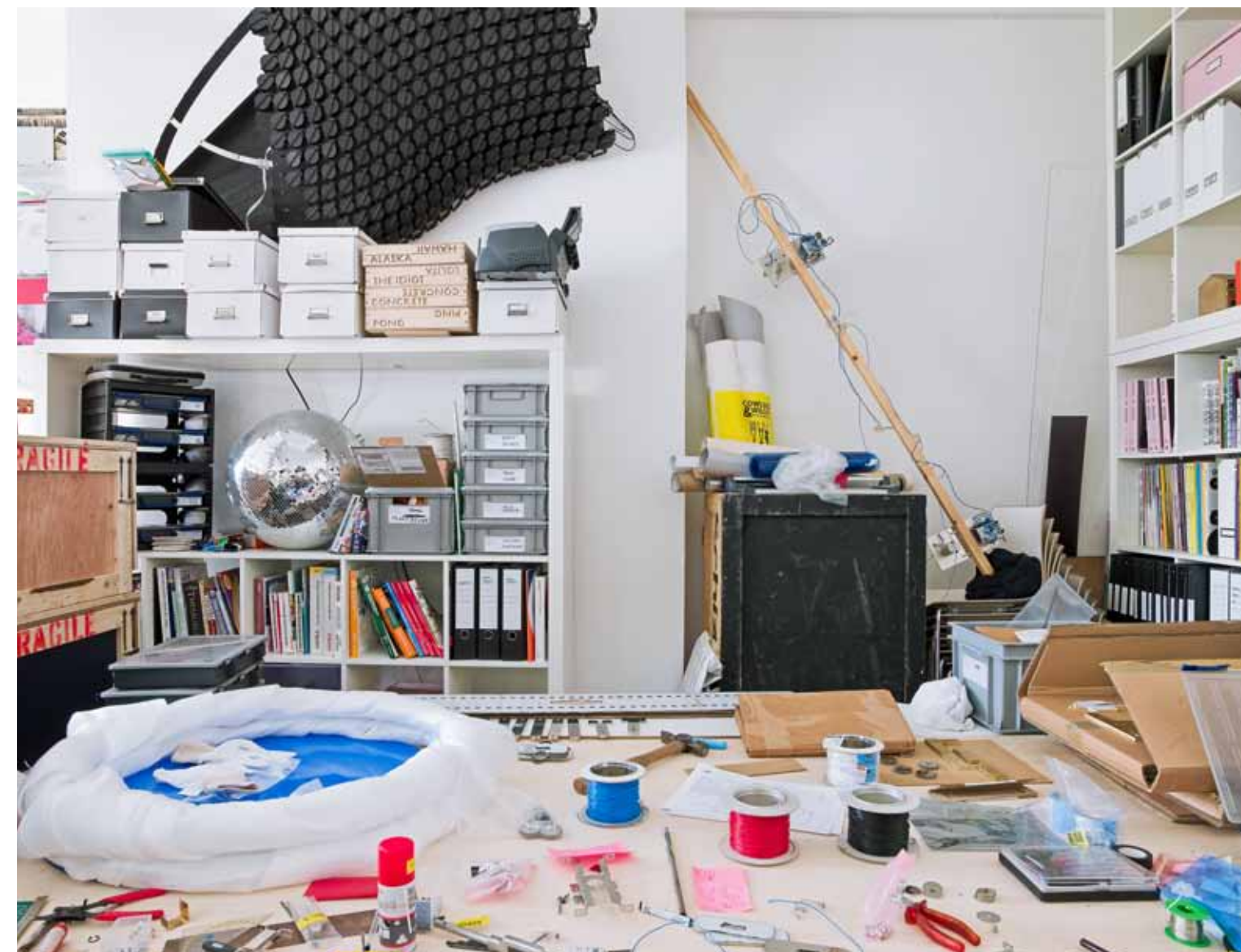




EVA RUCKI, CONNY FREYER AND SEBASTIEN NOEL (FROM LEFT TO RIGHT) IN THEIR FORMER STUDIO IN LONDON. SHORTLY AFTER BEING INTERVIEWED BY *FRAME*, THE TROIKA TRIO MOVED INTO A LARGER WORKPLACE.



