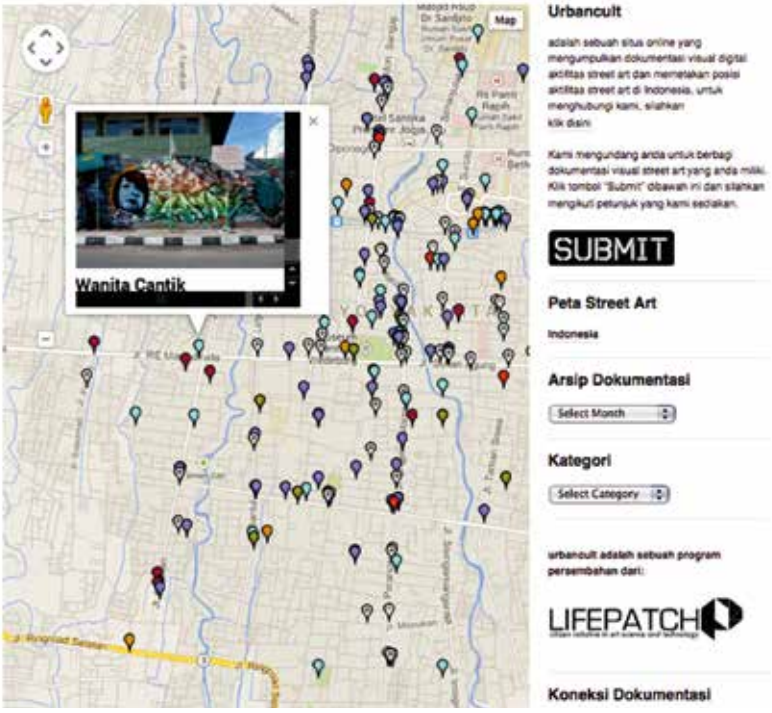
Open: *Land Matrix* data and visualizations are available for anyone to use, for any purpose, at no cost.

It aims to provide a comprehensive package for independent multiplications of the model, and will incorporate innovations by its open-source community.

Relevant: The *Land Matrix* will be as strong as its relevance for users, and as strong as its actively involved collaborators and co-creators. The *Land Matrix i*s conceived as a service provider, offering on-demand support on: data collection and research, decentralized crowd-sourcing strategies, and strategic use of data to influence policy.

The website *http://www.landmatrix.org* is our Global Observatory—an open tool for collecting and visualizing information about large-scale land acquisitions. As an open tool, the observatory allows wide participation in constantly upgrading, correcting and improving the information it contains. In addition to the Global Observatory, the *Land Matrix* initiative supports and is linked to other more specific observatories on land deals that are country-, regionally and thematically based. The *Land Matrix* aims to contribute in an innovative and relevant way to the growing movement towards open development.

Land Matrix is coordinated by the Centre de Coopération Internationale en Recherche Agronomique pour le Développement (CIRAD), the Centre for Development and Environment (CDE), the German Institute of Global and Area Studies (GIGA), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and the International Land Coalition (ILC). It is implemented through a network of in-country partners and data coordinators.


Map
Wanita Cantik
Urbancult
adalah sebuah situs online yang mengumpulkan dokumentasi visual digital aktifitas street art dan memetakan posisi aktifitas street art di Indonesia, untuk menghubungi kami, silahkan klik disini
Kami mengundang anda untuk berbagi dokumentasi visual street art yang anda miliki. Klik tombol "Submit" dibawah ini dan silahkan mengikuti petunjuk yang kami sediakan.
SUBMIT
Peta Street Art
Indonesia
Arsip Dokumentasi
Select Month
Kategori
Select Category
urbancult adalah sebuah program persembahan dari:
LIFEPATCH
Koneksi Dokumentasi


Titik 12 Jembatan Juminahan Selatan (Melia)
Description
Additional Data
Credibility
Leave A Comment
Name:
Email:
Additional Reports

Lifepatch–Citizen Initiative in Art, Science and Technology

http://lifepatch.org

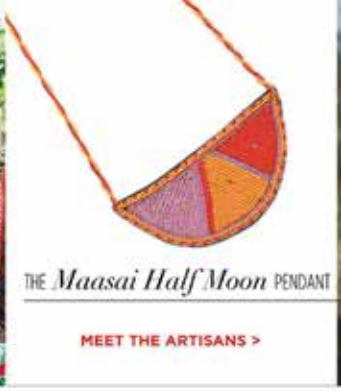
Lifepatch is a citizen initiative that works in creative and effective applications in art, science and technology. It focuses on the arts and science through education and accessible technologies that are practical and useful for citizens around them through the development of creative and innovative practices such as biological technology, environmental technology and digital technology. In practice, *Lifepatch* enriches the culture emphasizes the spirit of DIY and DIWO by inviting the target audience to become involved, to examine, explore, develop and maximize the function of technology in both the theoretical and practical use to society and culture itself.

Lifepatch's main focus is in disseminating tactics for dealing with day-to-day issues within specific communities, mainly through education, collaborating with individuals and communities from art and science, either from formal or non-formal practical background. It collaborates closely with formal educational institutes such as the Microbiology Laboratory of the Agriculture Faculty Gadjah Mada University, Yogyakarta, to initiate the Jogja River Project from 2011 to 2013. This invited citizens to investigate water quality of the rivers in urban areas of Yogyakarta while also documenting the social activities of the communities along the riverbanks.

Lifepatch consciously chose to style itself as a "citizen initiative" in order to not limit the results of its activities just to an art outcome/artwork. It sets a flexible platform and conditions for its members to initiate projects that can be implemented according to the needs of the surroundings, society, the public and the people, yet which are still based on each person's own interests and the community's vision. In talking of a target audience, *Lifepatch* is pointing at different groups of people depending on what they are working on. Each target group then has the chance to be more than just participants but also to develop, hack or disseminate a shared idea. To reach a wider audience, *Lifepatch* combines real physical activities with a virtual platform to share the knowledge and expanding networks both locally and internationally.

Larger-scale and long-term projects initiated by *Lifepatch* members include: Urbancult (an online mapping and location-based database of street art), the Jogja Rivers Project (a citizen initiative in river environment monitoring, mapping and documentation), and they have finished a collaboration with the International Hackteria Society for HackteriaLab 2014, Yogyakarta, a two-week intensive meeting point and multidisciplinary collaborative opportunity for makers, whether they are artists, scientists or hackers, etc).

Lifepatch was established in 2012 by several people from various disciplinary backgrounds with both formal and informal education. Even though the organization is still relatively new, the collaboration between them has been established for years. *Lifepatch* now has members in various cities, such as Yogyakarta, Pekanbaru and Bogor. Its members include: Agus Tri Budiarto, Agung Firmanto, Budi Prakosa, Andreas Siagian, Nur Akbar Arofatullah, Adhari Donora, Arifin Wicaksono, Ferial Afiff and Wawies Wisdantio. Collaborators: the Microbiology Laboratory of Agriculture Faculty Gadjah Mada University, Yogyakarta, led by Irfan Dwidya Prijambada and Donny Widianto *http://faperta.ugm.ac.id,* Green Tech Community, Yogyakarta; Hackteria *http://hackteria.org,* (Art)ScienceBLR and School of Life Sciences EPFL in Bio-Design for the Real World *http://biodesign.cc.*



NEW ARRIVALS WE LOVE


new Kizimba Cuff
$70.00


new Hamsa Dangle Earring
$42.00


new Tapered Perrito Cuff
$45.00


new Beaded Bib
$48.00


new Pointed Cuff
$42.00

Soko

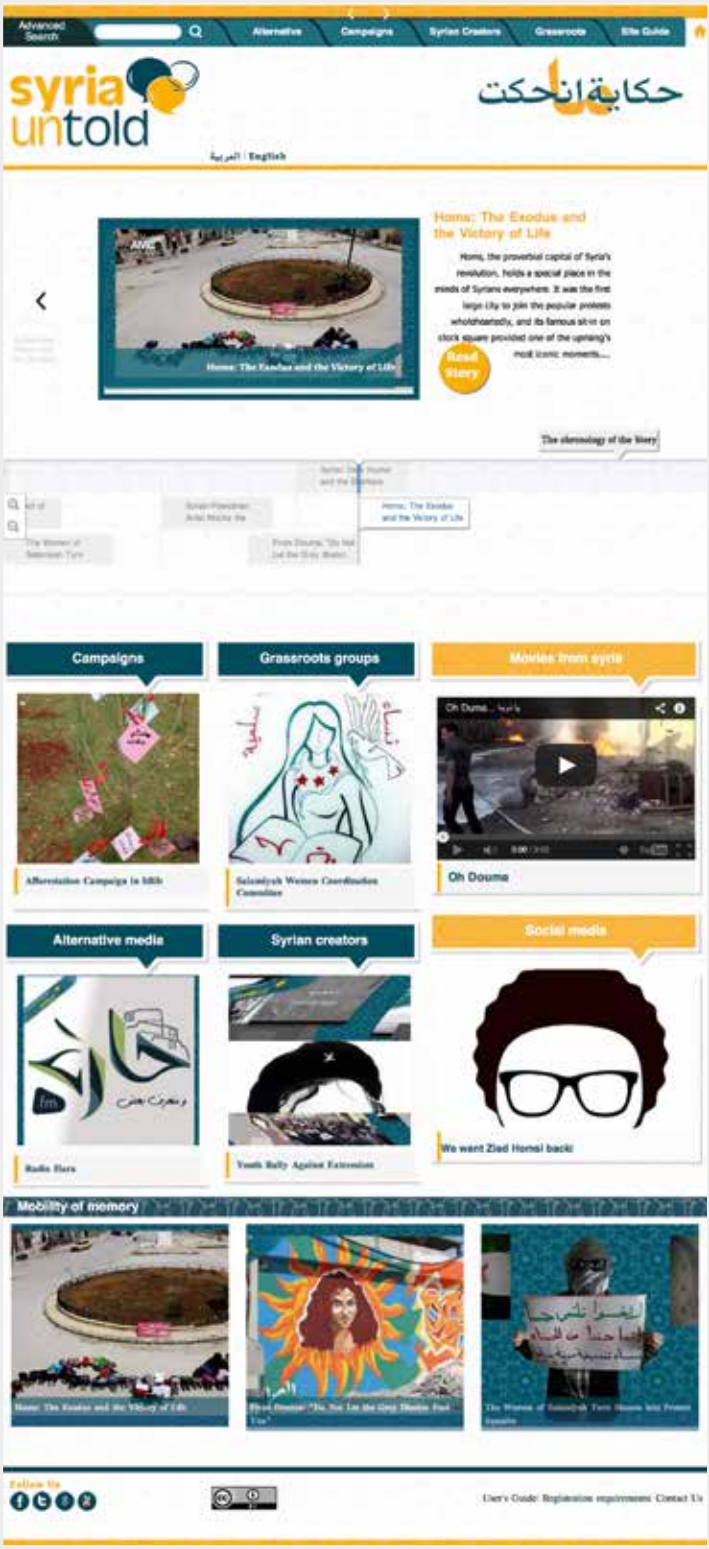
http://www.shopsoko.com

Soko means marketplace in Swahili, the national language of Kenya. *Soko's* Founders Catherine Mahugu, Ella Peinovich and Gwen Floyd, met in Nairobi, where they were inspired to create technology solutions to change the lives of those around them. *Soko* was born out of a love of design, a combination of global perspectives, and the desire to connect and empower entrepreneurs via the use of the technology. At *Soko,* our mission is to create an online marketplace so that small-scale producers in the developing world can participate in global trade. *Soko* helps "fashion a better world" through the equitable direct trade in beautiful goods between artisans in the developing world and web consumers worldwide. Working at the bottom of the pyramid communities around the world, the founders realized that by leveraging technology and existing infrastructure in an innovative way they could create a platform to enable any talented artisan to participate in international trade. A large percentage of the population in Sub-Saharan Africa are self-employed in the informal economy, producing craft and handmade goods–a skill that roots them deeply in culture and community and which helps them supplement their meager incomes. However, these producers cannot access the worldwide consumer demand for their unique, low-cost products because, like over 70 percent of the world's population, they live and work on the other side of the digital divide, unable to benefit from the economic opportunity the Internet provides.

Soko was founded in 2012 in recognition of the global need as well as a global opportunity to disrupt these systemic patterns of poverty across the developing world's creative economy. *Soko h*as made significant progress since its inception. We have carried out a test pilot of our mobile platform in India, increased our vendor market by partnering with telecos who have a footprint in Asia, Latin America and Africa. We have received media coverage ranging from locally to internationally renowned organizations and media houses, including the BBC, CNN, CNBC, UNWomen, GSMA and the World Bank. In addition we have launched a new website featuring *Soko's* next generation artisan tools, the first Soko collection, an expanded marketplace and a competitive online user experience and product selection that is already garnering significant consumer and PR interest. *Soko* is making an effort to pioneer social-impact assessment monitoring and evaluation in our community of artisans, aiming for sustainability in business for our producers. We have acquired substantial partnership support and funding from the USAID Development Innovation Ventures grant, partnership with ICRW, and the Latin American telecom foundation.

Soko's solution empowers a distributed network of individual micro-entrepreneurs to compete in the global marketplace, enabling more equitable and distributed international trade. Every transaction on *Soko* supports its mission of economic empowerment of artisans. *Soko* has connected thousands of consumers to hundreds of artisans. Our site can receive thousands of hits per month and has empowered artisans to sell thousands of products to consumers from the US, Central America, the EU and Australia.

Soko was founded by Catherine Mahugu, Gwen Floyd and Ella Peinovich in 2012. The core team of eight people is based in Kenya and the US.


Advanced Search
Alternative
Campaigns
Syrian Creators
Grassroots
Site Guide
syria untold
العربية / English
حكاية ما انحكت
Homs: The Exodus and the Victory of Life
Homs, the proverbial capital of Syria's revolution, holds a special place in the minds of Syrians everywhere. It was the first large city to join the popular protests wholeheartedly, and its famous sit-in on clock square provided one of the uprising's most iconic moments....
Read Story
The chronology of the Story
Campaigns
Grassroots groups
Movies from syria
Alternative media
Syrian creators
Social media
Oh Douma
We want Zied Homsi back!
Mobility of memory
Follow Us
User's Guide Registration requirements Contact Us

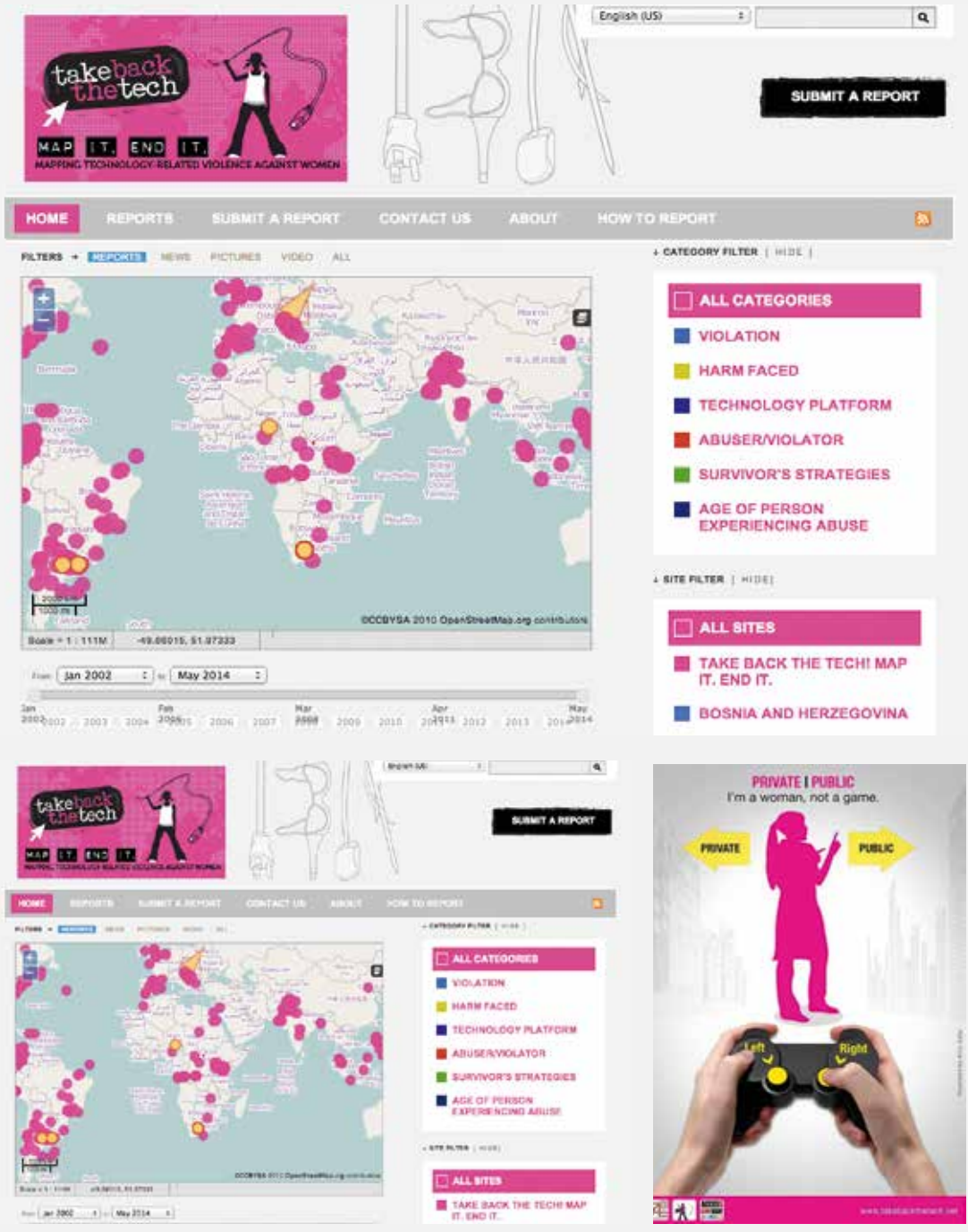
Syria Untold

http://www.syriauntold.com

Syria Untold is an initiative launched in 2012 by a group of Syrian net-activists, journalists, technicians and writers in coordination with two Italian new media scholars. From the beginning, the participants shared the idea of developing a platform capable of aggregating and contextualizing web-content related to civil movements and creative resistance in Syria. By organizing, curating and providing context for the large amount of existing material, *Syria Untold* aims to highlight the extraordinary work that Syrians from diverse religious, ethnic and identity backgrounds are producing, to put them in context and to provide a platform for them to engage in dialog as an alternative to the armed conflict. Our work focuses on data collecting and curating, both in English and in Arabic. Our main target groups are Syrian, Arab and international opinion-makers such as journalists, academics and civil-society groups. Since the beginning of the uprising in March 2011, a new generation of activists have been involved in multiple political initiatives and new forms of cultural expression. Most of this content is distributed by loose networks of activists through Facebook pages and profiles, Twitter accounts, and Youtube pages. Syrians use social media to discuss political matters, highlight campaigns, plan political initiatives or simply express their points of view through diverse means of expression: paintings, demonstrations, pictures, writings, videos, television shows, radio programs, etc.

This emerging cultural and political environment is particularly rich, but it is also difficult to capture and put into context, especially for external observers. The raw content circulating on Facebook and Twitter, mostly in Arabic, needs interpretation, fact-checking and contextualization. In other words, it needs to be curated by journalists and experts who have the competence to make it accessible to everyone. With mainstream media increasingly focused on geo-strategic and military aspects, the "non-violent movement" is almost invisible to the general public. In the current conflict, with the main focus on military and geopolitical aspects, there is a lack of contextualized information regarding the reality on the ground in Syria. *Syria Untold* aims to highlight civil work on the ground, promote dialog between grassroots groups and organizations and draw attention to their work. These grassroots projects, organizations and activists, which have not received enough attention from the media and the international community, are key actors in civil-society building. In the post-conflict situation, with so many open wounds and tensions, Syria will face a long and difficult reconciliation process. By highlighting and amplifying inclusive projects, spaces and civil actors representative of the Syrian diversity, *Syria Untold* aims to pave the way for and become a significant actor in promoting coexistence and civil-society building in a pluralistic society.

