



Opposite page: Chicks on Speed, SCREAM, an interactive multi-media exhibition at Artspace, Sydney, 2013

Right: Clinton Watkins, *Frequency Colour*, 2013, production still. Courtesy of the artist and Starkwhite, Auckland



report that this new generation of artists is starting to enter the scene with a new set of radical and compelling artistic positions. "The level of technological acumen enjoyed since childhood by large swaths of this age group fuels the promise of aesthetic and conceptual breakthroughs, which are only now beginning to unfold." Irreverence for traditional notions of authorship and cultural heritage, empowerment through instant knowledge and reliance on digital social platforms are among the many qualities the curators have identified.

This is the sort of student who wants to study Creative Technologies at AUT, Auckland, which has a ground-breaking interdisciplinary research institute and educational hub, called Co-Lab, linking with industry, professional bodies and communities. Staff members James Charlton, Harry Silver and Dr Clinton Watkins, along with Gregory Bennett who is Senior Lecturer in Digital Design, are mentors in the area of technological interaction and innovation.

As Co-Lab's Associate Professor Frances Joseph says, "These young technologically advanced students are coming

to us from diverse backgrounds, from art or science pathways, and as such, they're the Leonardo da Vincis of our world. These digital creatives represent a total generational shift."

Collaborating with The Edge, Co-Lab has created Digital Art Live (DAL), a project in which digital artworks are shown on large screens in Auckland's Aotea Centre. Unique in New Zealand, DAL offers viewers the chance to become part of the artwork in an interactive space. In Shannon Novak's new DAL project, for example, you can take a mobile device, download a free app and view a synaesthetic experience occurring through real-time animation while you encounter objects inside the Aotea Centre.

Art in "The Age of Vertigo"

Living in an age of constant technological update, many artists are harnessing digital and social media to create aesthetic and conceptual breakthroughs. Sue Gardiner reports.

Sitting here at my desk I've just bought a digital artwork online, synched my various devices, attended a question and answer artist's discussion on Facebook and thought about attending a Hackfest – all with a flick of my hand on the computer's mouse. Then this quote stopped me in my tracks: "Just as water, gas, and electricity are brought into our houses from far off to satisfy our needs in response to a minimal effort, so we shall be supplied with visual or auditory images, which will appear and disappear at a simple movement of the hand, hardly more than a sign."

What was so surprising was that this was written in 1931 by Paul Valery in his essay *Pieces Sur L'Art*. Valery's writing supplied the opening quote in Walter Benjamin's famous essay *The Work of Art in the Age of Mechanical Reproduction*, written in 1936. While 77 years ago, Benjamin was expecting "great innovations to transform the entire technique of the arts," I can't help but wonder how he and Valery might have reacted if they could have peeked into the future and witnessed the surge of technological transformation that is happening right now in the arts.

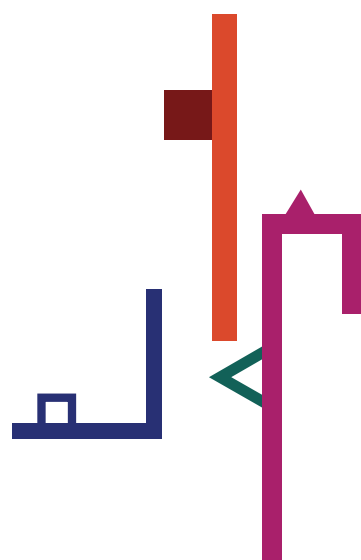
Many describe this vast new realm of multi-sensory art as 'contemporary media art' because that term is broad enough to encapsulate all art using technology, including digital art, interactive art, net art, moving image, computer art, animation, electronic art... you name it – it's out there being explored.

Digital creativity is happening so quickly that artists are pushing technological innovations in unforeseen directions. Reflecting this, critic Camille Paglia calls our time "The Age of Vertigo" because of the dizzying overstimulation we experience every day. In trying to understand these radical new developments, it seems to me there are three clusters of artists and art practices, within media art, which stand out and demand investigation.