TRIPLE JUMP

The TROIKA trio wants to subvert our expectations, play with conventions and revive obsolete technologies.

WORDS GIOVANNA DUNMALL
STUDIO PHOTOS ANDREW MEREDITH

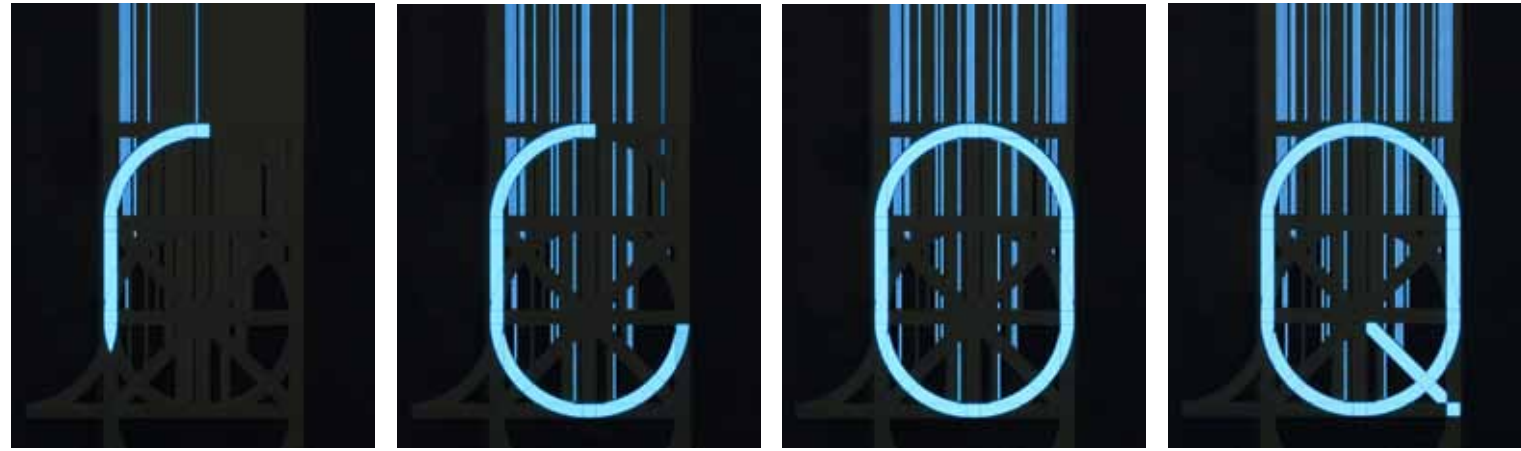
You may not have heard of Troika, but if you've travelled through Heathrow's sleek new Terminal 5 since its opening in 2008, chances are you've seen the art and design studio's work. Its installations adorn both the entrance atrium of British Airways' luxury lounges, and the entrance itself. The first is a 5-m-long digital sculpture in the shape of a cloud whose signature feature – 4638 flip-dots that audibly alternate between black and silver, creating mesmerizing patterns across its skin – was inspired by the once commonplace departure-board signage found in railway stations and airports. 'It's a beautiful technology from the 1970s,' says Troika's Sebastien Noel. 'You have motion, you have noise, and it is very elegant.'

The second is a 22-m electro-luminescent display (screen-printed onto acetate)