Syria Untold was launched in 2012 by a group of Syrian net-activists, journalists, technicians and writers in coordination with two Italian new-media scholars. The team is made up of ten members. The editorial tasks are divided between the main Arabic team (one editor-in-chief, one writer, two curators), the English-language team (one editor, two translators/writers). The technical support is handled by a web developer. The team is also supported by two consultants who are involved in promoting the project and in fund-raising activities.


takebackthetech
MAP IT. END IT.
MAPPING TECHNOLOGY-RELATED VIOLENCE AGAINST WOMEN
English (US)
SUBMIT A REPORT
HOME
REPORTS
SUBMIT A REPORT
CONTACT US
ABOUT
HOW TO REPORT
FILTERS
REPORTS
NEWS
PICTURES
VIDEO
ALL
CATEGORY FILTER | HIDE |
ALL CATEGORIES
VIOLATION
HARM FACED
TECHNOLOGY PLATFORM
ABUSER/VIOLATOR
SURVIVOR'S STRATEGIES
AGE OF PERSON EXPERIENCING ABUSE
SITE FILTER | HIDE |
ALL SITES
TAKE BACK THE TECH! MAP IT. END IT.
BOSNIA AND HERZEGOVINA
Jan 2002
May 2014
PRIVATE | PUBLIC
I'm a woman, not a game.
PRIVATE
PUBLIC
Left
Right

Take Back The Tech! Association for Progressive Communications

http://takebackthetech.net

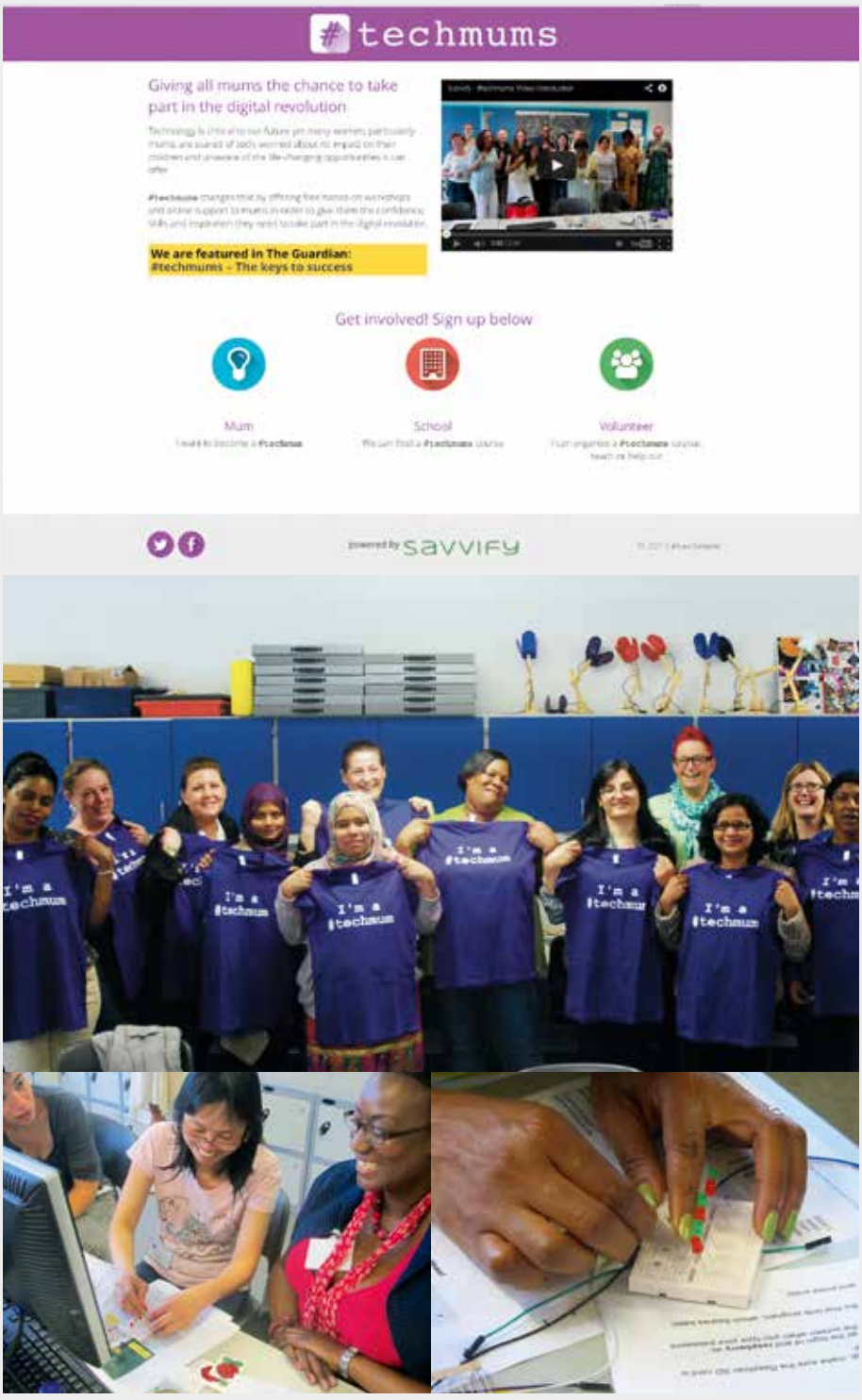
Take Back the Tech! (TBTT) is a collaborative global campaign that calls on all information and communications technology (ICT) users, especially women and girls, to take control of technology and use it to change power relations that enable violence against women. Initiated by the Association for Progressive Communications' Women's Networking Support Program (now Women's Rights Program) in 2006 as part of 16 Days of Activism Against Gender Violence, the campaign aims to encourage all users to think about the issue of violence against women (VAW) in connection with ICT in various contexts. Campaigners work for the right to define, access, use and shape ICT for its potential to transform power relations toward equality. The campaign platform facilitates participation by ordinary users, encouraging them to think about their daily technology use through the lens of feminism and thus ICT's potential impact on women's rights and VAW. Daily campaign actions explore different aspects of the intersection of violence against women and ICT (e.g., privacy violations, ICT access, cyber harassment) and call for experimentation with various applications and tools, such as creating digital postcards and digital stories, sharing online resources for better security, mapping incidents and starting social-media discussions. A fundamental part of TBTT is sharing campaign ownership by giving users tools and media, such as logos, icons and banners, to adapt and translate for their own communities; users then post their creations to the site to share with and inspire other campaigners. They connect their online and offline activism by sharing photos of marches and lectures on social media, leading workshops on digital storytelling, strengthening demonstrations with online mobilization and more. Participants come as groups and individuals from all over the world, and TBTT has enjoyed significant campaigns in countries such as Brazil, India, Pakistan, DRC, Uganda, the Philippines, Mexico and Uruguay.

Take Back the Tech! initially focused on providing ideas, information and a platform for anyone who had access to some form of ICT to think about how ICT spaces and tools can affect violence against women. It was a political call to all ICT users to take action to end violence against women through creative solidarity and strategic collaboration and communications. It always aimed to support dispersed action in different localities, and there was a fair bit of that at the beginning—local campaigns by different people who were translating materials, gathering people together to discuss the issue, organizing street interventions etc. From 2006 to 2008, TBTT had no specific funding to support the campaign, so it focused mostly on creating content and building a collaborative platform. From 2009 to 2011, the campaign received funding to support work to end online violence against women in twelve countries in Latin America, Africa and Asia, and from 2012 to 2015, in seven countries in the same regions.

Funding has made a visible impact, as the campaign has supported concrete, on-the-ground activities that are making a targeted impact on building evidence to understand the specificities of the issue in different spaces, growing effective networks, realizing creative solutions through seed granting and supporting content production from different spaces. The campaign has brought all of these different elements and partners together in a more sustainable network. At the same time, TBTT has been able to consolidate and grow the global campaign, which remains a powerful call to all ICT users, and to strengthen its resources, platforms and spaces.

Conceived and developed by Association for Progressive Communications in collaboration with campaigners around the world.

In 2005, the **Association for Progressive Communications** developed research papers that looked at the connection between ICT and violence against women, an issue that received little attention at the time. From sharing the findings with women's rights and communication rights advocates in different spaces, APC found this to be a critical issue that compelled further attention and deeper engagement and in 2006 initiated *Take Back the Tech!* (TBTT) as one way of starting a global conversation on ICT and violence against women. Since then, TBTT has implemented 16 Days campaigns every 25 November to 10 December, growing the digital community and building the platform through which any ICT user can learn about the issues, lead campaigns, connect with other campaigners and contribute ideas and content. The theme for the 2013 campaign was *Public | Private: Define Your Line,* which encouraged users to consider how ICT has complicated our ideas of what public and private mean and how that affects violence against women.


#techmums
Giving all mums the chance to take part in the digital revolution
We are featured in The Guardian: #techmums – The keys to success
Get involved! Sign up below
Mum
School
Volunteer
powered by savvify
I'm a #techmum

#techmums

http://techmums.co

#techmums is all about giving mums the opportunity to take part in the digital revolution. In ten hours of intensive, hands-on workshops we take mums, who can be disempowered around technology, from being scared of the keyboard to being tech savvy.
The aims of *#techmums* are:

- to empower mums, their families and communities through technology
- to improve children's life chances by empowering and educating their mums
- to provide a route back to employment for mums and others who have been out of the job race for some time
- to create a more positive attitude towards technology and its benefits to society
- to engage families with the school computing curriculum.

#techmums is achieving these goals through an e-skills-accredited program of short, hands-on workshops that introduce mums to online security, social media savviness, essential computing skills and app and web design. In addition there is opportunity for mums to be introduced to simple Python programming to gain an understanding of the computer skills their children may learn at school. *#techmums* programs are delivered via schools, either directly by a *#techmums* trainer or by the schools themselves. All mums enrolled on the program are further supported by a dedicated *#techmums* online community.
Technology is critical to our future, yet many women, particularly mums, are scared of it, worried about its impact on their children and unaware of the life-changing opportunities it can offer. *#techmums* changes that by offering free, hands-on workshops and online support to mums in order to give them the confidence, skills and inspiration they need to take part in the digital revolution. We empower mums and their families, create female role models in technology and aim to get rid of the phrase "it's so easy your mum could do it" from the world of technology. We will also create many jobs for mums as technology trainers across the UK and then the world.
When mums sign up for the program they become part of the online *#techmums* community, where we help them to carry on with their technology journey. Our project has shown that we can make a dramatic difference to women's self-esteem and confidence with technology, affecting not just them but their whole family.

Initiated by Sue Black, the first **#techmums** pilot took place in summer 2012. The team behind is Savvify: Emma, Sue, Mary and Clare. Four mums with twelve kids between us who think mums sometimes get left behind when it comes to technology. We have created *#techmums* to change that. We are currently recruiting twelve trainers to go out and train mums across London.

VISIONARY PIONEERS

OF MEDIA ART

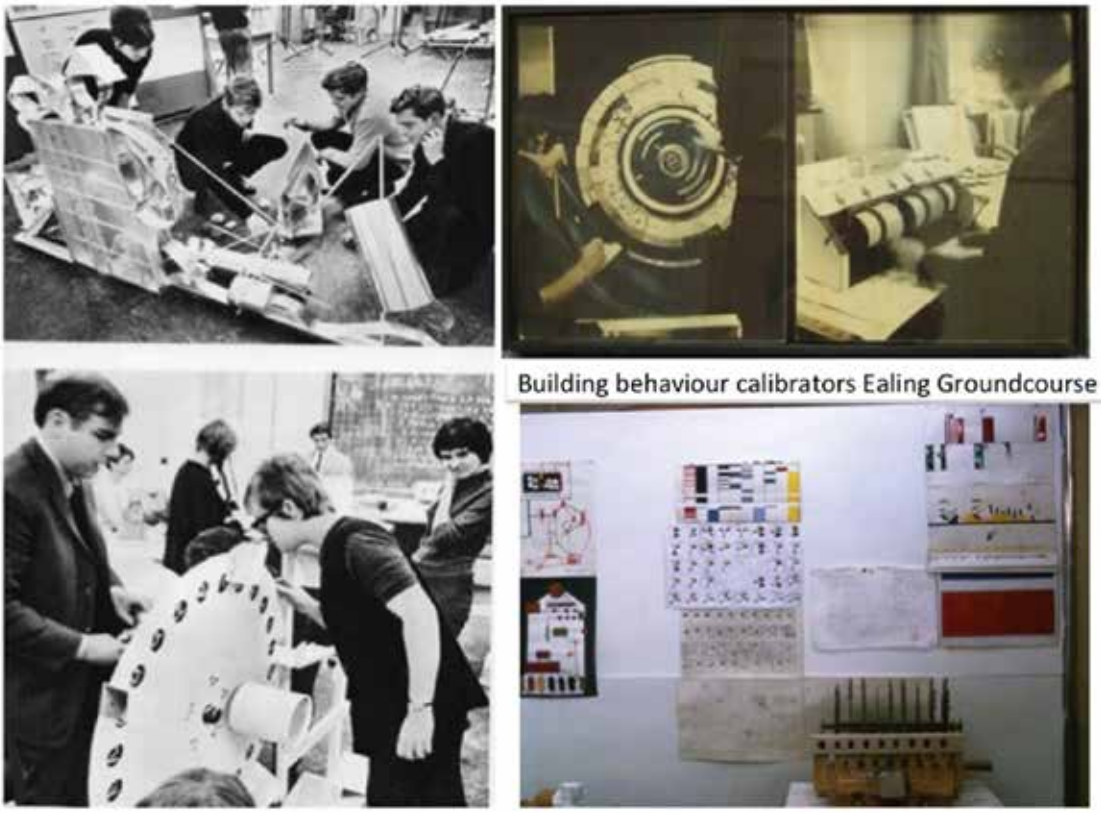


Photo courtesy: Roy Ascott

1964, behaviour calibrators, Ealing School of Art, Groundcourse

Visionary Pioneers of Media Art

Launched this year, this new category is dedicated to recognising and celebrating the men and women whose artistic, technological and social achievements have decisively influenced and advanced the development of new artistic directions.

What began as a technological revolution has since developed into a new culture and a social reality with its own specific forms of communication, cultural techniques and artistic expressions, the roots of which extend far back into the past and lead us to encounters with remarkable, extraordinary personalities–the visionary pioneers of media art. Thus, in many respects, these men and women established the foundation of media art as we know it today. In order to give them the respectful recognition commensurate with their accomplishments, we have created the new prize: the Prix Ars Electronica's Golden Nica for Visionary Pioneers of Media Art.

The nominating and the decision-making process to select the recipient of this very special award was given into the hands of all previous recipients of a Golden Nica since the Prix Ars Electronica's inception in 1987–a distinguished community of consummate artists and visionaries in their own right. Each of them could nominate up to three candidates and each had one vote to select the final winner.

The criteria were kept simple: anyone who had made a name for themselves as a visionary pioneer of media art could be nominated. The accent was on creativity, regardless of the artistic discipline or form of expression in which it is manifested. Since work in interdisciplinary teams has always been a significant

issue in the practice of media arts it was also possible to nominate collectives and groups. Nominations and voting could be made online with the Prix Ars Electronica submission page or by e-mail to Prix Ars Electronica.
For documentation purposes and to support the decision-making process, the Prix Ars Electronica staff created a portrait page on its website elaborating on each nominee and their work. Ars Electronica officially informed the nominees and asked for their consent. Although nominations and balloting were anonymous and only previous Golden Nica recipients were entitled to take part, the results had also always been visible online in real time to the public. In the period for nominations a list of 117 names came together and also a very lively debate about possible criteria developed online. At the moment of the first deadline several nominees had gotten the same number of votes and so, as planned for the situation of a tie, the balloting was extended for another week.
Until about twenty minutes before the deadline four people were ex aequo on top of the list and about five minutes before, there were still two people. In a really dramatic run-off, literally the last minute before the voting portal was closed at midnight, a final decision was reached.

The first Visionary Pioneer of Media Art to be singled out for recognition with a Golden Nica is Roy Ascott. The British artist, theoretician and visionary thinker has been active since the 1960s, and his numerous publications and works have exerted a major influence on the global digital art community.

Roy Ascott


Josephine Coy

Is a British artist whose work over the past 55 years has sought to realize a vision of art that is cybernetic, telematic, technoetic, and syncretic. *La Plissure du Texte* (1983) made a seminal contribution to telematic interaction and distributed authorship (revisioned and exhibited internationally since 2011 in virtual world environments). *Aspects of Gaia* (Ars Electronica, 1989) combined the experience of telematic disembodiment with presence in physical space, a precursor of subsequent forms of telematic, hybrid media. Since 1961, he has shown in biennales and other major exhibitions in Venice, Shanghai, Seoul, Amsterdam, Paris and London, as well as galleries in Brazil, Colombia, Canada and many parts of Europe. His work is in the permanent collection of the Tate Gallery. He was an international commissioner for the 1986 Venice Biennale, initiating the Laboratorio Ubiqua, a comprehensive and interactive exhibition of new media art from around the world. Since the publication of his first theoretical work *Behaviourist Art and the Cybernetic Vision* in 1964, his writing has been translated in many languages, with books in Japanese, Korean and most recently in Chinese: *The Future is Now,* which updates his influential *Telematic Embrace* of 2003. Many of his neologisms–moistmedia, cyberception, telenoia–have entered the discourse of media art. As a teacher, he created the radical Groundcourse in 1960s London, based on cybernetic principles. He is the founding president of the Planetary Collegium, first established as CAiiA in 1994, and now based in Plymouth University, whose PhD graduates include many of today's leading artists in the field of media art. He is also De Tao Master of Technoetic Arts at DTMA in Shanghai, charged with advancing research in art, technology and consciousness in China.
(Source: Roy Ascott)

http://royascott.net
http://www.medienkunstnetz.de/works/la-plissure-du-texte
http://www.fondation-langlois.org/html/e/page.php?NumPage=137
http://vimeo.com/22649475

Roy Ascott–Pioneer of Media Art, Telematic Visionary, and Planetary Mentor

Edward A. Shanken

Although it was over twenty years ago, I clearly recall the first time I encountered the writings of Roy Ascott. It was for me, much like Roy described his first encounter (c. 1960) with cybernetics: "an Archimedean 'Eureka experience'–a visionary flash of insight in which I [he] saw something whole, complete, and entire." As an aspiring art historian who loved figurative painting but was equally fascinated by the recent emergence of the Web and interactive CD-ROMs, Ascott opened my mind to an alternative aesthetic framework that was radically different from the conventional one I knew. As he noted, the "recognition that art was located in an *interactive system* rather than residing in a material object … provide[d] a discipline as central to an *art of interactivity* as anatomy and perspective had been to the renaissance vision." Ascott made it possible for me to imagine how emerging technological media were offering new tools with which the future of art would be developed, for he had been doing that for decades. Indeed, his praxis amounts to a substantial history of ideas in the field of media arts. But more importantly, his work extended beyond the realm of art or, rather, epitomized how art, at its best, could offer a model of possible futures that people could experience in the present.

When I met Roy in 1994, I proposed editing a book of his essays, and though I had only completed my first year of graduate school, he agreed. I could hardly believe it. Entrusting his work to me was one of the greatest gifts anyone has ever given me. That gift deeply influenced my own teaching method and approach to life. And it resulted in the volume, *Telematic Embrace: Visionary Theories of Art, Technology, and Consciousness* (2003), which serves as an enduring testimony to Roy's pioneering contributions to media art and contemporary art in general.

I have since learned that Roy is widely known for his generosity. Indeed, throughout his career, Ascott's generosity as an artist, scholar, and mentor has deeply influenced innumerable artists and theorists around the world, who have spread and expanded on his ideas, a rippling effect that has had an incalculable impact on artistic practice globally. Joseph Kosuth stated that "Art 'lives' through influencing other art, not by existing as the physical residue of an artist's ideas. The reason why different artists from the past are 'brought alive' again is because some aspect of their work became 'usable' by living artists."[1] Extending this logic, Roy Ascott's work is more alive today than it was in 1960 or 1990, and I envision that it will be more alive in 2020 and 2050 than it is today.