The first group, the 'digital natives', are key to the world of contemporary media art. They're the young generation for whom 'monitor love' means everything is mediated through digital means. Hans Ulrich Obrist and Simon Castets are co-curators of an international project researching artists born in or after 1989. On their website (www.89plus.com) they



Shannon Novak, *Transcription -36.852926,174.763411*, 2012. Augmented Reality intervention



Shannon Novak, *Ostinato II*, 2013.
Augmented Reality intervention

This work uses augmented reality, and to view it you must have a mobile device running iOS or Android (tablet or smartphone). You must also have the "Aurasma" app installed.

To install Aurasma: search for and download the "Aurasma" app in Google Play or the Apple App Store. Launch the app, click on the "A" symbol at the bottom of the screen, then click on the magnifying glass icon. In the search box, type in "Shannon Novak" and click "Search".

Select the channel titled "Shannon Novak" then click "Follow" to follow the channel.

Now you are ready to view the work. Click the target icon (bottom centre of the screen) and hold your device over the work to watch it animate. Any time you want to view the work in future, simply launch Aurasma, and it will be ready to go.

Note: make sure you are connected to the Internet and you have your sound up before holding your device over the work.

Novak's recent show, *A Garden for Orpheus*, at the George Fraser Gallery, presented the audience with an empty gallery space where the works were completely virtual. They had to be activated by the audience through a mobile device and a downloaded app.

Europe-based, New Zealand curator Ché Zara Blomfield (who established www.composingrooms.com) engages with the internet as a collaborative arena and works with young artists who are addressing "our increasing entanglement with technology". These artists make art specifically for the digital space, or with an inherent consideration for the web-based world. Blomfield was in Auckland recently to curate *Repeat Pattern* at artist-run space Gloria Knight. In this group show, artists such as Katja Novitskova and Daif King, worked through the idea that there's nothing new anymore – ideas, images, trends and interests repeat, recede and are recycled

in a world where there's an acute awareness of the past. This is made possible through the intensity and ubiquity of information and images accessed and presented through the digital world.

This instant access to information is not only changing the way artists work, and the way the gallery system operates as a means of distribution, it's also changing the concept of the artist's studio. Take Angelica Mesiti, a Sydney- and Paris-based video artist whose work is currently at Artspace as part of the Auckland Triennial. Like many other young artists, she says she's never had a studio-based practice. Instead, her laptop and her hard drive are her studio.

Also working with technology in the Auckland Triennial is one of Japan's leading electronic composers and visual artists, Ryoji Ikeda. He can best be understood as belonging to the second group in this discussion of contemporary media