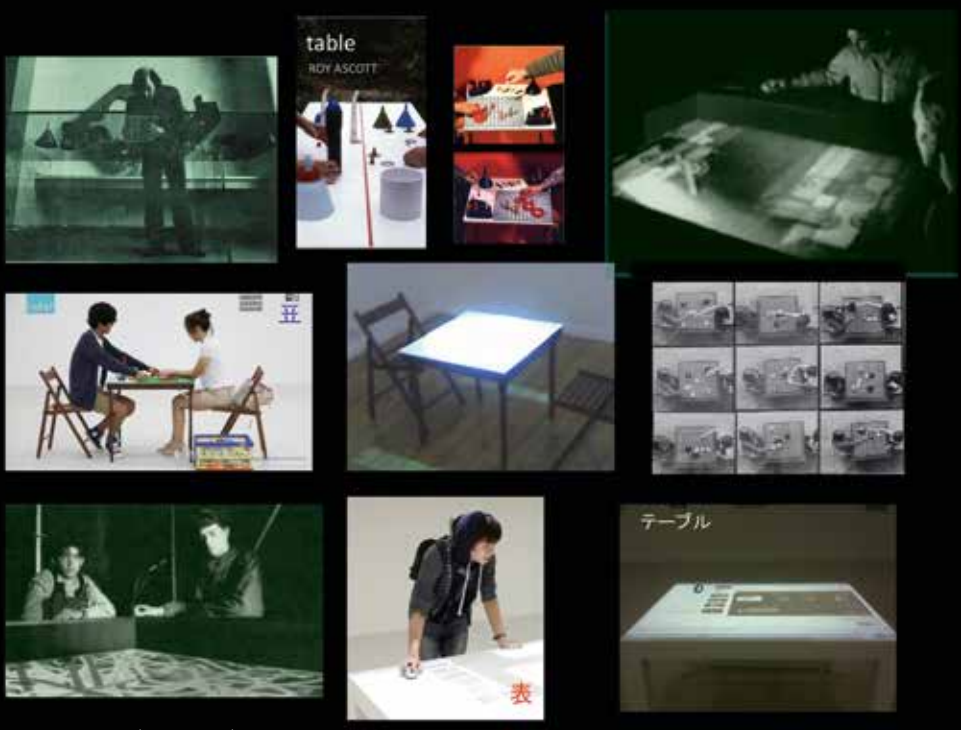
In the spirit with which Roy entrusted me with editing a collection of his writings, and also in the spirit of "distributed authorship," which is at the core of his theory of telematic art, I have entrusted some of his colleagues and former students with providing insights into his influence on their own work and on media art around the world. I am grateful for their generosity in sharing their perspectives and heartfelt sentiments.

Paul Thomas, Australia

I first met Roy Ascott telematically in 1983 through an art project created by Eric Gidney and Tom Klinkowstein using ARTEX (an early computing networking platform for artists). Roy was the inspirational visionary of the future who not only lived the dream but who gave that dream a reality in education. When he lectured in Perth in 1986, I knew I had found a guide that immersed me in a telematic-mentor's embrace, and inspired my own telematic artwork *You Send One* (1987, with Neil Hollis and Benno Poeder). Roy's ongoing visions for the future have been remarkably profound in creating aspirational perspectives for new understandings of life in which all aspects of being human are challenged and contextualized. These visions are generous, freely given gifts at the cutting edge of contemporary art practice and syncretic educational paradigms.

Jill Scott, Switzerland

I was one of Roy's first doctoral students back in 1994 when he founded what is now the Planetary Collegium, but we first met the mid-1970s at the San Francisco Art Institute, where (much to the faculty's amazement and consternation) he arrived as vice-president with evolved cybernetic views on education. Roy is unique thinker with a generous interest

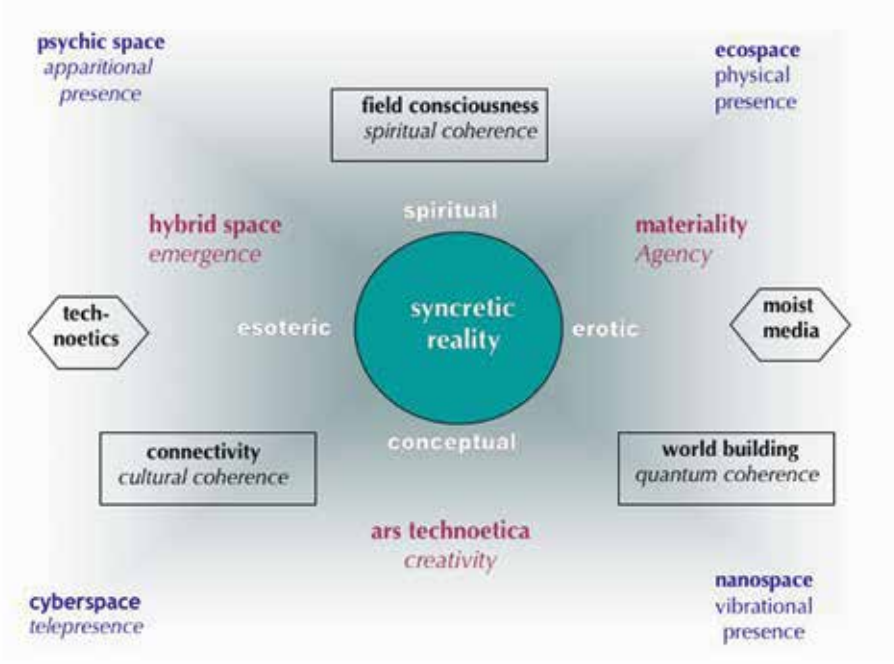


1968-12, TABLE (composite)

Photo courtesy: Roy Ascott

1989, Aspects of Gaia (composite), Linz, Ars Electronica Festival

1983, LPDT (composite)



2012, Syncretic Cybernetics, Retrospectivele, Shanghai, Shanghai Biennale

Photo courtesy: Roy Ascott

in nurturing artistic research and in the deeper questions of representation, reality and consciousness. In 2004 we collaborated on the forming of Z-node, a research arm of the Planetary Collegium, based in Zurich (www.znode.net). We now have three groups focused on cultural themes that relate to discoveries and discourses in science labs and the Z-node has graduated a dozen PhDs, who extend Ascott's aesthetic and pedagogical theories around the world.

Gilbertto Prado, Brazil
Ascott's important appearances in Brazil include *Arte no Século XXI* (1995) at the Museu de Arte Contemporânea/Memorial da America Latina, São Paulo, and *Invenção: Thinking the Next Millennium* at Itaú Cultural (1999), São Paulo. A particularly synergetic moment was the expedition to Kuikuro's tribe in Xingu National Park (1997) with the artists Tania Fraga, Malu Fragoso, Diana Domingues, and myself, introducing Ascott (the artistic shaman of cybernetic and telematic art) to the indigenous shaman of the rainforest, joining visionary practices and forging multicultural insights. Ascott's pioneering work as artist/theorist/educator have influenced many Brazilian artists, researchers and PhD students at a myriad of institutions. His presence and participation in these trans- and intercultural dialogs has had vital relevance in the expansion of the field of art and technology in Brazil.

DooEun Choi, Korea
Roy Ascott's insightful thoughts have inspired curators, theorists, and artists in Korea to find their own paths to media arts. The Art Center Nabi in Seoul opened in 2000 with a collaborative telematic art event that he led to create a "mind bridge" between Korea and the global world. In 2002, his book *Technoetic Art* was published in Korean and became one of the bibles on media art, quoted by prominent Korean media theorists. Recently, a Korean university started a media art and humanities major called "Technoetic Humanities," borrowing Ascott's term. His influence in Korea is not one-way but interactive and participatory; his interests in Korean culture and spirituality and writings regarding the encounter with Korean shamans ignited our own culture as the spirit for the future art.

Peter Anders, US
Roy Ascott has been a life-changer for me. We were introduced at a *Consciousness Reframed* conference in the 90s at a time when I was questioning the materialistic bias of architecture. My PhD studies with Roy at CAiiA-STAR at the University of Plymouth were the best educational experience of my life, leading me to presently develop a node for its successor, the Planetary Collegium, in the US. Roy is a crucial figure in the integration of art with science, one who has identified consciousness as the substrate of both. I remember a conversation in which he defined *aesthetic* as being what remains when all sensible aspects of a work of art have been removed, which called to mind Buckminster Fuller's definition of *synergy* as the difference between the whole and the sum of its parts. Both addressed material reality on a cognitive level and in this they express science and art as a product of spiritual endeavor.

Xiaoying Juliette Yuan, China/US
There is no better way to describe Roy Ascott's ambition and achievement than inspiring the world through his unique vision. Born with the mission of creating new knowledge, he became a pioneer of telematic art, and founded the unprecedented international platform for art, science, technology and consciousness research, the Planetary Collegium. With the foundation of the Technoetic Arts Institute at the Beijing DeTao Masters Academy, Ascott continues to innovate and challenge by introducing his vision and knowledge to China. As one of Ascott's PhD fellows, I consider him not only as an excellent professor and educator, an astonishing artist and theorist, but as a wise and lucid investigator of human mind and existence.

Jennifer Kanary Nikolov(a), Netherlands
Dear Roy, your ideas, your artworks, and your students have consistently produced intimidating and mouthwatering examples of artistic knowledge production, which continue to inspire and challenge young artists and scientists all over the world to embark on journeys of artistic research that are worthy of the visionary core of your excellent program.

1 Joseph Kosuth, 1969, *Art After Philosophy,* Studio International, *www.ubu.com/papers/kosuth_philosophy.html* Cited 15 August, 2009

u19–CREATE YOUR

WORLD

Between a Balloon Hotel and an Ergonomic Stretcher, Femme Chanel Consults her Smart Clock

Sirikit Amann, Gerhard Funk, Conny Lee, Kirsten Mascher, Ulrike Schweiger

First Day: Friday, May 2

So here we are, convened and curious about the other jurors' impressions. We are telling one another which entries made a powerful impact on us during the online evaluation. Among the 650 submissions we've viewed, there were quite a few works that come up for discussion.

We quickly recognize that thematic clusters are forming—the entries can also be allocated to subgroups and thus be compared to one another. They include works on the subjects of bullying, friendship and social issues, as well as projects in specific technical areas. There are also imaginative theoretical concepts for making the world a better place, and visions of the future. The diversity and ingenious implementation of the ideas to improve everyday life are impressive. Once again this year, many entries come from an academic context: projects completed in a course or to satisfy degree requirements, or works started in school that pupils then carried on in their spare time. We were also struck by how many projects deal with increasing efficiency and economic viability, both in private life and on the job. On the other hand, there are also touching, poetic submissions, some very impressive despite the simplicity of their execution.

In the discussion process, we are making a concerted effort to give equal attention to all the various genres and fields: graphics, films, animation, inventions, ideas, robotics, hardware and software developments, games, installations, interactive applications, as well as Internet and community projects. The entrants' ages range from seven to nineteen, which, of course, is taken into account in assessing their work, because experience gained in recent years has shown that submissions by younger participants cannot be compared with the work of nineteen-year-olds. This is why two prizes were specially established to honor excellent projects submitted by our entrants in the youngest age groups.

Most of the works are very well documented, but what some of them lack—and particularly those of a conceptual nature and technical developments—is concrete material that would have made it easier for the jury to reach a well-founded judgment. Sometimes, with only written descriptions to go on, it was extremely difficult and time-consuming for us to figure out exactly what a particular project was all about or what was so innovative about it. We read, studied and analyzed countless PDFs, repeatedly went online to do research, and even consulted experts to get their assessments.

So, for the sake of future juries, we think it would be advisable for entries to be accompanied by not only comprehensive descriptions but also sketches, videos and models. We realize that many of these projects are still in the formative stage; nevertheless, to properly evaluate a work, it's important for the jury to see what the implementation and practical use would look like.

Second Day: Saturday, May 3

We're beginning our overview of the works that are still in the running, and doing an initial summary. From now on, we are grouping in thematic clusters to get a better overview and to make sure that every project gets all the attention it deserves.

But how do you go about unearthing the treasures? The question becomes: What's important in the execution of the concept? Technical excellence? Artistic or visionary ideas? Social consciousness? Artisanal perfection? Or flashing the soul of a poet? In fact, u19–CREATE YOUR WORLD stands for all of these. There is no definitive answer to this question, since the weighting and the orientation only emerge as the vector sum of the jurors' deliberations. In doing so, the jurors bring their own individual approaches to bear, some the upshot of their personal views, others due to the fact that they all work in different fields. The advantage of this is that each project is scrutinized and interpreted from diverse perspectives. In this process of exchange focused on these highly

varied u19 projects, all of us have gained new and enriching approaches, points of view and insights.
By midday, we further reduce the number of contenders and work through the thematic clusters. Some works especially stand out and continue to occupy our thoughts during the pauses. At this point, we all have our favorites and leading candidates for the Top 15 list. The discussions' intensity increases when it comes to letting go of a project that one had developed an (unshared) liking for. Nevertheless, by the end of the day, we succeed (out of necessity) in creating a list of the 30 entries we feel have the potential to win a spot among the fifteen best.
In the u10 and u14 categories, the decisions are rather easy to make. Every year, we receive a relatively large number of entries from youngsters and school groups age ten and under. This is a real mixed bag—drawings, computer games, learning platforms, visions of the future. Our unanimous choice is *Balloon Hotel* by nine-year-old Lara-Marie Pascher. What won us over was the tremendous creativity and inventiveness—for instance, a fold-out dog run and passenger outfits.
For the u14 prize, we decide on a collection of computer games produced with Scratch. What really stood out was that they created the figures and the backgrounds themselves. Each participant in this class project had the opportunity to design his/her own individual character. The jurors were also impressed by the modes of play and the variations offered by *Scratch: Jump and Run.*

Third Day: Sunday, May 4

All of a sudden, something that had been lurking just below the surface for days breaks out as an open—and quite emotional conducted—discussion. What does it mean to "create your world," above all in the context of the Prix Ars Electronica? Is it a wide-ranging playground for youthful curiosity? Is this a forum for young forms of expression that can help to change the world? Or are we the platform for the maladapted, for stuff with no other channel into the public sphere? Should the work that we single out for recognition conform to criteria established in the field of media studies? Are we permitted to disregard copyright considerations for the benefit of a cool new work? "Create your world" is also something that plays out in our heads, in our expectations of what we can hope to see emerge among young people. There is no clear, undisputed answer. The exhortation itself is simple: Make something of the world in which you live; configure it so that it is more interesting for you, a place more worth living in. We have made an effort to make our selections reflect the various approaches you, the u19 participants, presented us with. Accordingly, technology, art, social issues, fun and interdisciplinary efforts are represented in our ranking.

Golden Nica

Femme Chanel—Emma Fenchel · Sarah Oos

This work combines a Chanel commercial with various scenes from films starring Audrey Tautou. The switching between black-and-white and color, the musical transitions and the overall rhythm of the editing are very well done. The sophisticated montage of sound and image nicely foster the development of the concept. We are delighted by the tremendous interpretational latitude this work permits. The gaping discrepancies between the French dialog and the German subtitles—the content of which is almost totally made up—initially creates a bit of confusion, but subsequently evokes a wide array of associations in viewers' minds and inspires totally new thoughts. It is interesting that new narrative twists even have a way of occurring to those who have already seen this work several times.

Awards of Distinction

Smart Clock · Jonas Bodingbauer

This entry was one of the few that we had before us as a real object so we could test how it works. (It

works great!) What we really like about *Smart Clock* is that it succeeds in capturing Google Calendar data "hidden" in processors and smartphones, bringing it back into the analog world, and displaying it right on the clock's face. And all that in a beautiful object with a clear, understated design. But the data visualization concept and the design aren't this project's only outstanding features; we were also impressed by the technical implementation, which took considerable skills and insights both with respect to the hardware and the software.

(e)motion-mirror · Richard Sadek
Looking at yourself in the mirror and making funny faces—this is something elemental that everybody does. But when the mirror suddenly starts to make sounds and you realize that they're controlled by your own emotional facial expressions, then it is clear that you are right in the middle of an interaction with the *(e)motion-mirror.* The way the mirror is constructed makes it possible to hide the technology behind it all. It is as if you were standing in front of an ordinary mirror.

Merchandise Prize u14

Scratch: Jump and Run · Class 2, Modellschule Graz
The animated figures are rendered by hand, painted, scanned in, set up and thus prepared for the Scatch programming environment. Each of these custom-designed figures also gets its own game background, all of which are integrated into the jump-and-run games.

Merchandise Prize u10

Das Ballon Hotel · Lara-Marie Pascher
What caught our attention first? The painstakingly detailed drawings are so lovely that it is hard to describe. The fold-out dog run, the captain's chair complete with driver's license, the passenger outfits, the back-and-forth switch between blue pen-and-ink drawings and the colorful world inside the balloon? u19 honors not only finished works, products and digital environments, but also ideas. Futuristic mock-ups like this one are precisely what constitute the basis of our man-made environment and our inclination to think things over and make them new.

Honorary Mentions

Erdapfel_2.0 · Florian Rath
Retro gaming has enjoyed growing popularity for some time now and *Erdapfel [potato] 2.0* is a groovy ride on this trendy bandwagon. The various levels take players on a quick trip through video-gaming history—from text adventure to 2D scroller to elaborate jump-n-runs. All the jurors, even those who don't play video games on a regular basis, quickly took a shine to *Erdapfel 2.0.* The game works flawlessly, it's lots of fun, and we were particularly struck by the fact that it was developed for several operating systems.

The Epic Awesome Ultimate Super Mega-tasty Ultra-insane Crazy Incredible Biscuit Quest Paolo Perfahl
This game made us laugh and made us curious. The images are refreshing, colorful and witty. The application is simple and works well. The story and the narrative style stand out—in a truly outstanding way. *Biscuit Quest* is more original than most games put on the market by big-name studios.

Multi-Robot Indoor System · Peter Kohout, Günther Cwioro
Using robots to reconnoiter an environment—there are so many deployment possibilities. And when these robots are also interlinked in a network they can do the job even more effectively. Once we had familiarized ourselves with this project, lots of ways to utilize the *Multi-Robot Indoor System* occurred to us: exploring very extensive and hard-to-reach areas like caverns, or hazardous settings like a post-meltdown nuclear power plant or buildings destabilized by an earthquake.

Zaumdo · Sebastian Auberger, Jürgen Brandl
Zaumdo is a platform that anyone can access. It offers open structures so would-be participants can apply to take part in projects; other undertakings can

be set us by-invitation-only. Lots of useful tools are available: a shared calendar, a project database, chat, shared document processing, and the possibility of uploading files. The jury also liked the attractive, no-nonsense design.

anGEKOMMEN–The Long Way to a New Homeland · Anna Fresner, Florian Götschl, Christoph Iby, Markus Wurzer

anGEKOMMEN–The Long Way to a New Homeland is a nicely done documentary that takes an empathetic, authentic look at the everyday life of young asylum seekers in Austria. What really comes across here is these youngsters' genuine interest in the living conditions of these others, and the compassion that ought to be an integral part of what it means to be a human being in our society. Having an open mind, being sensitive to other people's ways of life and living conditions, and making an effort to propagate these insights–this is valuable, and deserving of recognition and support.

Wasser für Togo · Patrick Hutterer, Bernhard Käfer

Several projects engaged in development cooperation were submitted for prize consideration this year, but this one is by far the most complex and has been implemented to the greatest extent. It is not simply a concept proposal or a fundraising drive; this initiative has been in progress for almost two years–from a long phase of thorough preparation to actual implementation on site in Togo. It is an excellent example of how to identify a problem, analyze a situation and develop a solution in close cooperation with the subsequent users and in a way that takes local facts and circumstances into consideration. In this development cooperation project, the accent truly is on cooperation.

Hands4World · Laurenz Birnbaum

Who would have thought that you could make something worthwhile out of a soft drink can, a PET bottle, a ballpoint pen and a piece of string. Hard to imagine, huh? But the project video demonstrates quite convincingly that a hand prosthesis can be created out of very simple means. Especially in countries in which high-tech medical prostheses are unaffordable, this little invention could make a real difference in people's lives. We regard this entry as an inspiring display of commitment that shows how it is possible to provide interpersonal aid irrespective of financial framework conditions.

Cycle Swing · Ugo Uwakwe

Cycle Swing is a very promising and innovative piece of public infrastructure: a space-saving way to park bicycles. We really like this idea–its user-friendliness and its well-thought-out design.

Hungry Fish · Paul Hueber, Marvin Schürz

Even though you have a pretty good idea about what's up with the *Hungry Fish* after only a few sequences, you are still looking forward with great anticipation to see where the current is flowing. Thanks to a clear narrative arc, a simple story becomes a big drama. A little fish eats all the big marine life that swims its way until it finally bites off more than it can chew. Animation is an effective instrument to engender feelings: smirking, thoughtful reflection, dismay and laughter. The thing about *Hungry Fish* is that it can make you chuckle but there is a message too–about greed and how some gluttons just don't know when to quit.

Ergonomische Seitenabstützung der Gebirgstrage · Dominik Stachl

Who would have thought that nobody had come up with something like this yet? This incredibly simple solution would lead you to think that the *Stretcher with Ergonomic Side-Support for Use in Mountainous Regions* had been around forever. But sometimes, the easy answer to a problem does not emerge until the need for it in actual practice is pressing enough. This young inventor's approach was exemplary: problem analyzed, solution worked out, community involved, transition from drawing board to implementation accomplished, product tested and, what's more, economic viability considered. From base to summit, a successful project!

Found Footage, *Train de Nuit,* Jean-Pierre Jeunet, Frankreich 2009

Femme Chanel–Emma Fenchel

Sarah Oos

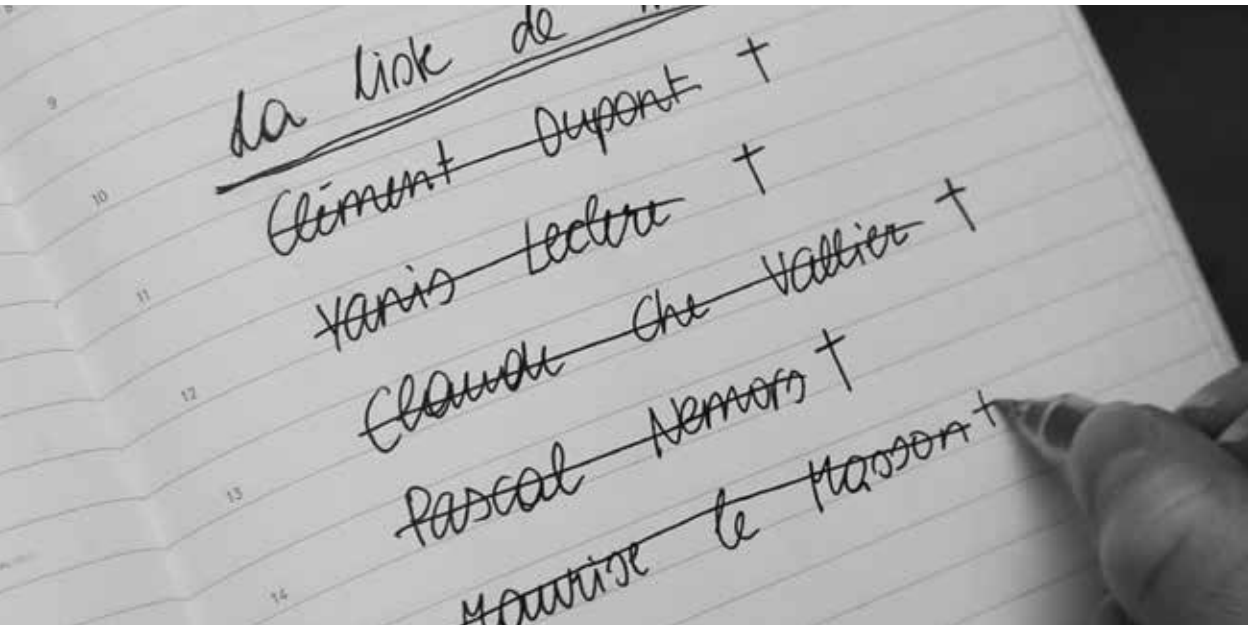
Femme Chanel–Emma Fenchel is a video made with found footage–sequences from existing films–that explores the possibilities of recontextualizing this material. The point of departure is a commercial for the Chanel No. 5 *Night Train* perfume (France 2009) directed by Jean-Pierre Jeunet and featuring Audrey Tautou, as well as other films *(Coco Chanel, Hunting and Gathering, Priceless)* starring Tautou.

This found footage was re-cut into a new video, with particular emphasis on the editing as a means of subtly manipulating viewers. *Femme Chanel–Emma Fenchel* consists primarily of cuts interconnecting formally well-matched sequences from other motion pictures. This revision of the sequence of the cuts as well as the insertion of other material modifies the message of the perfume commercial, with the initially demure Audrey Tautou–playing a stereotyped female image propagated by advertising–mutating into a man-eating femme fatale.

There is one additional manipulation strategy: going with the original French soundtrack and adding German subtitles. However, the translation by no means corresponds to what is said in the originals–for one thing, in order to adapt the dialog to the new cinematic sequence of events, for another, to impart ironic connotations to the reconfigured plot.

The name of the lead character, *Emma Fenchel,* is an anagram of "Femme Chanel," and thus announces the basic principle of the video–rearranging various components to compose a new message.

Found Footage, *Coco avant Chanel*, directed by Anne Fontaine, with Audrey Tautou, France 2009



Sarah Oos (born in 1994) in Wels, is about to graduate from the High School for Artistic Design; in October, she will start studying graphics and photography at Linz Art University. She discovered her passion for video-making and graphic design over the course of various internships, including one at the YOUKI International Youth Media Festival.

(e)motion-mirror

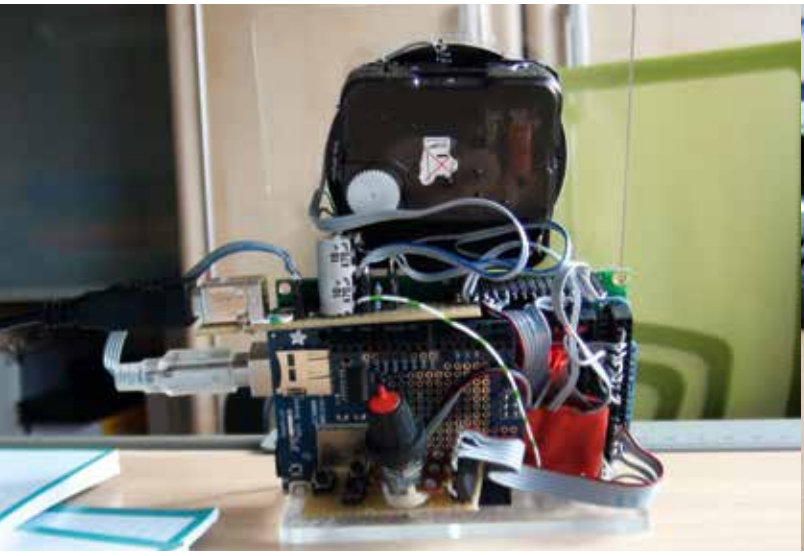
Richard Sadek

Feelings are human. No computer in the world—no matter how much processing power it brings to bear—can outperform us when it comes to interpreting feelings and reacting to them. Moreover, a person does not even have to learn feelings. Infants and people afflicted with blindness at birth laugh and cry, and thus display feelings that are clearly recognizable as such. *(e)motion-mirror* is designed to enable us to appreciate this unique human trait in that it does not make even the slightest effort to interpret the feelings of visitors to the installation. Instead, facial movements (motions) are subjected to computerized (e) analysis and "reflected" (mirrored) as piano notes. This project is thus, in a certain sense, comparable to a video or a mirror that simply reflects feelings and does not interpret them like some artificial-intelligence applications. Accordingly, the sounds heard by installation visitors are their own feelings, which are analyzed in a purely objective way. Nevertheless, these are not sounds that one would normally associate with the respective emotions—for instance, a smile does not necessarily evoke cheerful music. If that were the case, then *(e)motion-mirror* would indeed be interpreting those feelings. Here, it is left up to the observers themselves to interpret their feelings that have been translated into sounds.

Richard Sadek (born in 1996) has been fascinated by music and technology ever since he was a little boy. Currently enrolled at Kepler High School, he plays classical guitar and sings in a choir, but also devotes a lot of his free time to programming. As a way of combining his two passionate pursuits, he developed a predilection for creating interactive artworks. *(e)motion-mirror* was produced in conjunction with Experimental Media Design, an elective course he took at Kepler High School.

Smart Clock

Jonas Bodingbauer



Smart Clock is a combination appointment calendar and clock. It displays not only the current time but also upcoming appointments. The RGB LEDs behind the clock-face display appointments coded by color. The user can see when an appointment begins and how long it will last. The names of the appointments and their respective color coding are displayed on an LCD with space for 20 x 4 letters under the clock. The *Smart Clock* retrieves the appointments from Google Calendar. Appointments can be displayed in half-day mode (one LED corresponds to 30 minutes), or in one-hour mode (one LED corresponds to 2½ minutes), with the current hour being displayed in full detail. The clock was constructed with an Arduino Mega 2560, a WiFi Shield and several other components. Since you cannot access the Google server directly with the Arduino Mega, this has to be done via a server running on an external computer (e.g. a Raspberry Pi). Thus the clock first accesses the self-programmed clock server and then the Google server. The server was programmed in Java, the Arduino in C and/or C++.

The network settings (WLAN data, server IP) are entered via a homemade controller consisting solely of a potentiometer (to enter numbers and letters) and three buttons to navigate the menu.

This clock was developed to provide users with a better overview of their daily schedule and to help them arrive for appointments more punctually.

Jonas Bodingbauer (born in 1998) is currently attending Leonding Technical School, where he is studying electronics and computer science. He likes to spend his free time on the computer–programming and designing switches, as well as playing computer games. He has taken part in the annual Physics Olympiad and won the 2014 competition in the province of Upper Austria. His other hobbies are cycling, running and playing the cello.

Scratch: Jump and Run

Class 2, Modellschule Graz

When Magdalena Strauss, our new teacher, asked us, the students in Class 2 at Modellschule Graz, what we would like to do in graphic arts class this year, a buzz went through our ranks: "Let's create a computer game!" And we were really happy that we were going to be able to do exactly what we wanted. But then it turned out that it was not as easy as we thought it was going to be! We painted the protagonists and the bad guys, designed the backgrounds and developed narratives about the individual characters. We also analyzed programs in order to turn them into short plays. The work on the computer demanded a great deal of concentration and patience. Separating the characters from the background and programming the game were probably the greatest challenges, but we managed to master them with lots of skill, inventiveness and mutual help. It took about two months to produce jump-and-run games that we are really proud of. What they call for are manual dexterity and quick reactions while doing what it takes to reach the goal—jumping over obstacles, collecting candy or stars, shopping, flying or enlarging yourself. But watch out! When you have a run-in with an evildoer, with lava or acid, it's GAME OVER. So if at first you don't succeed, try, try again! But if you do make it all the way, you get a well-deserved round of applause. In one game, the main character even starts juggling! We would especially like to thank David Panhofer for helping us do the programming.

Modellschule Graz is a college preparatory public school offering an enriched program in graphic arts. Class 2, Modellschule Graz classmates: Antonia Alge, Laurens Angenbauer, Thomas Bachlechner, Viola Baur, Oliver Binder, Lea Fritz, Lena Gartler, Evelyn Gratzer, Niklas Grebien, Juli Hanusch, Maja Jaritz, Nikolaus Juch, Elias Krainer, Johanna Marauschek, Lisa Oberleitner, Helen Pölzl, Jana Rabofsky, Katharina Rohrer, Angelina Roll, Flora Michaela Storm, Faye Taylor, Gabriel Zinganel

Das Ballonhotel

Lara-Marie Pascher

Das Ballonhotel (The Balloon Hotel) is a hotel that functions like a balloon and is propelled the same way—a gigantic balloon flying through the air with four capsules—a cockpit, passenger area, dog run and a toilet. There are two pilots: one on the dayshift, one on the nightshift. A stewardess provides service for the passengers and the pets.

Safety Precautions: In case of an imminent crash, a paraglider for the entire balloon hotel unfolds from the side of the passenger area. There are also parachutes for everyone on board stored on the side of the passenger capsule. For children and dogs, there are tandem paragliders equipped with safety belts.

Passenger Area: The passenger area is round, with a circumference of at least four meters. This space resembles a ring like in a circus, and has a table in the middle.

Technology: The balloon is powered like a normal hot-air balloon. The balloon hotel also features a balloon covered with solar panels to provide electricity to the cockpit and the infrared lamps used for heating.

House Rules: The balloon hotel is for adults and children. Pets such as dogs and cats are also permitted, but not horses or other large animals.

The dog outfit should look like dog clothing. There should also be a dog basket suspended from the balloon hotel. The dog run is a meadow that folds out of the passenger gondola. In the middle of the dog run, there is a metal ring with karabiners so dogs and people can be secured to it.

The people's clothing is a rock climbing outfit with soft and comfortable belts.

Lara-Marie Pascher is nine years old and lives in Vienna. Her hobbies include inventing (as you may already have guessed), her pets (a dog called Pablito and Merissimo the cat), culinary experimentation and her cooking blog *http://lara-marie-kocht.mp2.at*, ice skating, horse riding, mountain climbing and outdoor adventures, her friends, and, above all, creative activities such as painting, arts and crafts and jewelry and fashion design. As you can see, she is hardly ever bored, but when she is, she reads a book or writes stories.

anGEKOMMEN–The Long Way to a New Homeland

Anna Fresner, Florian Götschl, Christoph Iby, Markus Wurzer

We, the members of Altes Gymnasium Leoben's video crew, visited the refugee facility run by a Protestant social welfare organization in Deutschfeistritz, Styria, in the summer of 2013, where we got some interesting and also very touching insights into the everyday life of 44 Afghan refugees who had been forced to leave their homeland to escape war and political persecution. The hope for a better future brought these young people to Europe. But not everyone in Austria reacted with understanding to why they had fled. These asylum seekers, while still in a state of shock after the ordeal they had gone through, had to face questioning by Austrian authorities. Since there is no investigation of the circumstances that forced them to flee, the credibility they display in these interviews plays a big role. The people who look after them in Austria say that a lot of changes have to be made to this country's asylum policies and the many hurdles to granting these people official recognition. The young people face a long, hard path to reach what they call a "good future." In the meantime, they are making every effort to integrate into Austrian society. At the Polytechnic School in Deutschfeistritz, a special class for young Afghans was set up, in which volunteers give them extracurricular German instruction and help with their homework. They devote most of their leisure time to sport. There is a gymnasium inside the refugee facility, as well as an athletics field outside. Many of them take the train to Graz to work out or go swimming. The refugees' main goal is to finish school, learn a profession, find a job and live happily ever after in their new homeland.

Anna Fresner (born in 1998) likes films, video games, music and the color green. She also enjoys programming and spends a lot of time working on computers. **Christoph Iby** (born in 1998) is a student at Leoben High School and is on the video crew of the Altes Gymnasium Leoben. His hobbies are producing, directing and editing films, reading, dancing and music. He is also interested in politics, business and modern media. **Florian Götschl** (born in 1998) is a student at Leoben High School. His interests include sports (football, skiing, cycling) and computers. He has already worked on numerous video projects. **Markus Wurzer** (born in 1998) is a student at Leoben High School. He enjoys athletics and the outdoor life, but he's also very interested in technology. He discovered his cinematic talents and abilities at a young age, and working with a camera is now one of his main hobbies. (Group portrait: Back: Christoph Iby; Front (left to right): Markus Wurzer, Florian Götschl, Anna Fresner)

Cycle Swing

Ugo Uwakwe

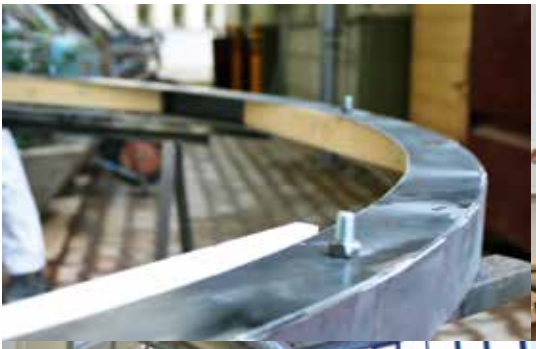
The cyclist rides up to the bicycle stand and dismounts. Then they position the front tire on the bottom of an upward arcing channel and shove the bike forward. With the momentum, the front wheel easily reaches the 12 o'clock position, where it slides onto a hook from which it hangs securely. When the cyclist is ready to use the bike again, all they have to do is pull a lever to release the hook holding the front wheel, and gravity rolls the bike back down the channel right into their hands. The innovative aspect of this project is the space-saving, flexible design of the bike storage container. Its unique feature is the curved rear wall that takes advantage of the bike's momentum to get it up onto the storage hook.

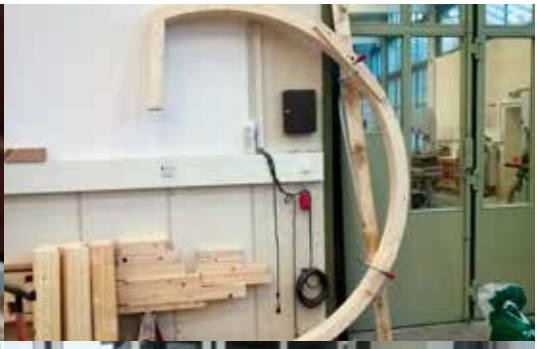
The initial approach to this project entailed horizontal storage, but this had a number of disadvantages for the user. Then the effort was made to employ the same principle in conjunction with vertical storage, and it turned out that this design was far superior–more flexible, optically more interesting, and uses the available space more efficiently.

Design variants: This bike storage facility can be designed as a stand or a container (featuring room for tools so users can carry out maintenance).

Materials: The channeled arc is made of galvanized steel. Among the many possible materials for the frame are sheet metal and wood paneling.

Usage: If it is designed as a container in a public location, electricity can also be supplied. In a private setting, the container can be equipped with a mechanical lock.

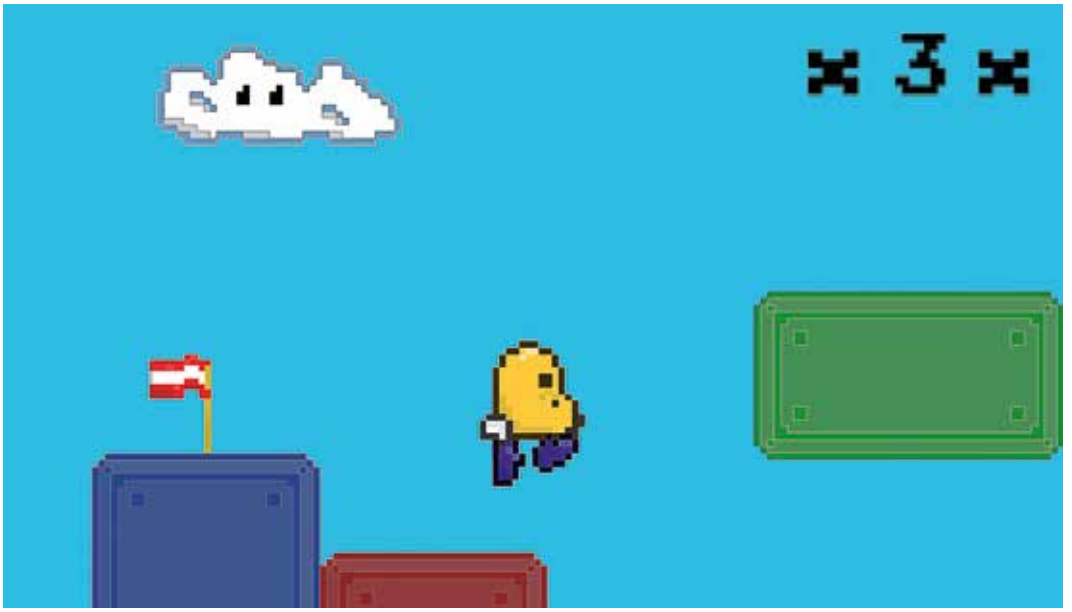




Ugochukwu (Ugo) Uwakwe (born in 1996 in Nigeria) has lived in Vienna for almost 18 years. He has been fascinated by architecture and design since he was a little kid. His first step towards a career in this field came in 2010 when he enrolled in the Camillo Sitte secondary technical school, from which he is due to graduate in 2015. *Cycle Swing* is his first major attempt to demonstrate what innovation means to him. Here he combines industrial design with mobility, which will take on increasing importance in people's lives in the future.

Erdapfel_2.0

Florian Rath



"Tell me of the past and I will recognize the future." (Confucius)

The idea for this project emerged gradually while I was working on various games at school. Then one day, I decided to unify my wide-ranging approaches, and I proudly presented the result: *Erdapfel_2.0*. Video games have long been more than just playthings for kids; as the interplay of music, 2D art, 3D art and animation, they have unquestionably arrived as an art form in their own right. *Erdapfel_2.0* combines the best of 40 years of video gaming history into an interactive experience. The player is accompanied by a charming potato *[Erdapfel* in Austrian dialect] through four elaborately designed levels, each representative of a different era. Along the way, we are repeatedly confronted by corny jokes and "Austrian charm." Throughout this video game's various and sundry segments, only one aspect remains constant: the controls. Navigating the protagonist is thus always done via arrow keys. Special interactions like a jump are launched by the space bar. In addition to surveying the history of video gaming, this project also addresses a linguistic issue: the progressive demise of German-language dialects. Over the course of four months, *Erdapfel_2.0* made the transition from a simple idea to a fully-fledged game. Its retro look was created exclusively with freeware such as Blender, an open-source 3D application, and Photoshop CS2 image-processing software.

http://flow754.itch.io/erdapfel_2

Florian Rath (born in 1998) currently attends Geringergasse High School in Vienna. In 2012, he started teaching himself to use 3D and image processing software in his spare time, and eventually became an expert in Blender 3D and Photoshop. Since 2013, he has also been working with Python/C# scripting in various game engines such as Unity. His ultimate aim is a career in the computer game sector.