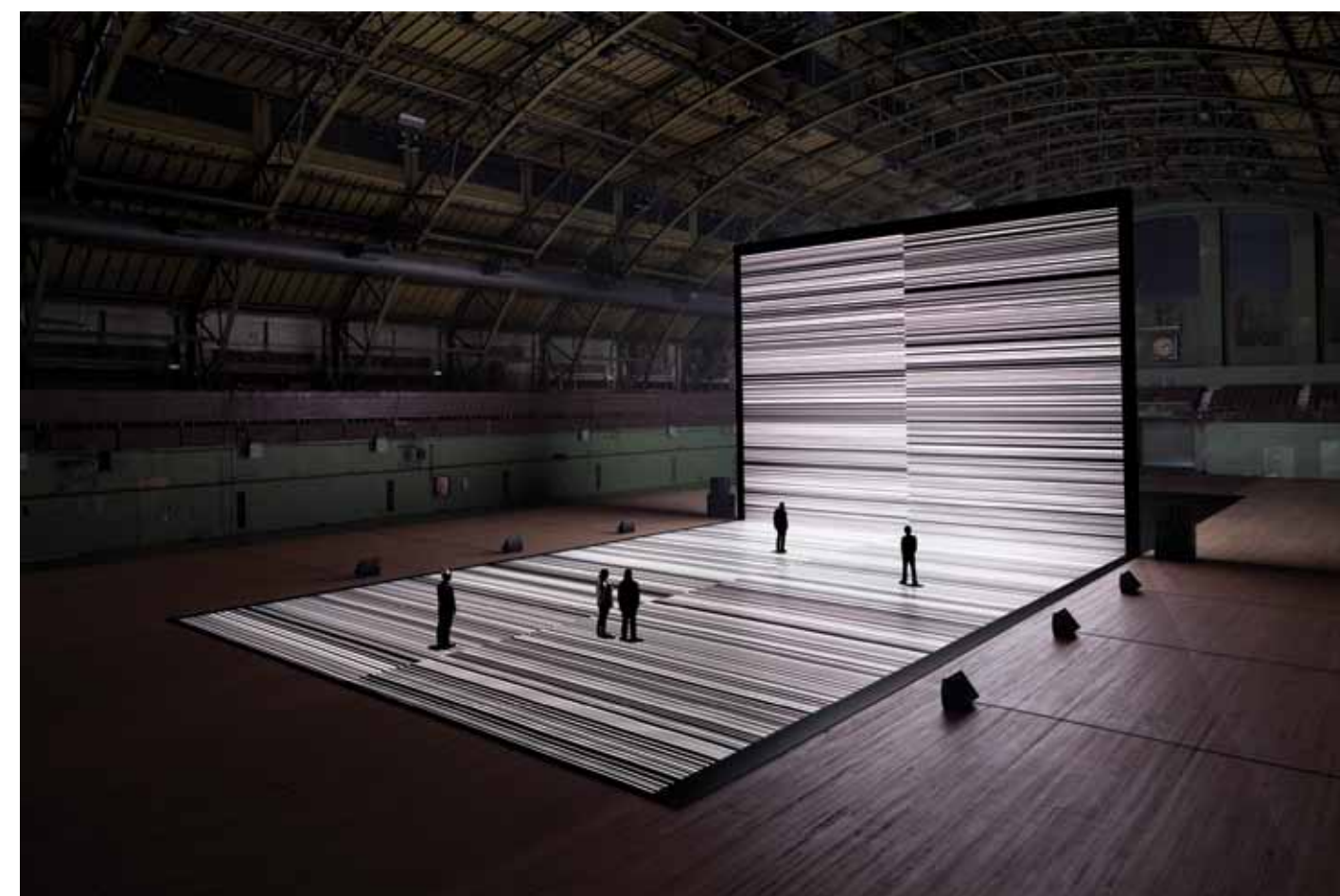
art. These artists use technology to create artworks that offer audiences an active, enhanced experience, which is often interactive and immersive. Their works are not about the artist as the single author, but instead are collaborative and communicative.

Ikeda's work at the Silos in Wynyard Quarter, *A [for 6 Silos]*, is a site-specific sound installation exploring the history of the musical note 'A'. The title *A* stands for the standard concert pitch 440Hz, so-called 'La'. The concert pitch, however, has varied over the past few hundred years, from Bach's era to the 1970s' definition by the International Organization for Standardization (ISO). A series of historical concert pitch A's will be assigned to each silo, where they will be emitted simultaneously from hidden loudspeakers. Visitors will experience their own particular interference/oscillation in their ears, which will constantly change and resonate as they move through the space. Ikeda will also stage a major immersive environment at Carriageworks in Sydney (from 7 June to 1 July). Titled *test pattern [No5]*, it pushes the threshold of human perception.

During the recent Auckland Arts Festival, two galleries reflected the increasing commitment to show interactive works. Bath Street Gallery exhibited work by Liu Dao, a



Daif King, *blsck_ringdoh*, 2013, C-type print on metallic archival photographic paper, gold-plated rare earth magnets, 420 x 420mm. Courtesy of Gloria Knight Gallery, Auckland



Ryoji Ikeda, *Test Pattern (Enhanced Version)*, 2011 © Ryoji Ikeda. Photo courtesy of Park Avenue Armory New York and Forma © James Ewing



Gregory Bennett, *Omnipolis*, 2012, single-channel, high-definition video, variable, 12 minutes looped, edition of 5.
 Courtesy of Two Rooms Gallery and Chartwell Collection, Auckland Art Gallery, Toi o Tamaki, Auckland, New Zealand



Simon Ingram, *Energy Transference*, 2012. Plastic sheet, tape, oil paint, timber, aluminium, cable, plastics, electronics, software.
 In the exhibition *Contact, Artists from Aotearoa/New Zealand*. Courtesy of the artist

Shanghai-based art collective of “tech-geeks and creative talents”, and Starkwhite showed the interactive work of Jin Jiangbo, one of China’s leading multimedia artists.