Ergonomische Seitenabstützung der Gebirgstrage

Dominik Stachl / 5AHWII

When a mountain rescue crew is called out to transport an injured climber from a very steep, flat rock face, the operation always involves a tremendous amount of exertion and hassle, because the stretcher the crew uses has to be arduously yanked away from the rock face while being lowered or raised. But this newly developed *side-support for the stretcher* makes transporting an injured climber a lot easier. It facilitates the rescue crew's job, and means a less jarring trip for the injured climber too.

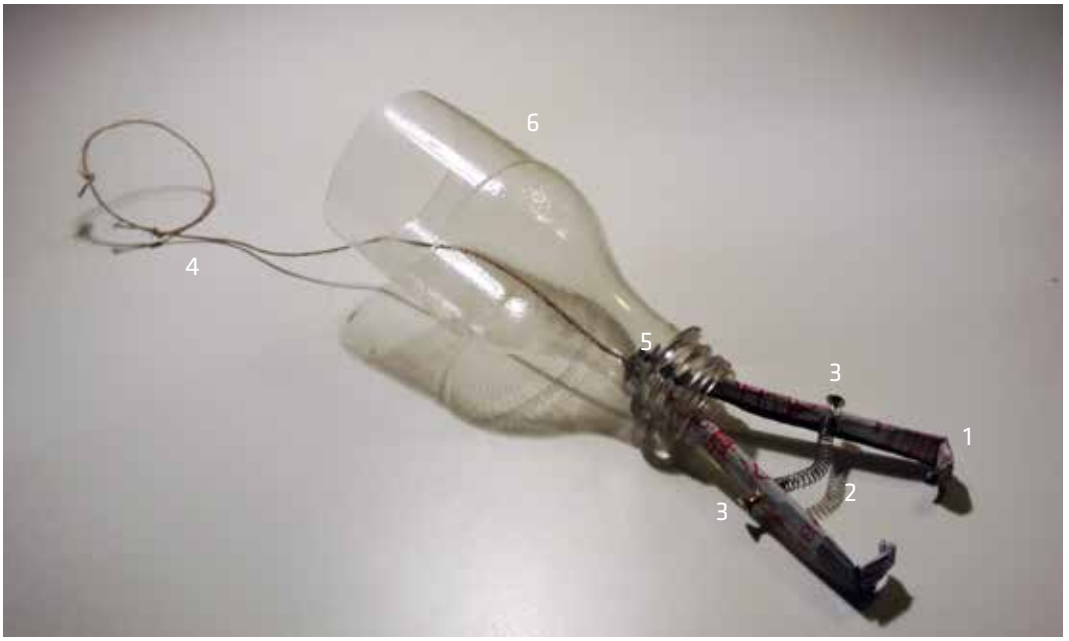
The newly developed side-support built onto the stretcher consists of two wheels, which keep the stretcher away from the rock face and also effectively provide shock absorption to cushion the ride of the injured climber. Two handles have also been added to the stretcher frame; these provide leverage that enables the rescue crew to control the stretcher more effectively. For assignments of this sort, the side-support can be quickly mounted onto the stretcher frame with specially designed clips.

This system is simple to use and much less exhausting for the crew. It has already been successfully tested by the Gesäuse Alpine Rescue Service and is currently in use. All the crew members confirm that it is much easier than the old system and agree that they would like to carry on using it.

Dominik Stachl (born in 1995) lives with his parents and 16-year-old sister in Weißenbach an der Enns, where he attended elementary and intermediate school. He currently attends the Waidhofen Technical School, majoring in mechanical engineering. In his spare time, he enjoys sports and socializing with friends. His hobbies are free-ride skiing, mountain climbing, rock climbing, running, mountain biking and cycling, volleyball and photography.

Hands4World

Laurenz Birnbaum



When someone in the Third World loses a hand, that person's future prospects are not too bright—even if prostheses were available they would be unaffordable. That is why I developed *Hands4World,* a prosthesis you can assemble yourself out of cheap materials and using simple tools. All you need are a PET bottle, a cola can, two little screws and a nail, a thin wooden stick and a ball-point pen.

How It Works

Before you reach for something, your forearm usually forms a right-angle with your upper arm. When you reach for something, you stretch out your arm. The prosthesis' main connection is a piece of string (4) with one end tied to the upper arm just above the elbow and the other end tied to a "pincer" (1) made out of the cola can. Now, when you stretch out your arm, you tighten the string, which, in turn, closes the pincer sticking out of the PET bottle. The two screws (3) prevent the pincer from being pulled completely into the mouth of the bottle. The ball-point pen's spring (2) makes the two prongs of the pincer automatically reopen when the arm is relaxed. The small nail (5) across the mouth of the bottle holds the pincer in place.

The Website

The next step in publicizing my invention is for me to set up a website providing step-by-step instructions on how to build the prosthesis. This website will also feature a space for comments such as feedback and suggestions for improvements.

http://hands4world.jimdo.com/

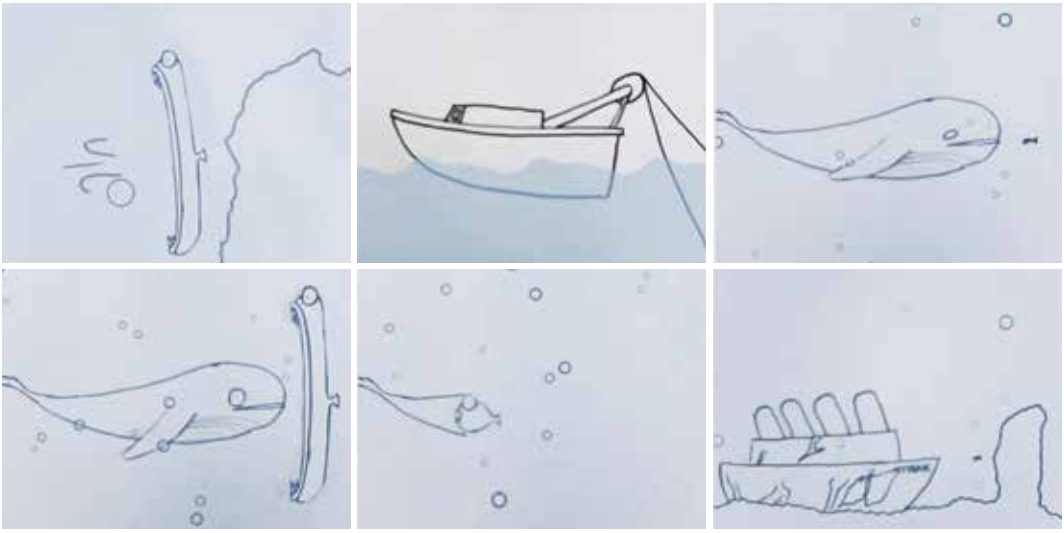
Laurenz Birnbaum (born in 1999), attended Innere Stadt Innsbruck Elementary School from 2005 to 2009. Since 2009, he has been attending Sillgasse High School, which offers enriched instruction in the natural sciences. He lives in Innsbruck with his parents and younger sister. Projects:
2013 JUFOTECH – Jugend forscht in der Technik der WK Tirol: 1st Place, Small Group
2014 JUFOTECH – Jugend forscht in der Technik der WK Tirol: 2nd Place, Small Group

Hungry Fish

Marvin Schürz, Paul Hueber

In 2013, we took a course in animated filmmaking at the Summer Academy sponsored by Stiftung Talente [a foundation to nurture gifted youngsters]. During the first few days, we tried out different techniques and ideas, but it did not take long for us to come up with a basic idea for a film plot, though we were not yet sure how it would end. First, we agreed on a certain style we wanted to use in our short film. Then came the design and drawing the various characters. To shoot the individual images, we used a 480p webcam together with AnimatorDV-Plus stop-motion software. At first we worked with white foil and whiteboard markers, but this was really time-consuming. Plus it left black smears on the areas where colors had been applied and then erased. So we decided to draw the characters on paper and cut them out. When something had to change its shape, we just redrew it and then switched the images. For example, we had four different versions of the opening positions of the fish's mouth.

After we finished shooting the individual frames, we inserted effects with Blender 2.63 and Adobe After Effects CS3. With After Effects, we put in air bubbles and colored the background blue to get across the feeling that the story was set underwater. We used Blender for the waves you can see in the scene with the boat. Finally, we added sound and music with Pinacle Studio 14.

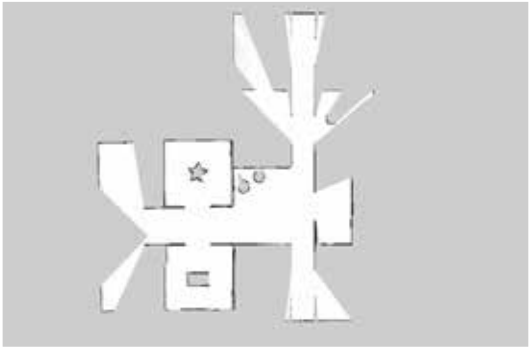


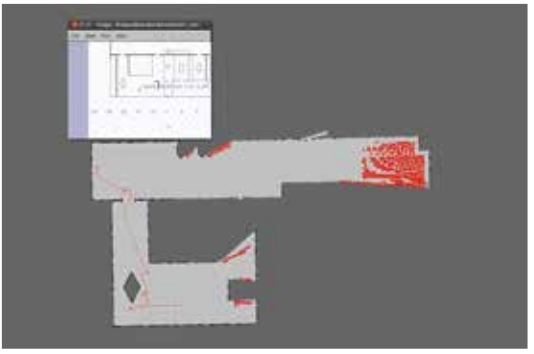
Marvin Schürz (born in 1999 as Marvin Elias Julian Höhl) currently lives in Alberndorf in der Riedmark. After spending the first three years of his life in Vienna, he and his mother and sister moved to Upper Austria. He first attended Georg-von-Peuerbach High School in Linz. Since September 2013, he has been attending Leonding Technical School. **Paul Hueber** (born in 1998) attended Linz's Adalbert Stifter Elementary School and is currently at Georg-von-Peuerbach High School. This film is one of the results of the animation course he took at the 2013 Summer Academy. Last year, he also took part in the Mathematics Mini-Olympics. His hobbies are reading, math, travel and volleyball. Beginning in summer 2014, he will be spending a year in the USA.

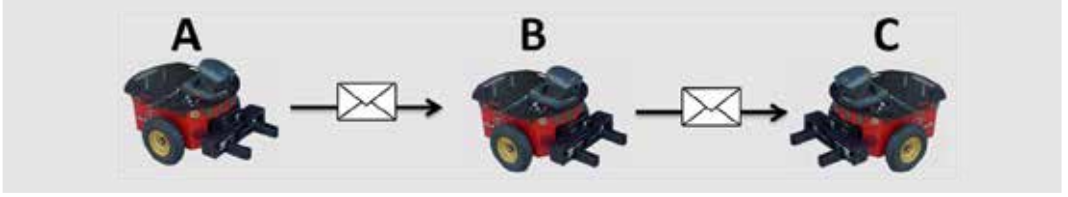
Multi-Robot Indoor System

Günther Cwioro, Peter Kohout

Our *Multi-Robot Indoor System* is above all an effort to create a framework that enables robots to exchange information about their surroundings, learn from one another and reconnoiter buildings quicker. With this system, robots can operate in unfamiliar environments and exchange and evaluate information they have gathered. The robots can independently set up an ad-hoc network to exchange their data. To make communication possible among robots that are not directly connected to each other, intermediary robots function as relays and pass on data to the others. In this way the robots can communicate comprehensively and dynamically among themselves, even when they are constantly on the move and the neighbor they are directly linked to changes. Every robot is capable of using a laser to generate a two-dimensional map of its surroundings. With our framework, a robot can exchange this map with others and input the information into its own coordinate system. Each robot thus obtains all the information the others have gathered, so they can be deployed as a team in a coordinated, efficient way.



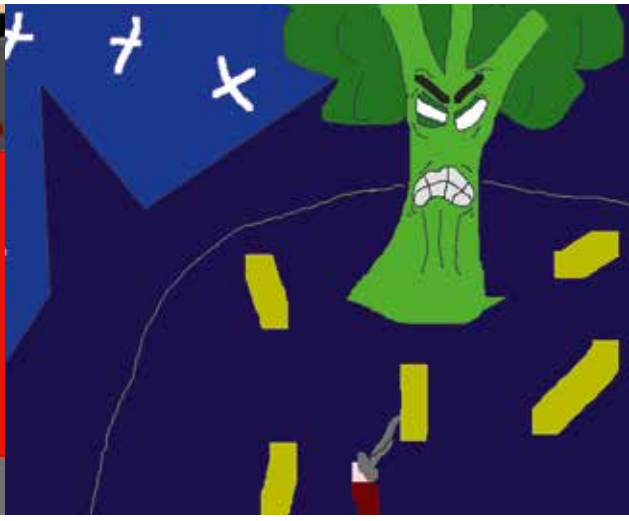




Günther Cwioro and **Peter Kohout** attend Villach Technical School, where they are seniors majoring in network technology. They carried out this project in conjunction with their pre-university studies, which entailed a summer internship in cooperation with the University of Klagenfurt. They are currently working on expanding and upgrading this project.

The Epic Awesome Ultimate Super Mega-tasty Ultra-insane Crazy Incredible Biscuit Quest

Paolo Perfahl



By way of overview: this game features a hero played by the user. You have to try to defeat Tiucsib, the evil sorcerer, and prevent his dastardly efforts to wipe out biscuits. Here's how it works. A picture appears. Beneath it are options you have to choose from. The correct option leads to the next "space"; the wrong ones mean that you either lose a biscuit or nothing happens. Your biscuits and the "space" are shown in the window at the top of the screen. The biscuits are a source of life; when you are out of biscuits, you lose. You also need biscuits to carry out various attacks, so you have to keep that in mind too. I programmed the game using only Python (including easygui), and I did the graphics with mtPaint. The whole game is in English.

Paolo Perfahl (born in 2003) has just started high school in Vienna. He has been programming ever since he turned eight—beginning with Scratch and moving on to Python. A friend showed him how to work with Scratch, but he also discovered various commands and combinations on his own. To learn Python he attended a great course that taught him the commands he used in *The epic awesome ultimate super-mega tasty ultra-insane crazy incredible Biscuit Quest*. He thinks programming is lots of fun.

Wasser für Togo

Patrick Hutterer, Bernhard Käfer, HTLuVA Pinkafeld




Wasser für Togo (Water for Togo) is the result of cooperation between Pinkafeld Technical School and a school in Lomé, Togo. The assignment for this graduation project was to design a shower and WC facility to improve conditions at the school in Togo. This project's genesis was in March 2012 when Ephrem, a German teacher from Togo, visited Pinkafeld and provided an overview of the Lycée de Lomé Port and the conditions there. This led to the first student initiative and started the wheels turning on the project to improve the water supply at the school. In summer 2013, a vertical filter well and a water tower were developed.

But improving the water supply was only half the job; we also had to come up with an elaborate wastewater treatment concept. Our response was our graduation project: "Construction of a Sanitary Facility." At the top of our agenda was improving the sanitary situation and making the facility sustainable. By combining a toilet, a shower, an efficient sedimentation tank and an organic (plant-based) water treatment facility, we hoped that the new system would please the people who used it. In order to assure a long useful life, we installed a system that is easy to maintain and repair. In the future, the emphasis will be on expanding and upgrading the facility.


Bernhard Käfer (born in 1995), attends Pinkafeld Technical School. In the structural engineering program he is majoring in underground construction. Over the course of his schooling, he has developed a keen interest in the construction and visualization of buildings. During Christmas vacation 2013-14, he made a commitment to this construction project in Togo. His hobbies are using visual software to create 3D buildings and playing the drums. He is also a volunteer firefighter. **Patrick Hutterer** (born in 1995) attends Pinkafeld Technical School. In the structural engineering program he is majoring in underground construction. In recent years, the focus of his interest has shifted to groundwater engineering. During Christmas vacation 2013-14, he displayed his abilities and improvisational talent in the construction of this sanitary facility. His hobbies include running, cycling, skiing, paintball and trapshooting. He is also a volunteer firefighter.

Zaumdo

Sebastian Auberger, Jürgen Brandl

Our aim is to set up a public platform for creative collaboration that enables people to have fun working together on their projects. The concept of this endeavor was born when we realized how many different tools we were using when we worked together–both in school and in our personal lives. Actually, most of these tools are not even designed for this purpose and are correspondingly complicated or inconvenient to use. *Zaumdo* makes it possible to collaborate in real time. Registration is open to the public, and use is free of charge. Anyone can create a project on a wide range of topics in one of the following privacy levels:

- Public (anyone can participate)
- Open (anyone can apply, but the applicant has to be accepted)
- Private (only invitees can see the project; by invitation only)

Projects have access to the following collaborative tools:

- Tasks → create simple to-do lists and checklists
- Discussions → conduct conversations that really get the point across
- Documents → compose a text jointly in real time
- Files → all files and documents are located in one place
- Calendar → record important appointments
- Chat → send short, project-related messages

These tools are set up so that any change is immediately displayed to everyone involved in the project. *Zaumdo* is ideal for school projects, but it is also a great way to cooperatively organize a birthday party or group vacation. We love working on this, and it would really make us happy if lots of people all over the world used *Zaumdo!*

http://www.zaumdo.com

Jürgen Brandl (born in 1995) attended Rohrbach High School from 2005 to 2009, before transferring to Neufelden Technical School. During his five years at Neufelden, he did several internships in a wide range of sectors, including advertising and marketing. These experiences quickly led him to recognize that the combination of visually appealing presentation and modern technology is no longer a contradiction but a basic prerequisite for successful products. He is currently completing his final projects and exams, including putting the finishing touches on the *http://www.zaumdo.com* online platform together with his classmate **Sebastian Auberger** (born in 1995) lives in Haslach an der Mühl, where he attended elementary school from 2001 to 2005. Then it was on to Rohrbach High School and, beginning in 2009, Neufelden Technical School. During his five years at Neufelden, he really got into computer science. One quality that defines him in numerous ways is his desire to learn new things. He buys more books than he has time read, and registers for lots of online courses. He is currently completing his final projects and exams, including putting the finishing touches to the *http://www.zaumdo.com* online platform.

[the next idea]
VOESTALPINE ART AND TECHNOLOGY GRANT

Innovative Reactions to an Unstable Society

Rikke Frisk, Horst Hörtner, Ela Kagel, Alexander Mankowsky, Michael Sterrer-Ebenführer

The aim of this art and technology grant is to honor new and extraordinarily promising ideas and to support the process of developing them further. This year, the jury received 128 submissions and the selection process was organized in two steps. In the first one, each jury member had access to the application database before the jury met, in order to gain insights into the projects. In the second step—the actual jury meeting—the jurors went through all entries again thoroughly, discussing the quality of the ideas, the relation to the overall categories of energy, mobility and access, and whether the project would benefit from the grant or not. What is remarkable about this year's submissions is that we have had a broad range of projects that express a general discomfort with the current state of digital culture and its impact on society, individuals and how technical developments may interweave with biology. Many projects critically reflected upon digital environments and pointed towards challenges and threats we are facing against nature, the quality of our lives, personal freedom and access to information.

The jury observed that many projects implied very challenging questions rather than providing solution-driven notions of technical innovation, which might have prevailed in previous years. This may reflect a zeitgeist that questions the problem-solving possibilities of technological developments, the usability of high-end products and the effects on social interaction. The entries demonstrated this by critically asking questions about societal problems, by deconstructing and downgrading technological high-end products, by including poetical reflections and by pointing to cyborgism and the interplay of nature and technology. This year's proposals clearly showed us that real innovation cannot happen outside the realm of society. Technology can help a great deal in realizing social innovation, so we need to be in a position to define its framework and control its scope in a self-determined way. With our selection of winners we want to honor people who can spark critical debates and who have come up with outstanding approaches for working on some of today's pressing challenges.

[the next idea] Voestalpine Art and Technology Grant

Blind Maps · Markus Schmeiduch, Andrew Spitz, Ruben van der Vleuten

Our winning project, *Blind Maps,* provides an outstanding solution for blind people to navigate routes in real time with the support of a touch-sensitive technology. The interface has a perforated, Braille-like screen with adaptable, moving pins that show the user how to find his or her way through the dense network of streets so typical of current cities. The big potential of the project lies in the fact that it augments the everyday reality of visually

impaired people, and thus creates access to technologies that were previously not available to this group. *Blind Maps* opens up and expands a formerly one-dimensional "blind space" to a crowd-sourced, navigation-based ecosystem enriched with useful information. On top of this, the exploration of this technology might add the tactile sense to augmented reality and thus enhance the experience and use of technical devices, which will possibly affect our future interaction habits on a more general level.

Honorary Mentions

Mine Kafon · Massoud Hassani

The first Honorary Mention goes to *Mine Kafon,* a low-tech project that is easy to develop and implement but makes a truly life-changing difference for countries that suffer from undetected land mines. Designer Massoud Hassani has created a wind-powered device that can sense and destroy landmines at minimal cost compared to conventional processes and products. This project also shows how the combination of local and academic knowledge can create fantastic results, which are more feasible and locally adaptable than anything invented in a laboratory.

Symbiotic Machine · Ivan Henriques

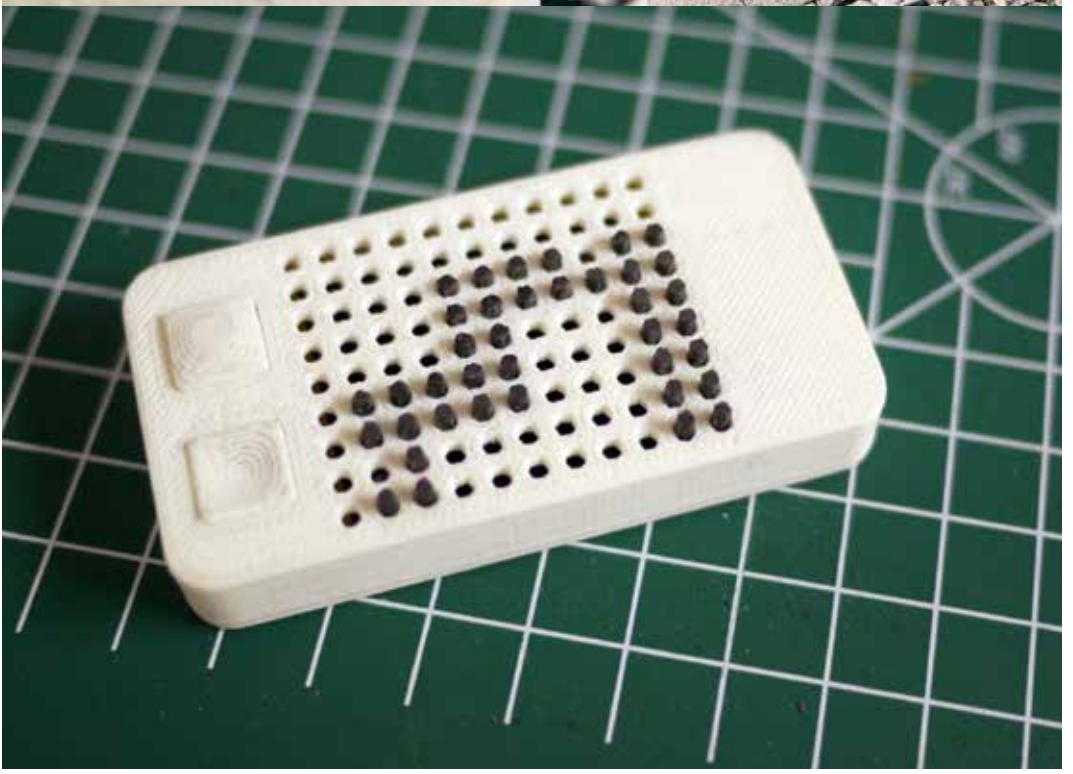
The second Honorary Mention goes to the *Symbiotic Machine* by Ivan Henriques. This prototype of a robot can feed on algae while moving in water. Mimicking the digestion of a living organism, Henriques' machine harvests energy from photosynthetic cells and makes it usable for its own locomotion. We selected this project because it addresses the issue of mobile energy as a self-sustaining robot that, living in a closed environment, can gain enough energy to move and to perform easy tasks without central control. Its simple but effective biomimicry approach shows a way of creating self-organized swarm robots, which could be deployed for a range of useful environmental tasks, like cleaning water from algae or filtering harmful substances out of drinking water.

iPhone Quick-Draw System · Shota Mori

The third Honorary Mention goes to the *iPhone Quick-Draw System* by Shota Mori. This video is deeply disturbing, desperately sad and weirdly funny all at once. In a very strong performance, Shota Mori shows us the condition of the homo digitalis: even though he has the most sophisticated communication tools at hand—faster than a samurai could draw his sword—he is still lonely. Lost in a world with constant phone contact there is no way for the urban warrior to connect to anyone outside of his own imagination. He raises a serious cultural critique in a remarkably strong entry that moved us all.

BlindMaps

Markus Schmeiduch, Andrew Spitz, Ruben van der Vleuten



Those with full eyesight take for granted how straightforward it feels to walk around an urban environment. Navigation becomes infinitely more complex when sight is no longer a reliable way of processing one's surroundings. *BlindMaps* is a research-project around this question: how can the visually impaired be given the freedom of exploring and navigating in an unknown urban context. *BlindMaps* will allow the visually impaired to navigate and explore new routes with ease. The user searches for a route using voice-input. Using touch-sensitive technology, the interface has a perforated Braille-like screen with pins that move and adapt to show how to navigate the route in real-time. *BlindMaps* avoids using voice guidance as this detracts from vital auditory clues in the environment.

BlindMaps is planned as a crowd-sourced navigation-based service, which builds on top of map systems like OpenStreetMap and the onboard technology of smartphones. If the user encounters a problem, they can report it with a button and the route will adapt to a safer alternative for them and other users. Using the built-in sensors on the smartphone, the service intelligently rates the route based on how the user is navigating—sudden movements and changes in directions will rate as more difficult. The more people use a route, the more accurate the ecosystem becomes.

The initial concept was made in 2012 at the Copenhagen Institute of Interaction Design. The Fast Company wrote about it in February 2013 and many people have contacted us since then to say that they were interested in having *Blind Maps* for themselves or for their loved ones. In November 2013 we decided to continue with the project as part of the Creative-Region / Cross-Innovation EU program to further develop the concept in Linz, Berlin and Amsterdam.

We are currently doing user-research and prototype-testing sessions with blind people to further define the interface and interactions concept. In parallel we are looking into technology that would be needed to actually manufacture such a small interface. Projects such as HyperBraille, NIST tactile visual display, the Novel BrailleDis 9000 pin-matrix device and MIT's inForm dynamic-shape-display are very promising as possible enablers for *BlindMaps*. Also as a next step we plan to research the software side of things with map-data and route-finding controlled by voice input. It is important to us to further develop this project in the context of open-data, open-hardware and open-design.



Markus Schmeiduch (AT) is an interaction designer and maker of digital products and services. He worked many years at the Vienna based agency Knallgrau before studying at the Copenhagen Institute of Interaction Design. His focus is on people-centered design for mobility solutions at the intersection with emerging technologies. He co-founded and was the interface designer and product manager of Flying, an iPhone app for frequent flyers. Besides *BlindMaps,* he is working on Orbitalism, an experience design project around human space flight *http://www.smeidu.com.* **Andrew Spitz** (FR) is an interaction designer, creative and sound designer. He is the founder of FROLIC, an interaction and experience design studio based in Amsterdam. Before starting FROLIC, he co-founded and was the creative director of Flying, an iPhone app for frequent flyers. His early days were spent as a sound designer and sound FX recordist/editor where he worked on feature films, commercials and documentaries. It was through sound that he discovered the world of interactivity where he started creating interactive installations and software *http://www.andrew-spitz.com.* **Ruben van der Vleuten** (NL) has been involved in a medical start-up called Urogyn. With a background in industrial design, he was responsible for all product design and product development. At the same time he led another life as an interaction designer, developing skills in electronics and programming and studying at the Copenhagen Institute of Interaction Design. After four years with Urogyn he decided it was time to focus completely on his true passion and founded FROLIC, an interaction design studio based in Amsterdam focusing on user experience and tangible design. *http://www.rubenvandervleuten.com*

iPhone Quick-Draw System

Shota Mori

The *iPhone Quick-Draw System* is an up-sleeve holster for an iPhone, with a quick-release mechanism. When not in use it is stored up the sleeve, inspired by the holster release mechanism in the movie *Taxi Driver*. The loneliness that the hero of *Taxi Driver* (Robert De Niro) faces, is the common loneliness faced by the modern Japanese. Even though he has the most sophisticated communication tools at hand—faster than a samurai could draw his sword—he is still lonely. Lost in a world with constant phone contact there is no way for the urban warrior to connect to anyone outside of his own imagination.

The project consists of three parts—the gadget, the performance and the video—and raises a serious cultural critique. In the video, which is deeply disturbing, desperately sad and weirdly funny at the same time, Shota Mori played a man who can't keep up with the present, using an up-sleeve holster for an iPhone, which has conquered the world because of its information-processing speed and its design.

http://www.youtube.com/watch?v=-9Psqkq1nwU
http://www.youtube.com/watch?v=WuP78X6H5JU

Shota Mori (JP), born 1983, is a performer / filmmaker. He produces various performance stage appearances and video productions. The video has had approximately three million hits on YouTube and featured on television at home and abroad. It was inspired by the movie *Taxi Driver* and has been posted on blogs such as Gizmodo. In 2013, Shota Mori directed the music video *Futari ha Koibito* by Kuchiroro and the *ILC Sefuri High School!* promotional video for the Kyushu International Linear Collider video (director with Kurando Furuya), he was the filmmaker for the Gainax *Poke exchange diary-SF100sight* and for the KORG promotion video *Kaossilator 2 & mini kaoss pad2 Quick-Draw System.* In December 2013, the 17th Japan Media Arts Festival entertainment division jury recommended the *iPhone Quick-Draw System* and the *Sefuri ILC High School!* videos.

Symbiotic Machine

Ivan Henriques

In collaboration with scientists from the Vrije Universiteit Amsterdam, we developed a prototype for an autonomous photosynthetic bio-machine that harvests energy from photosynthetic organisms, applying the energy in order to collect photosynthetic organisms again. This aquatic bio-solar machine creates a symbiotic system with its environment, and detects, collects, carries and processes these organisms autonomously, using a floating mobile robotic structure to amplify the energy it has obtained from them. The microorganisms that are a potential food source for the *Symbiotic Machine* can be found in ponds, canals, rivers and the sea. As in the case with harmful algae blooms, it can clean its own environment. This prototype is a crossover between the disciplines of art, design, robotics, mechanics and biotechnology and development of a new entity.

The machine is designed to communicate with the environment and to unify form and function. For this first model the machine is planned to generate electricity by processing the algae from specimen spirogyra. As this specimen is a floating filamentous organism, the robot has to float in the water together with the algae.

The structure is composed of a revolving ellipsoid with three conical arms with tentacles equipped with sensors attached to them. The structure is transparent, in order to catch sunlight at any angle. The choice of a revolving ellipsoid was to create more surface area for the electrodes (photocells) and to capture more of the sun's rays when the light reflects in the golden electrodes–thus using more sunlight. The tentacles make the robot extend its senses to search for algae. The arms create closed chambers for the electronics.

The machine has a complete digestive system, which operates like a jellyfish: mouth/anus and stomach.

The *Symbiotic Machine* was developed in collaboration with Raoul Frese and Vincent Friebe, scientists of VU Amsterdam Laser Lab, physicist Michiel van Overbeek and engineer Leydervan Xavier from Cefet/RJ (Technological School from Rio de Janeiro, Brazil). This project was only possible with support from Stichting DOEN.

http://ivanhenriques.com/2014/03/02/symbiotic-machine/

Ivan Henriques (BR/NL), born in Brazil, lives and works between The Hague and Rio de Janeiro. He is a transdisciplinary artist and researcher working in multimedia installations examining different perceptions of time, memory and environment. In his work he explores hybrids of nature and (technological) culture, creating new forms of communication between humans and other living organisms. He researches various aspects of real-time environment data visualization, where it becomes a motive and motor for the platform that he creates within his works. In an in-depth look at this information he gains from the environment and other living organisms, Ivan creates interactive and participatory art installations. His visionary combination of robotics and living organisms explores the fluidity of subject positions in the post-digital world. Audience involvement is the core of his creation, approaching all living species with a unique experience envisioning a possible new world where we all are hypersensitive to our surroundings. Henriques has an MA from the ArtScience Interfaculty at the Royal Academy of Arts and the Royal Conservatory of Music, The Hague (2009–2011), is represented by Verbeke Gallery and is also member of Transnatural Arts, Research & {future} Design. Some of his pieces are held by recognized private art collections. *http://ivanhenriques.com/*

Mine Kafon

Massoud Hassani

Massoud Hassani has designed and hand-built a wind-powered device heavy enough to trip landmines as it rolls over the ground. Massoud drew his inspiration from his childhood. Growing up on the outskirts of Kabul, Afghanistan, he and his younger brother Mahmud would play with their homemade wind-powered toys. Today, living in the Netherlands almost 20 years later, they designed the *Mine Kafon,* a device that could mean the end of the landmine, in a quicker way than we know with current technology. The *Mine Kafon* is approximately the height of a man. Its core is a 17kg iron casing surrounded by dozens of radiating bamboo legs, each with a round plastic "foot" at the end. Inside the ball is a GPS unit to map the route it has taken—in theory, land cleared of mines. The data will be accessible online in real time. The feet act as a suspension mechanism, which allows the entire Kafon to roll over bumps, holes and so forth. In all it weighs a little over 80kg. About as heavy as a person, and mimicking human footsteps, it is designed to produce enough pressure to trigger a landmine. With each detonation the *Mine Kafon* loses just one or two legs, so it could potentially destroy three or four landmines in one journey. The total cost of the *Kafon* is about $60. It is faster, safer and up to 120 times cheaper then traditional techniques. In countries with war-ravaged pasts, concealed landmines pose a silent, hidden threat. Lurking underground for years, they risk blowing open fresh wounds in communities that are just beginning to heal. Using *Mine Kafon* we can get rid of landmines very quickly. Even if it hits only one percent of landmines worldwide, we are still talking about millions of landmines. In this way we can also save billions of dollars and invest that money in affected countries, to build schools, hospitals, agriculture and industry. The *Mine Kafon* project could help to rebuild economies and give the inhabitants hope and a bright future without fear.

http://vimeo.com/51887079

Massoud Hassani (AF/NL), born in Afghanistan in 1983, moved to the Netherlands in 1998 in search of a new life. As a child in Kabul, he would make all kinds of toys, sculptures and paintings. By the age of nine he had learnt to weld and worked as a car mechanic. So it was an enlightening moment when he arrived in the Netherlands and discovered that there was a profession called "product designer". As soon as he could, he enrolled to study at the Eindhoven Design Academy. Having adopted a new lifestyle and cultural habits, he focused his study on research into building a bridge between the two cultures. He graduated in 2011 and now works from his own studio in Eindhoven with his brother Mahmud Hassani.

PRIX ARS ELECTRONICA COLLIDE@CERN RESIDENCY AWARD

Prix Ars Electronica Collide@CERN Residency Award

Ariane Koek, Michael Doser, Matthew Gardiner, Horst Hörtner

This is the final year of the first cycle of the three-year cultural partnership that created the Prix Ars Electronica Collide@CERN prize in digital arts. The award is one of the two strands of the Collide@CERN artist's residency program, which was the arts/science initiative by CERN (the world's largest particle-physics laboratory, located outside Geneva, Switzerland) conceived of as the flagship of their first Cultural Policy—Great Arts for Great Science.

The first competition for Prix Ars Electronica Collide@CERN in 2011 was won by the German visual artist Julius von Bismarck, with three honorary mentions in visual arts, multi-media opera and digital design. This first competition attracted 395 entries from over 40 countries around the world. In the second year the award attracted even more entries, from 49 different countries, and was won by the American sound sculptor Bill Fontana. In November 2013, the prize was awarded to the Japanese data artist Ryoji Ikeda, with an honorary mention to the German artist Agnes Meyer-Brandis.

The annual competition is open to artists in any domain who work with the digital as a means of creation and/or production, and who are truly inspired by CERN and its science. They are invited to submit their project ideas to the Prix Ars Electronica Collide@CERN, together with a personal video testimony and their portfolio. They have to show their desire to engage with the ideas and/or technology of particle physics or with CERN as a place of scientific collaboration, using them as springboards of the imagination that dare to go beyond the paradigm. They can be choreographers, performers, visual artists, filmmakers or composers—what they all have in common is that they use the digital as the means of making their work and/or of presenting it.

The award includes prize money and a fully funded residency whose costs are raised from private donors. The residency is in two parts—with an initial two months at CERN with a CERN scientist as a dedicated inspiration partner. The second part is a month with the Futurelab team and mentor at Ars Electronica Linz, with whom the winner will develop an idea inspired by the CERN residency.

The jury met in Autumn 2013 to assess the entries for the third Prix Ars Electronica Collide@CERN Residency Award after the Ars Electronica Festival in Linz. As in the previous year, entries came from very diverse artistic domains—with a noticeable increase in entries devoted to music, sound art and gaming in particular.

Mathematical Precision

The Japanese artist Ryoji Ikeda has been described as "the great poet of our current age of digital exploration" (John Zeppetelli, Director and Chief Curator at Muséé d'art contemporain de Montréal.)

As the third prize winner of Prix Ars Electronica Collide@CERN, Ryoji Ikeda, who lives in Paris, is one of the few artists with an international reputation in both visual and sonic new media arts. He focuses on the essential characteristics of sound and that of visuals as light, using both mathematical precision and aesthetics to make anything from small to large-scale immersive installations and performances.

Ryoji's entry for the Prix Ars Electronica Collide@CERN Residency Award was an ambitious research project to continue his artistic investigations into data in quantum dimensions—the qubit (quantum bit), which represents not 0 or 1 but both at the same time—contrasting it with the "bit," which is the smallest unit of data we use in our daily lives. His proposed project impressed the jury with its scope and potential:

"We are intrigued to see what would happen at CERN during the residency when Ryoji's drive to uncover the multi-substantiality of data is directly confronted by the tremendous flow of data and

processing power at CERN when the Large Hadron Collider is working again in 2015." The CERN data center handles about one petabyte of data every day from the experiments of the LHC, so in the words of the Director General of CERN, Rolf Dieter-Heuer, "it is appropriate that what is at the heart of our scientific discoveries will become the heart of artistic discovery too."

In his personal video testimony supporting his application for the residency Ryoji was also clear about the uniqueness of the residency as something that offers him the time and space to think, reflect, discover and research, without the pressure of producing a piece at the end of his residency:

"The residency at CERN and Ars Electronica Futurelab gives me the extremely valuable freedom of time and space to research and explore new areas at CERN—one of the world's leading centers of technology—without any pressure, which is something I have been longing for," said Ikeda. "I am very excited about the possibilities."

Ikeda is splitting his residency at CERN into two parts. The first part is in July 2014, when he comes to CERN without his team of programmers, "to enjoy being quiet and contemplating that I haven't had for many years."

Induction Inspiration

In February 2014, Ryoji Ikeda visited CERN for his induction—a four-day introduction to the science and scientists at CERN, which is an important part of the residency. Curated by the creator and director of the Collide@CERN program, Ariane Koek, the induction, which takes place months before the residency, is intended to fire the imagination of the artists before they begin. It is also the time when they meet many scientists, one of whom is specially selected as the inspiration partner for the duration of the residency. Ryoji was unusual in that he wanted his induction time to be dedicated to just meeting people one on one, and not visiting the machines or experiments at CERN. He wanted to save those aspects for his residency. Accompanied by Horst Hörtner from Ars Electronica Futurelab, he met many different scientists—ranging from theorists looking at black holes and dark energy to experimentalists working on different aspects of the detectors on the world's largest machine, the LHC.

At the end of the induction, the theorist Dr Tom Melia was selected as his inspiration partner. Tom currently works in the CERN theory department, and Ryoji and he share a very deep appreciation of music and musical structures, as well as sharing a passion for mathematical forms.

Supersymmetry—Experiment and Experience

Ryoji Ikeda

In recent years, Ikeda has become interested in quantum theory and mathematics. *Supersymmetry* is the title of a work composed of two installations that reflects these interests, as well as the ideas inspired by the dialogues Ikeda began with the researchers and scientists at CERN during his induction week. The installations have been designed as a platform to express the findings and discoveries during his residency, and so they will continue to evolve and change during their international exhibition tour.