Auckland artist Janet Lilo is now researching and developing a new video project working with the deaf community, while Clinton Watkins is extending his *Force Field* project to create an immersive environment at Starkwhite (opening on 22 July). His large two-screen projection, *Frequency Colour*, will fill the space with sound created by analogue modular synthesisers and tone generators. This tonal composition then generates the immersive visual component of the work – bars and lines of colour that radiate out into the space.

Verging on chaos, *SCREAM*, a work by artists’ collective Chicks on Speed, made an interactive app available for the audience visiting Sydney’s Artspace in April. A collage of sounds, rhythms, words and images, the work was ‘performed’ by the visitors using ipads, which enabled them to compose and mix audio visual scenes, which were projected into the gallery space. Chicks on Speed recently collaborated with Wellington designer and artist Lisa Walker. Their responsive and interactive exhibition, *TOUCH ME BABY I’M BODYCENTRIC, A MULTIMODALPLOSION!* at City Gallery Wellington, positioned the human body and the act of performance at the centre of the creative process.

An increased sense of realism and interactivity is Gregory Bennett’s next goal for his digitally produced moving image works, which involve de-humanised figures moving to create labyrinthine crowd patterns and collective structures. For works such as *Omnipolis I*, he uses key-frame animation created with digital 3D animation software, which was originally developed for interactive online gaming, and he wants to move into motion capture technology.

“Working more closely with the relationship between reality and the extension into the digital realm will produce an uncanny quality,” Bennett says as we tour the motion capture lab at AUT. “We will work with pure movement data to develop differing psychological effects, and to create a space that spectators can fill – one which is open to interpretation.”

This desire for a more open-ended approach to artistic outcomes while engaging with technology is also a strong motivation for Simon Ingram. Several years ago Ingram began to construct Lego-based robotic painting machines which have become more complex over time. In his exhibition *Smoking Bolts* at Artspace, Sydney (until 16 June) his painting machines will paint live in the space, while being controlled remotely by the artist in Auckland. As a painter Ingram’s relationship with technology is always changing. He reflects back to the 1990s, a decade of rapid development, when new media became a hot topic – and more accessible – to artists. He thinks of this rapid trajectory as another sort of modernism. “This was a development led by the medium, in a quest for the new.

Technology could provide those answers,” he says. Now he sees technology as a bit of a ghetto. “I’m not a new media artist, but an artist engaging with new media.”

He’s interested in a new model developing that is not led from the platform of technology alone but retains links to human culture, through the poetics of feelings and attitudes. While he acknowledges technology is a useful format for asking questions and doing things, he takes the position of painting as a technological critic, injecting painting with technology, with that which could potentially overcome it. He then wants to see what happens. Ingram won’t be present when the paintings are made, so he’s open to ideas of failure, unpredictability and encounter.

“I want to use technology in a questioning, challenging way – so its use makes sense and is interesting, compelling and even disruptive. I want to collaborate with machines, not be replaced by them.”

Finally, the third group contributing its networks and synapses to the new media realm comes from an entirely different direction. These practitioners don’t necessarily come from an art background, and include web developers, scientists, engineers, electronics experts and so on. It says volumes about the level of convergence between these experts and the art world that there exists an artists’ residency at CERN, the particle physics laboratory in Geneva, home to the Large Hadron Collider. That programme is designed so that artists and physicists can engage in ‘creative collisions’. The 2013 artist in residence is pioneering sound artist Bill Fontana from the United States.