Supersymmetry opened at YCAM (Yamaguchi Centre for Design and Media) in Japan, which commissioned this work, and then moved to *le lieu unique, scène nationale de Nantes* in France in June 2014. The work comprises two installations *supersymmetry [experiment]* and *supersymmetry [experience],* with subtitles deliberately designed to correspond to the relationships between experimentation and observation in modern (particle) physics and between representation and mathematical models.

The first piece, subtitled *experiment*, is one in which visitors can witness physical phenomena prior to them being observed and recorded as data. There are three boxes emitting intense white light, with microscopic pellets moving in complex patterns, both in groups and individually.

The second piece, subtitled *experience,* is two video screens arranged on the left and right, 20 meters long and facing each other, each with two parallel rows of monitors. While images are successively displayed on the video screens, their respective movements are analyzed and described on the monitors lined up in front of them. All the screens are controlled to operate in total synchronization with parallel independent audio playbacks. The sonic score adds another dimension and mathematical experience to this installation.

Ikeda describes *supersymmetry* as the installation version of his performance work *superposition,* which had its world premiere at the Centre Pompidou in November 2012, featuring two live performers. Many of Ikeda's pieces build on previous ones, adding new dimensions and interrogations, and this particular version is a complex expression of the limits of data observation. It will be interesting to observe how the installation changes during his residency.

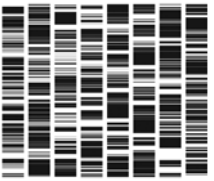
What also will be interesting to observe is the changes in Ryoji's thinking as he goes through the residency in 2014 while the LHC is switched off, and in 2015 when it is switched on. Like all artists, Ryoji will be participating in an occasional blog with his science inspiration partner, and members of the public will be able to listen to how his thoughts evolve before he changes *supersymmetry* during its international tour. In this way, Ryoji himself becomes part of an experiment–the observed. However, one unusual aspect of Ryoji Ikeda is that he is never photographed or filmed. So people looking at the blog will not be able to see him–only hear and read his ideas. He states very strongly that the artist, his personality and his image should not dominate the work. Instead, he believes that the work should speak for itself without the intervention of the cult of the artist.

http://arts.web.cern.ch/collide/digital-arts-residency
http://www.aec.at/prix/collide/

supersymmetry
Materials: 40 DLP projectors, 40 computers, loudspeakers
Dimensions: W9 x D20 xH3m (dimensions variable)
Date / place: April 2 – June 1, 2014 / YCAM, Yamaguchi, Japan

Concept, composition: Ryoji Ikeda
In collaboration with:
Norimichi Hirakawa: programming, computer graphics, mechanics/optics/device design, technical management
Tomonaga Tokuyama: programming, computer graphics, computer system design, technical management
Yoshito Onishi: programming, computer graphics, electronics design
Curator: Kazunao Abe (YCAM), Patrick Gyger (Le lieu unique)
Co-developed with: YCAM InterLab
In cooperation with: Gallery Koyanagi, Tokyo
Equipment cooperation: Mix Wave, Inc., Bell-Park Co., Ltd.
Co-produced by: Yamaguchi Center for Arts and Media (YCAM), Le lieu unique, scene nationale de Nantes, Ryoji Ikeda Studio

Ryoji Ikeda (JP) born in 1966 in Gifu, lives and works in Paris and Kyoto. Ikeda, Japan's leading electronic composer and visual artist, focuses on the essential characteristics of sound itself and that of visuals as light by means of both mathematical precision and mathematical aesthetics. Ikeda has gained a reputation as one of the few international artists working convincingly across both visual and sonic media. He elaborately orchestrates sound, visuals, materials, physical phenomena and mathematical notions into immersive live performances and installations. Alongside of pure musical activity, Ikeda has been working on long-term projects through live performances, installations, books and CDs. 'cyclo' a collaborative project with Carsten Nicolai.
http://www.ryojiikeda.com



Ryuichi Maruo, Courtesy of Yamaguchi Center for Arts and Media [YCAM]

Ryoji Ikeda, *supersymmetry [experience]*, audiovisual installation, 2014

Jury Prix Ars Electronica

2014

Prix Ars Electronica 2014–Jury

COMPUTER ANIMATION / FILM / VFX
Suzanne Buchan, Joe Gerhardt, Jürgen Hagler, Sabine Hirtes, Quayola

INTERACTIVE ART
Óscar Abril Ascaso, Irini Papadimitriou, Enrique Rivera, Maholo Uchida, Michel van Dartel

DIGITAL COMMUNITIES
Ian Banerjee, Laina Greene, Leila Nachawati Rego, Salvatore Vanasco, Kazuhiko Washio

[the next idea] VOESTALPINE ART AND TECHNOLOGY GRANT
Rikke Frisk, Horst Hörtner, Ela Kagel, Alexander Mankowsky, Michael Sterrer-Ebenführer

u19 – CREATE YOUR WORLD
Sirikit Amann, Gerhard Funk, Conny Lee, Kirsten Mascher, Ulrike Schweiger

Prix Ars Electronica Collide@CERN Residency Award
Michael Doser, Horst Hörtner, Matthew Gardiner, Ariane Koek

COMPUTER ANIMATION / FILM / VFX

Suzanne Buchan (CH/UK) is professor of animation aesthetics at Middlesex University London. She gained her PhD at the University of Zurich and was a founding member and co-director (1994-2003) of the Fantoche International Animation Film Festival, Switzerland. She teaches, curates and advises internationally in her research field of a wide concept of history, theory and aesthetics of animation outside commercial canons. Her books include *Pervasive Animation: An AFI Reader* (forthcoming 2013) and *The Quay Brothers: Into A Metaphysical Playroom* (2011). She is the founding editor of *Animation: An Interdisciplinary Journal* (Sage Journals).
adri.mdx.ac.uk.contentcurator.net/buchan-prof-suzanne; anm.sagepub.com

Joe Gerhardt (UK) together with Ruth Jarman forms the artist duo Semiconductor. Through moving-image works they explore the material nature of our world and how we experience it, questioning our place in the physical universe. Their unique approach has won them many awards and prestigious fellowships, most recently the 2012 Samsung Art + Prize for new media, the Golden Gate Award for New Visions at the San Francisco International Film Festival, 2012, and the Art and Science Award at the Ann Arbor Film Festival.
http://www.semiconductorfilms.com

Jürgen Hagler (AT) studied art education, experimental visual design and cultural studies at the University for Art and Industrial Design in Linz, Austria. He is professor for computer animation and animation studies at the Department for Digital Media at the University of Applied Sciences Upper Austria, Campus Hagenberg. He became the program coordinator for the digital arts master's degree program in 2009. Since 2009 he has been co-curator of the Ars Electronica Animation Festival.

Sabine Hirtes (DE) has been teaching post-production and VFX at the University of Offenburg since 2010. After graduating in visual communication at the FH Aachen, she was involved in miscellaneous creative and educational activities in the field of digital print media as well as moving images with a focus on computer animation and VFX in different companies, studios and schools in Germany and abroad, such as the Filmakademie Baden-Wuerttemberg, Cairo Film Institute and the ZKM, Center for Art and Media, Karlsruhe.

Quayola (IT/UK) Regarded for his enigmatic video installations, Quayola creates hybrid spaces of animated painting and sculpture. Engaging a practice of audiovisual performance, drawing, photography and software programming, he explores a fine boundary between the real and the artificial. Special institutional commissions of Quayola's work have allowed him exceptionally rare access to the art and architecture of churches, theaters and museums in Europe, such as Notre Dame and the Vatican. Quayola received a 2013 Prix Ars Electronica Golden Nica together with Memo Akten.
http://www.quayola.com

INTERACTIVE ART

Óscar Abril Ascaso (ES) works as director of activities at the Laboral Centro de Arte y Creación Industrial (Gijón, Spain). As a specialist in the context of techno-scientific culture and new social cultural paradigms, he develops his research in the field of performativity studies. Throughout his professional career spanning over twenty years, he has commissioned more than ten international exhibitions, in addition to many congresses, symposiums, seminars and workshops, for Sonar Festival, Barcelona, Centre de Cultura Contemporània de Barcelona, ARCO Madrid and L'Estruch, Sabadell.
http://www.laboralcentrodearte.org

Irini Papadimitriou (GR/UK) is a London-based curator and producer, currently head of new media development at Watermans, an arts organization presenting innovative work and supporting artists working with technology, where she is curating the exhibition program and an annual digital performance festival. Irini is also the digital programs manager at the Victoria and Albert Museum, mainly responsible for programs such as the annual Digital Design Weekend: a large-scale event of interactive installations, open and collaborative workshops, artists' presentations and talks, showing digital art and design projects and offering audiences the opportunity to meet the artists and makers and explore processes. She is also one of the organizers for London's Elephant and Castle Mini Maker Faire, a day of making, learning, inventing and tinkering.

Enrique Rivera (CL) is a Chilean audiovisual researcher and curator. President of the Chilean Video Corporation and director of the Media Art Biennale of Santiago. Since 1997 he has explored and developed installations based on the intersection between visual art, film and literature in public spaces, galleries, museums and concerts. *http://www.mediatecalibre.cl, http://www.cchv.cl, http://www.plataformaculturadigital.cl, http://www.bienaldeartesmediales.cl*

Maholo Uchida (JP) is a curator and exhibition development division manager of Miraikan (National Museum of Emerging Science and Technology) in Tokyo, Japan. She started her career as a curator of new media art and design producing several national and international exhibitions. She has developed a new style of science museum, where activities and exhibitions are strongly orientated towards art, design, game, manga and other popular culture. She is a director of the *Tsunagari Project,* a symbol exhibition of the Miraikan, which includes Geo-Cosmos, an interactive display with a six-meter image of the Earth.

Michel van Dartel (NL) is curator at V2, where he coordinates public events and is involved in a variety of artistic R&D projects. He also works as a freelance, among others curator of the Dutch Electronic Art Festival, the art center TENT, the MU gallery, the Energize festival, and the Article biennial. Besides curating, Michel is an author, a tutor at Luca Brussels University College and Codarts University for the Arts, a researcher at Hanze University of Applied Science, associate editor of the *Journal for Artistic Research,* advisor to the Mondriaan Foundation and the Creative Industries Fund NL, among others, and professional advisory board member at the Piet Zwart Institute and Willem de Kooning Academy. Michel has an MSc in cognitive psychology and a PhD in artificial intelligence and currently lives in Rotterdam and Brussels

DIGITAL COMMUNITIES

Ian Banerjee (IN/AT) is an architect, urban planner and educational researcher living in Vienna. After spending his childhood in Africa, Asia and Europe, he studied architecture in Vienna. He did his masters thesis on the city of Curitiba, also known as the "ecological capital" of Brazil. He then worked for several years for the Austrian Broadcasting Corporation (ORF) and the German satellite TV channel 3Sat as a consultant for documentaries on urban innovations. During this time he traveled extensively–especially in Asia. The films were made in Tokyo, Kyoto, Hanoi, Shanghai, Hangzhou, Hong Kong, Kolkata, Mumbai, Paris, Washington and Mexico City. Going back to academia, he joined the Center for Sociology (ISRA) at the Vienna University of Technology as an assistant professor. This is where he started researching radical innovations taking place in the educational sector–especially their virtual aspects. During this time, he worked for three years on the National Spatial Strategy for the Sultanate of Oman. The exposure to the complexities of national policy-making in the Arab world shaped his conviction of the need of new forms of community-based education and societal learning.

Laina Greene (SG/US) is chief executive officer of GET-IT (Green Energy Technology and Info-communications Technology), and executive director of a publicly listed telecom tower company in Indonesia. Laina's work experience spans 25 years in the telecoms industry with a focus on Green ICT and bridging the digital divide in developing countries. She also served as secretary-general of the Asia-Pacific Internet Association, board director of Globetel Communications Corp, guest lecturer at the Global Enterprise Marketing program at the Stanford Graduate School and founded, ran for ten years, and sold an interactive digital media company in Singapore. Based in Silicon Valley, Singapore and Indonesia, she considers herself a serial entrepreneur and a global citizen. *www.linkedin.com/in/laina*

Leila Nachawati Rego (ES) is a Spanish-Syrian communication strategist and human rights activist. She is a professor of communications at Carlos III University in Madrid, where she has also started her PhD on new media and freedom of expression under authoritarian regimes. She contributes to several projects and online media like *Global Voices Online, Global Voices Advocacy, Eldiario.es* and *Al-Jazeera English.* She has degrees in English studies, Arabic studies, and a master´s degree in international cooperation. You can follow her on Twitter: @leila_na

Salvatore Vanasco (IT/DE) Born in 1960 in Montalbano, Italy. He grew up in the German state of Hesse and in 1982 studied literature at La Sapienza University of Rome. From 1984 to 1989 he studied visual communication at HFBK, the University of Fine Arts, in Hamburg, and from 1989 to 1998 was a founding member and director of the European Media Art Lab. In 2006 he co-founded xailabs GmbH in Berlin. He is an artist and software entrepreneur, for many years a full-time professor and dean at Merz Akademie Stuttgart, a recipient of the German Media Art Prize and has been an e-businessman since the Internet's takeoff.

Kazuhiko Washio (JP) is a creative director/ producer at Hakuhodo Inc, and also is a chief research director at the Institute of Media Environment of Hakuhodo DY Media Partners Inc. Since joining Hakuhodo, a major advertising agency in Japan, he has supported building innovation programs for a range of companies through his expertise and experience in strategic planning, creative planning, communication design, advanced media development and project development. He is also a photographer and the author of *Branding for Empathy* and a number of photography books.

[the next idea] VOESTALPINE ART AND TECHNOLOGY GRANT

Rikke Frisk (DK) is founder and co-director of the community-focused culture planning company Indgreb, based in Copenhagen. Indgreb specializes in participant-driven events, and has among other things created the international innovation and art competition and festival Afsnit I. Rikke co-created and for several years managed Strøm, the leading festival for electronic music in Scandinavia, and later she was head of secretariat for the Copenhagen hosting of Womex, the world's biggest world music fair and festival. *www.indgreb.dk, www.afsniti.dk*

Horst Hörtner (AT) is a media artist and researcher. He is an expert in design of human computer interaction and holds several patents in this field. Hörtner was a founding member of the Ars Electronica Futurelab in 1996, which he has directed since then. He started work in the field of media art in the 1980s and co-founded the media art group x-space in Graz/Austria in 1990. Horst Hörtner works at the nexus of art and science, giving lectures and talks at numerous international conferences and universities.

Ela Kagel (DE) (Supermarkt Berlin) is an independent cultural producer with a focus on open-source strategies, media activism and digital culture. As one of the Transmediale festival program developers she initiated the Free Culture Incubator, a series of research events on the price and value of cultural work. Since 2005, Ela has worked with Public Art Lab and has initiated a broad range of media culture events, such as the Mobile Studios, Upgrade! Berlin and the Mobicases. Since 2011, Ela has been founder and managing partner of Supermarkt, Berlin's center for creative resources. twitter: @supermarkt, facebook: supermarkt. (Berlin, Germany)

Alexander Mankowsky (DE), born in 1957, studied social science, philosophy and psychology at the Freie Universität Berlin. In 1989 he started working in the research institute of Daimler in Berlin. The multidisciplinary approach in the institute integrated a wide array of disciplines, from social sciences to artificial intelligence. His current working topics are futures studies, focused on the ever changing culture of mobility, the interdependency of social and technological innovation and other aspects of envisioning paths into the future.

Michael Sterrer-Ebenführer (AT) Corporate Advertising and Sponsoring voestalpine AG

u19–CREATE YOUR WORLD

Sirikit Amann (AT) was born in 1961. She studied political science, theater and economics in Vienna. Since the 1980s, her activities in Austria and abroad have been focused on the interface of culture, education and new media, until 2007 at KulturKontakt Austria as division manager for cultural education, beginning in 2008 in the newly-established staff position for artistic and cultural education at the Austrian Ministry of Education, Art and Culture. Until 2013 she was the ministry's in-house expert for artistic matters and since 2014 has had the same function in the office of the Federal Chancellor. Since 2008 she has been the Prix Ars Electronica's curator of Young Animation and a u19 juror since the category's inception.

Gerhard Funk (AT), born in 1958, studied mathematics and art education in Linz and received his PhD in theoretical computer science. He taught art education, mathematics and informatics and worked as an assistant and researcher at RISC Linz. In 1993 he established an education program for digital media and developed the e-learning platform Digital Media for Artists–DMA at Linz Art University. Since 2004 he has been a full professor at the Institute of Media and the head of the bachelor's degree program Timebased and Interactive Media, which he conceived. Additionally he leads the Web Art & Design course of the master's degree program in web sciences at the Johannes Kepler University Linz.

Conny Lee (AT), born in 1985 in Vienna, studied the allegedly unpromising discipline of theater, film and media studies. Since getting her degree she has been working for Radio FM4 at the Austrian Broadcasting Company, where she produces and co-hosts the bilingual FM4 *Morningshow* and does reviews on games, literature and comics. She also moderates events and public discussions.

Kirsten Mascher (DE) was born in 1974. She studied social pedagogy in Dresden, with a major in using media for instructional purposes. Since 2002, she has worked at the Medienkulturzentrum Dresden developing multimedia educational projects. She is a project manager in conjunction with the MB21 German multimedia prize. In recent years, she has offered game design instruction at u19-CREATE YOUR WORLD and provided guidance to youth groups in developing serious games.

Ulrike Schweiger (AT) was born in 1969 and graduated from the MDW, University of Music and Performing Arts, Vienna, where she majored in film and television. She works as a director, screenwriter and dramaturgical advisor. She is a member of the board of directors of the Viennese and Austrian screenwriters guild and serves as a juror on the Austrian Film Institute's film development advisory board. Ulrike Schweiger's films have won numerous awards at international and Austrian film festivals.

Prix Ars Electronica Collide@CERN Residency Award

Michael Doser (AT/CH) has been working for CERN since 1991, where he is deputy department head of CERN's physics department. He has been working with antimatter since 1983, using it both as a tool and as an object of study, with the goal of understanding the first moments of the universe. In 2002, he was part of the team that made cold atoms of anti-hydrogen for the first time and he currently leads the Aegis experiment to measure the effect of gravitation on antimatter. He is the author of more than 250 publications related to his work and to the Aegis experiment.

Matthew Gardiner (AU/AT) is an artist most well known for his work with origami and robotics. He coined the term Oribot 折りボト and then created the field of art/science research called Oribotics. Oribotics is a field of research that thrives on the aesthetic, biomechanic, and morphological connections between nature, origami and robotics. Gardiner works at the Ars Electronica Futurelab as an artist and researcher, he curated Project Genesis on the topic of Synthetic Biology and is currently working on a three-year art science (PEEK) grant from the Austrian Science Fund FWF for his research on the aesthetics and language of folding and technology.

Horst Hörtner (AT) is a media artist and researcher. He is expert in design of human computer interaction and holds several patents in this field. Hörtner was a founding member of the Ars Electronica Futurelab in 1996, which he has directed since then. He started work in the field of media art in the 1980s and co-founded the media art group x-space in Graz/Austria in 1990. Horst Hörtner works at the nexus of art and science, giving lectures and talks at numerous international conferences and universities.

Ariane Koek (UK) is passionate about the power of the imagination and creativity across disciplines. She has worked extensively throughout the BBC as an award-winning producer in radio and as a director in television, going on to become CEO/director of the Arvon Foundation for Creative Writing. Ariane was awarded a Clore Fellowship in 2009 supported by the Cultural Leadership Program, and she is currently working on international arts development at CERN.

Digital Communities 2014–Advisory Board

Heitor Alvelos (PT) is professor of design and new media at the University of Porto, Portugal. outreach director at the UT Austin-Portugal program in digital media and principal curator of the FuturePlaces digital media festival.

Cristina Ampatzidou (NL) is an independent researcher based in Rotterdam. Currently she works as an embedded researcher for the Amsterdam Hackable Metropolis project. She has worked for several architecture offices in the Netherlands, including MAKS, Barcode Architects, OMA and the Powerhouse Company and has been a collaborator of Play the City! Foundation

Martijn De Waal (NL) is the founding director of The Public Matters *(www.thepublicmatters.eu),* an office for research and strategy on the role of new media in society. With Michiel de Lange he co-founded TheMobileCity.nl, a think tank, research group and conference series on mobile media and urban design.

Cyrus Farivar (US) is a journalist, radio producer and author. He is also the senior business editor at Ars Technica. He is the author of *The Internet of Elsewhere,* about the history and effects of the Internet on different countries around the world.