Many technology-driven groups in this convergent field have been around for a long time, operating mostly through independent conferences and symposia. In New Zealand, Aotearoa Digital Arts Network (ADA) works in the expanded field around electronic and digital art. *ADA Mesh Cities* is their next major project for 2013-2014 and addresses the role of media arts in the city. There are several Australian organisations: the 20-year-old ANAT (Australian Network for Art and Technology), the 15-year-old Brisbane organisation MAAAP, and Sydney-based dLux MediaArts. Internationally, Ars Electronica in Linz Austria is the benchmark organisation. Established in 1979, it leads research into artistic genres, scientific domains and technological directions.

New Zealand expatriate Julian Oliver, who lives in Berlin and describes himself as a ‘critical engineer’, took part in the 2011 Ars Electronica Festival. At the 2013 festival, neuroscientists, computer engineers, artists and philosophers will explore the evolution of memory. The other top international symposium is ISEA in Sydney, which has been around since 1988. Presenting a project there is Whanganui-based electronic artist Ian Clothier who has been funded by Creative New Zealand.



Left: Ian Clothier, *Respondent 003*, 2006.
Media online survey form, Excel, vinyl print
on perspex, 1480mm x 1630mm

Below: Julian Priest, *Free of Charge*, 2012.
A 'Letting Space' project, New Zealand

Clothier, who trained as a painter and moved into electronic arts, teaches at Western Institute of Technology in Taranaki and runs Intercreate.org, a research centre which bridges the fields of art, science, technology and culture. He focuses on interdisciplinary and intercultural projects, which are led by a concern to electronically connect nature and humans as a basis for cross-cultural conversations. For ISEA 2013 Clothier will create a collaborative installation, *Sea of Ubiquity*, presenting data in audio and visual form, which has been gathered from sensors placed in natural settings in different countries. Voltage from trees, sounds from indigenous musicians and data from the biosphere will flow together in this project.

“Using the voltage of a tree as your medium is a long way from using a tube of paint, but through the computer we’re able to release this information imbedded in our world,” Clothier reflects.

Julian Priest is a media artist who worked in the UK as a pioneer in the field of network development. Now living in New Zealand and involved with ADA, he sees his collaborative approach as a way to challenge the science/humanities split that dominates our university education system. Moving from the high-tech world into the realm of contemporary art, he now focuses on participatory art, which he believes is closely connected to the net art world.

Local Time, 2011, his project at The Dowse in Lower Hutt, involved creating a new time zone in the gallery which was driven by the activity of people moving through the space. *Free of Charge* was his recent ‘Letting Space’ project which scanned people – airport style – at a local beach, measuring their voltage and starting a conversation. This was designed to increase their well-being, help them get rid of emotional baggage and feel more grounded.

Now the Whanganui-based artist is preparing to launch a satellite from Cape Canaveral in October this year as part of the KickSat project. Tiny satellites will hitch a ride on a



NASA flight heading to the International Space Station. Priest’s ‘Weight of Information’ satellite, one of many ‘nanosats’, will be in orbit for three weeks, transmitting digital radio signals back to Earth, which will then be relayed to a gallery space.

“It’s a fully fledged space programme that was sent to me in New Zealand with a US\$1.20 stamp on the envelope,” says Priest, obviously enjoying the portability of the project.

He joins others, like Simon Ingram, who think there’s a backlash against technology looming – but in the meantime, as technology is a major economic driver, it’s not surprising it’s becoming so integral in every aspect of our lives, including art. In his article *The Death of the Gallery Show* in the online journal *Vulture*, (www.vulture.com), New York critic Jerry Salz discusses the increasing presence of art online, noting “I’ll admit there’s something democratizing about all this”.

And I think that was quite possibly Walter Benjamin’s point too, all those years ago in 1936. He saw the mechanical reproduction of art in his time as emancipating art, as changing “the reaction of the masses toward art” and “enabling simultaneous collective experience”. His insights seem deeply prophetic now as we inhabit a radically new and different reality. As the theme of ISEA’s 2013 conference asserts: “Resistance is Futile”.