Yesica Guerra (US) is a researcher in urban design with a master's degree in architecture and urban studies from MIT. She challenges the notion of conflict manifested in opposing relations between the needs, values, interests and concerns of the different constituents in communities.

Felipe Heusser (PE) is a researcher in the field of open government and a citizen activist using web technology as a means of civic organizing and innovation. He is the founder and director of Ciudadanointeligente.org as well as co-founder of Peepol.tv and Subela.cl.

Mike Jensen (ZA) is an independent consultant providing advice on the use of information and communication technologies for development.

Denisa Kera (CZ/SG) is an assistant professor at the National University of Singapore. She follows and supports science community labs and alternative R&D places (Hackerspaces, FabLabs) across the world with a special focus on DIYbio movements, consumer genomics and various citizen-science projects.

Gerald Kogler (ES) is a specialist in the design of interactive systems and performs IT projects autonomously for clients in the cultural and scientific aerial such as the Museum of Science and Technology of Catalunya. Currently he is lecturing in various universities of Barcelona.

Daniela Kuka (DE) is a communication scientist and game designer, currently working as research fellow and lecturer at the Department for Communication in Social and Economic Contexts at Berlin University of the Arts. She is co-founder of preΔlab, laboratory for game-based methods.

Peter Kuthan (AT) is a sociologist and specialist in the field of cooperative development. Since 1993 he has initiated a number of cultural exchange projects between Austria and Africa (tonga.online).

Keith Lam (HK) is a new-media artist and the co-founder and artistic director of the new-media creative studio Dimension+.

Marc Lee (CH) has been using artistic production methods to create network-based interactive projects since 1999. He experiments with information and communication technologies and explores thematic clusters that contain cultural, creative, economic and political elements.

André Lemos (BR) is an associate professor at the Faculty of Communication at the University Federal of Bahia, Brazil, and coordinator of the Cybercity Research Group (GPC). He is currently working on mobile communication and locative media studies.

Eric Pan (CN) is the founder of Seeed Studio, Shenzhen.

Stefan Pawel (AT) is the project director of the Open Commons Region Linz. The city of Linz launched the first municipal initiative in Europe to build a vibrant public-civil-private digital ecosystem, the Linz Open Commons, to serve the needs of public administration, citizens, enterprises, science, arts communities and educational institutions.

Annalisa Pelizza (IT) is a media theorist and researcher in science and technology studies. Over the years her research interests have focused on the ethnography of contested urban spaces, DIY media education, the implications of tactical and citizens' media practices for urban planning.

Fred Petrossian (IR) is online editor in chief of Radio Farda. He co-edited and co wrote a book on Iranian protest movement based on citizen media *(Hope, Votes and Bullets,* 2010). He is co-founder of the award-winning March 18 Movement to raise awareness about bloggers' safety around the world.

Ulrike Reinhard (DE) is a German publisher, author and futurist. She is founder and editor in chief of *WE-Magazine.* In 2008 Reinhard set up the WeBenin project, a new decentralized informal way of helping people to self-empowerment.

Juliana Rotich (KE) is co-founder and executive director of Ushahidi. She is a technologist, African futurist and a TED Senior Fellow. She often speaks at international conferences about technology and Africa.

TH Schee (TW) is a web veteran who has pioneered several social projects that have spawned dozens of start-ups and mayoral election web campaigns in Taiwan since 2002.

Mike Stubbs (UK) is the director/CEO of FACT, the Foundation for Art and Creative Technology, a leading organization for the commissioning and presentation of film, video and new-media art forms.

Otto Tremetzberger (AT) is co-founder and managing director of Free Radio Freistadt *http://www.frf.at*. He has co-curated conferences at the Ars Electronica Festival on the topics of freedom of information and communication. Since 2009 he has been co-managing director of DORF TV GmbH.

Rob van Kranenburg (NL) is the author of *The Internet of Things,* a critique of ambient technology and the all-seeing network of RFID. He is a co-founder of Bricolabs and founder of Council. Together with Christian Nold he has published *The Internet of People for a Post-Oil World* (Situated Technologies Pamphlets 8).

Christoph Wächter / Mathias Jud (CH) are Internet artists who have developed the pici-server, a tool that breaks not only China's and Iran's censorship of certain web pages but also indicates the increasing control over the Internet within Europe.

Jeffrey Warren (US) is the creator of Grassroots Mapping.org and co-founder and research director for the Public Laboratory for Open Technology and Science. He designs mapping and civic-science tools. He is a fellow at the MIT's Center for Civic Media, on the board of the Open Source Hardware Association and on the advisory board of Personal Democracy Media's WeGov.

Lei Yang (CN) is exploring digital engagement to transform social life in China with latest focus on smart city / smart citizen movement. He founded CMoDA CoINNO Lab (Beijing) on collaborative innovation on digital art and design. He is a mentor on digital entrepreneurship for X Media Lab Australia and founder, curator and producer of the NOTCH Festival. He founded Radio Take10, a collective Internet radio co-curation project on net label and demo culture.

Ars Electronica 2014

Festival for Art, Technology and Society

Organization
Ars Electronica Linz GmbH

Managing Directors
Gerfried Stocker, Diethard Schwarzmair
Ars-Electronica-Straße 1, 4040 Linz, Austria
Tel: +4373272720
Fax: +4373272722
info@aec.at

Co-organizers

ORF Oberösterreich
Director: Kurt Rammerstorfer

LIVA – Veranstaltungsgesellschaft m.b.H.
Directors: Hans-Joachim Frey, Wolfgang Lehner

OK Offenes Kulturhaus im OÖ Kulturquartier
Directors: Martin Sturm, Gabriele Daghofer

Partners
Akademisches Gymnasium Linz
Arts² - École supérieure des Arts
Art Creation Taiwan Co., LTD.
Backlab Collective
BRP Powertrain
bug'n'play
c3
Campus Genius Award
Central Linz
cinekid
Cultural Affairs Bureau of Taoyuan County Government
DOM Research Lab
Dorf tv
FH Oberösterreich – Campus Hagenberg
Fachhochschule Salzburg
Japan Media Arts Festival
Kapelica Gallery, Ljubljana
Kinderfreunde Oberösterreich
Klimabündnis OÖ
Kunstuniversität Linz – Universität für künstlerische und industrielle Gestaltung
LABoral Centro de Arte y Creación Industrial
La Maison Laurentine
Lentos Kunstmuseum Linz
mb21
Mariendom Linz
Mons European Capital of Culture 2015
Neront
OTELO – Offenes Technologielabor
Pilsen European Capital of Culture 2015
Queensland University of Technology
Radio Fro
RAUMSCHIFF
Science Gallery, Dublin
SideBySide Studio e.V.
Tourismusverband Linz
Verein Musik im Raum (MiR)
Waag Society, Amsterdam

Directors Ars Electronica: Gerfried Stocker, Christine Schöpf
Head of Festival: Martin Honzik
Technical Head: Karl Julian Schmidinger
Finance and Organization: Veronika Liebl

Production Team: Katharina Bienert, Sigrid Blauensteiner, Stefan Brandmayr, Cristina Cochior, Roman Dachsberger, Katharina Anna Edlmair, Marlene Eggenreich, Hannes Franks, Magdalena Götz, Rosi Grillmair, Sarah Hellwagner, Liza Höfer, Horia Ionescu, Julia Jung, Simon Kopfberger, Roland Krenn, Theresa Lackner, Hans Christian Merten, Manuela Naveau, Emiko Ogawa, Hideaki Ogawa, Georg Pühringer, Tina Reinthaler, Miriam Schmeikal, Jutta Schmiederer, Florian Sedmak, Joschi Viteka, Susi Windischbauer, Michaela Wimplinger, Johanna Zauner

Co-curators
Ars Electronica Animation Festival: Christine Schöpf, Jürgen Hagler
Big Concert Night: Dennis Russell Davies, Hans-Joachim Frey, Heribert Schröder
Campus Exhibition: Michel Cleempoel, François Zajéga, Martin Waroux, Drita Kotaji, Roald Baudoux
Device Art Exhibition: Hiroo Iwata, Erkki Huhtamo, Machiko Kusahara, Sunčica Ostoić, Olga Majcen Linn, Sandra Sajovic
Interface Cultures Exhibition: Christa Sommerer, Laurent Mignonneau, Martin Kaltenbrunner, Michaela Ortner, Reinhard Gupfinger
Buddha on the Beach: I-Wei Li, Pierre Bongiovanni

Prix Ars Electronica 2014

Co-organizers

ORF Oberösterreich
Director: Kurt Rammerstorfer

LIVA – Veranstaltungsgesellschaft m.b.H.
Directors: Hans-Joachim Frey, Wolfgang Lehner

OK Offenes Kulturhaus im OÖ Kulturquartier
Directors: Martin Sturm, Gabriele Daghofer

Idea: Hannes Leopoldseder
Conception: Christine Schöpf, Gerfried Stocker
Coordination: Martin Honzik, Emiko Ogawa
Technical Management: Karl Julian Schmidinger

Production Team: Katharina Bienert, Bernhard Böhm, Stefan Brandmayr, Katharina Anna Edlmair, Marlene Eggenreich, Christoph Einfalt, Ingrid Fischer-Schreiber, Theresa Lackner, Veronika Liebl, Hans Christian Merten, Kathrin Obernhumer, Remo Rauscher, Miriam Schmeikal, Jutta Schmiederer, Claudia Schnugg, Joschi Viteka, Florian Voggeneder

Press
Christopher Sonnleitner, Robert Bauernhansl

Marketing
Sina Balke-Juhn, Isabella Ematinger, Martina Huber, Eva Tsackmaktsian

Ars Electronica Archiv
Martina Hechenberger, Elvis Pavic, Christina Radner

Ars Electronica Linz GmbH

Managing Directors
Gerfried Stocker, Diethard Schwarzmair

Ars Electronica Center
Andreas Bauer, Christoph Kremer, Renata Aigner, Viktoria Aistleitner, Reinhard Bengesser, Dietmar Bok, Sarah Breinbauer, Blanka Denkmaier, Johannes Egler, Erika Eiter, Karl Federspiel, Julia Felberbauer, Melinda File, Andrea Fröhlich, Christoph Froschauer, Mitra Gazvini-Zateh, Christian Gerber, Elisabeth Gerhard-Mayrhofer, Nicole Grüneis, Ulrike Gschwandtner, Harald Haas, Gerid Maria Hager, Birgit Hartinger, Gerlinde Hauder, Florian Heiml, Martin Hieslmair, Thomas Hillinger, Gerold Hofstadler, Sri Rahayu Hofstadler, Philip Huemer, Thomas Jannke, Erika Jungreithmayr, Elisabeth Kattner, Herwig Kerschner, Viktoria Klepp, Eva Klimesova, Martin Kneidinger, Michael Koller, Thomas Kollmann, Wolfgang König, Andreas Leeb, Sabine Leidlmair, Juliane Leitner, Anna Katharina Link, Ulrike Mair, Reingard Medicus, Kathrin Meyer, Clemens Mock, Horst Morocutti, Marc Mühlberger, Daniel Murina, Heinrich Niederhuber, Michaela Obermayer, Benjamin Perndl, Svetlana Petrovic, Katharina Pilar, Armin Pils, Anna Polewiak, Mathias Pöschko, Ulrike Rieseneder, Andreas Roth, Petra Saubolle-Hofmann, Alina Sauter, Birgitt Schäffer, Johann Schauer, Barbara Schmidt, Nina Schönberger, Stefan Schwarzmair, Elio Seidl, Manfred Seifriedsberger, Margarete Stöttner-Breuer, Johannes Strasser, Lioubov Studener, Johannes Stürzlinger, Istvan Szabo, Bhoomesh Tak, Kerstin Tak-Wakolbinger, Michaela Maria Tanzer, Michael Thaler, Clarissa Ujvari, Linda Vankova, Thomas Viehböck, Florian Voggeneder, Karin Wabro, Manuel Walch, Florian Wanninger, Sebastian Zach, Silvia Zainzinger

Ars Electronica Futurelab
Horst Hörtner, Christopher Lindinger, Roland Haring, Roland Aigner, Florian Berger, Bernhard Böhm, Chris Bruckmayr, Barbara Erlinger, Maria Eschlböck, Peter Freudling, Matthew Gardiner, Peter Holzkorn, Andreas Jalsovec, Anna Lucia Kuthan, Magdalena Leitner, Martina Mara, Benjamin Mayr, Michael Mayr, Kristefan Minski, Stefan Mittlböck-Jungwirth-Fohringer, Martin Mörth, Patrick Müller, Otto Naderer, Nicolas Naveau, Kathrin Obernhumer, Hideaki Ogawa, Veronika Pauser, Michael Platz, Erwin Reitböck, Claudia Schnugg

Ars Electronica Festival
Martin Honzik, Karl Julian Schmidinger, Stefan Brandmayr, Katharina Bienert, Stephanie Danner, Katharina Anna Edlmair, Marlene Eggenreich, Magdalena Götz, Liza Höfer, Abdullah Karpuzcu, Theresa Lackner, Veronika Liebl, Hans Christian Merten, Manuela Naveau, Emiko Ogawa, Georg Pühringer, Tina Reinthaler, Miriam Schmeikal, Arber Tafilaj, Johanna Zauner

Ars Electronica Management Services
Elisabeth Kapeller, Markus Jandl, Sina Balke-Juhn, Sebastian Bauböck, Robert Bauernhansl, Bettina Danninger, Barbara Diesenreither, Isabella Ematinger, Bettina Gahleitner, Gerhard Grafinger, Martina Hechenberger, Gerold Hofstadler, Martina Huber, Andrea Huemer, Heinrich Klambauer, Stephan Kobler, Dominic Lengauer, Zulfija Magomedova, Michaela Neunherz, Peter J. Nitzschmann, Elvis Pavic, Julia Rabeder, Christina Radner, Markus Schwarzmair, Christopher Sonnleitner, David Starzengruber, Eva Tsackmaktsian, Michaela Wimplinger, Susi Windischbauer

Ars Electronica Solutions
Bernd Albl, Michael Badics, Lukas Bischof, Cecile Bucher, Stefan Dorn, Stefan Fuchs, Jorge Gálvez Gabarda, My Trinh Gardiner, Imanol Gomez, Yvonne Hauser, Barbara Hinterleitner, Christoph Hofbauer, Martina Karrer, Petros Kataras, Fadil Kujundzic, Johanna Mathauer, Kathrin Agnes Meyer, Harald Moser, Ali Nikrang, Benjamin Olsen, Dietmar Peter, Poorya Piroozan, Stephan Pointner, Andreas Pramböck, Gerald Priewasser, Gabriele Purdue, Roland Reiter, Stefan Rozporka, Vanessa Schauer, Gerald Sixt, Markus Wipplinger, Lars Witez, Claus Zweythurm

OK Offenes Kulturhaus im OÖ Kulturquartier

OK CyberArts Team
Directors: Martin Sturm, Gabriele Daghofer
Curators: Genoveva Rückert, Christine Schöpf
Public Relations: Maria Falkinger
Technical Manager: Rainer Jessl
Production: Martina Rauschmayer, Aron Rynda
Technical Head: Markus Wallner, Andreas Kurz

Production Team: Jarno Bachheimer, Attila Ferenczi, Alfred Fürholzer, Martin Haselsteiner, Bernhard Kitzmüller, Daniel Mandel, Gerald Schreilechner, Andreas Steindl, André Tschinder, Tom Vens, Hans-Jörg Weidinger, Gerhard Wörnhörer, Simon Wilhelm

Team: Erika Baldinger, Renate Berger, Julia Brunner, Michael Dalpiaz, Walter Eckerstorfer, Tamara Eder, Max Fabian, Werner Friesenecker, Michaela Fröhlich, Andrea Gintner, Manuela Gruber, Dominik Harrer, Sabine Haunschmid, Evi Heininger, Robert Herbst, Maximilian Höglinger, Fritz Holzinger, Sabrina Kamenar, Verena Karner, Simon Lachner, Katharina Lackner, Barbara Mair, Judith Maule, Franz Minichberger, Walter Mühlböck, Wolfgang Nagl, Catherina Neu, Josef Pfarrhofer, Franz Pfifferling, Wilhelm Pichler, Angelika Pöschl, Franz Quirchtmayr, Gerda Sailer, Markus Schiller, Ulrike Schimpl, Helene Schoißengeyr, Ulrike Seelmann, Marlies Stöger

Brucknerhaus
Wolfgang Scheibner, Wolfgang Schützeneder, Ursula Kislinger

ORGANIZATION

ARS ELECTRONICA

Ars Electronica Linz GmbH is a company of the city of Linz.

COOPERATION PARTNERS

Akademisches Gymnasium Linz
Arts² - École supérieure des Arts
Art Creation Taiwan Co., LTD.
Backlab Collective
BRP Powertrain
bug'n'play
c3
Campus Genius Award
Central Linz
cinekid
Cultural Affairs Bureau of Taoyuan County Government
DOM Research Lab
Dorf tv
FH Oberösterreich – Campus Hagenberg
Fachhochschule Salzburg
Japan Media Arts Festival
Kapelica Gallery, Ljubljana
Kinderfreunde Oberösterreich
Klimabündnis OÖ
Kunstuniversität Linz – Universität für künstlerische und industrielle Gestaltung
LABoral Centro de Arte y Creación Industrial
La Maison Laurentine
Lentos Kunstmuseum Linz
mb21
Mariendom Linz
Mons European Capital of Culture 2015
Neront
OTELO – Offenes Technologielabor
Pilsen European Capital of Culture 2015
Queensland University of Technology
Radio Fro
RAUMSCHIFF
Science Gallery, Dublin
SideBySide Studio e.V.
Tourismusverband Linz
Verein Musik im Raum (MiR)
Waag Society, Amsterdam

ARS ELECTRONICA RECEIVES SUPPORT FROM

Stadt Linz
Land Oberösterreich
Bundeskanzleramt
Außenministerium Österreich
BMWF
voestalpine
bfi
Hakuhodo
UNESCO
Linz AG
Tourismusverband Linz
Mercedes-Benz
Hutchison 3
Liwest

ARS ELECTRONICA RECEIVES SUPPORT FROM

Sparkasse OÖ

Ton + Bild

ÖBB

OÖ Nachrichten

Ö1

FM4

Taiwan Ministry of Culture

ITU Telecom World

Standard

Smurfit Kappa

Quanta Arts Foundation

Casino Linz

Japan Foundation

EU-Japan Fest Japan Commitee

University of Tsukuba

Future Catalysts

Empowerment Informatics

NTS

Cordial

Screenteam

LIVA


European Commission

European Union

Erasmus Plus

Rotes Kreuz

Art Council Tokyo

PH Oberösterreich

Akademie des österreichischen Films

Triple A


Rotary

OECD

Olympus Austria GmbH

Connecting Cities

Red Bull

Creative Region OÖ

Sampad

Arkade

Artshare

voxeljet

Iminds

Additional Support: KulturKontakt Austria, Cubus

CyberArts 2014
International Compendium – Prix Ars Electronica

International Compendium – Prix Ars Electronica – Computer Animation / Film / VFX
Interactive Art – Digital Communities – Visionary Pioneers of Media Art – u19 –CREATE YOUR WORLD
[the next idea] voestalpine Art and Technology Grant – Prix Ars Electronica Collide@CERN Residency Award

Editors: Hannes Leopoldseder, Christine Schöpf, Gerfried Stocker

Editing: Jutta Schmiederer, Ingrid Fischer-Schreiber
Translations: (German–English) Mel Greenwald
Copyediting: Jutta Schmiederer, Dave Westacott

Graphic design and production: Gerhard Kirchschläger
Typeface: Klavika
Paper: Claro Bulk, 150 g/m², 300 g/m²
Printed by: Gutenberg Werbering Gesellschaft m.b.H., Linz
Photos: pp 174–180: Florian Voggeneder

Published by
Hatje Cantz Verlag
Zeppelinstrasse 32
73760 Ostfildern
Germany
Tel. +49 711 4405-200
Fax +49 711 4405-220
www.hatjecantz.com
A Ganske Publishing Group company

You can find information on this exhibition and many others at www.kq-daily.de.

Hatje Cantz books are available internationally at selected bookstores.
For more information about our distribution partners please visit our homepage at
www.hatjecantz.com.

ISBN 978-3-7757-3923-8

Printed in Austria

Cover illustration: Universal Everything: *Walking; Land Matrix;*
Sascha Geddert: *The Rise and Fall of Globosome;* Quayola: *Captives*