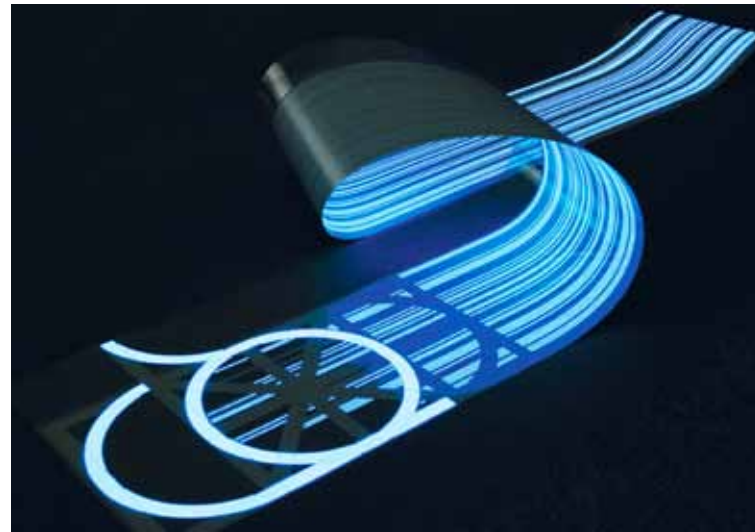
that shows the times in far-flung and exotic locations around the world. In *All the Time in the World*, London time is always at the centre of the wall display, and places like Mount Whitney, the Panama Canal, the Taj Mahal and Abu Simbel (the Egyptian site of two massive 13th-century BC rock temples) appear to the left or right of London, depending on whether they are located east or west of the UK capital. 'It's nice to think about the Great Barrier Reef at three o'clock in the morning,' says studio member Eva Rucki. 'It is immediately a story.' Or, as Noel puts it, 'It's a little subversive thing in the airport.'

Troika likes to subvert expectations. Conny Freyer, Eva Rucki and Sebastien Noel met while studying at the RCA in London and have worked together ever since, founding Troika in

2003. Rucki and Freyer both have backgrounds in graphic design (though Freyer also trained in photography), while Noel, armed with a knowledge of engineering and product design, has worked for Mario Bellini, Antonio Citterio and Ron Arad. Defining these three is almost impossible and quite probably irrelevant. Perhaps the label they feel least fettered by is 'digital design', provided it is understood as an all-encompassing concept and extends beyond the work commonly understood as interaction design. 'For us, digital becomes really interesting when it is embodied in physical installations and objects, where there is a merging of the analog and the digital, the actual and the virtual, which reflects current developments in society,' says Rucki. Noel uses the term 'humanist' to describe their take on digital art. >>>



SEQUENCE SHOWING THE MODULAR TEXT-DISPLAY SYSTEM, WHICH WAS CREATED ESPECIALLY FOR BRITISH AIRWAYS' LOUNGES AT HEATHROW AIRPORT. UP TO FIVE DIFFERENT FONTS CAN BE DISPLAYED.



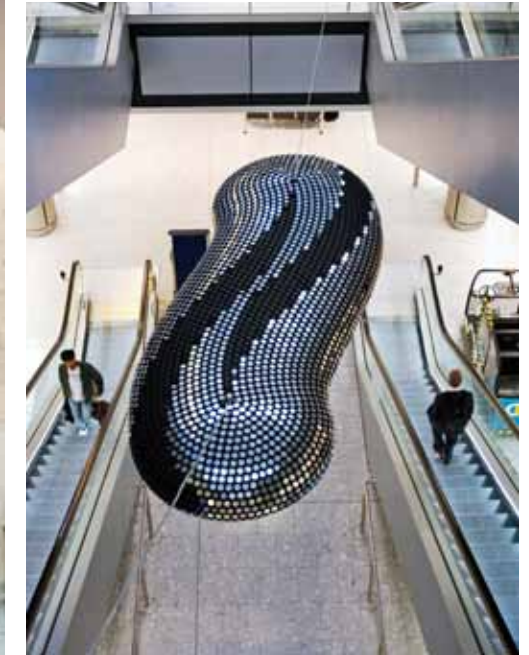
THE DISPLAY RELIES ON A CUSTOM-DESIGNED SEGMENTED TYPEFACE THAT IS LESS THAN HALF A MILLIMETRE THIN AND CAN BE CURVED.



ALL THE TIME IN THE WORLD – AN ELECTRO-LUMINESCENT DISPLAY ON THE ENTRANCE DOORS TO BRITISH AIRWAYS' LUXURY LOUNGES – SHOWS THE TIMES IN VARIOUS LOCATIONS WORLDWIDE. PHOTO ALEX DELFANNE, COURTESY OF ARTWISE CURATORS

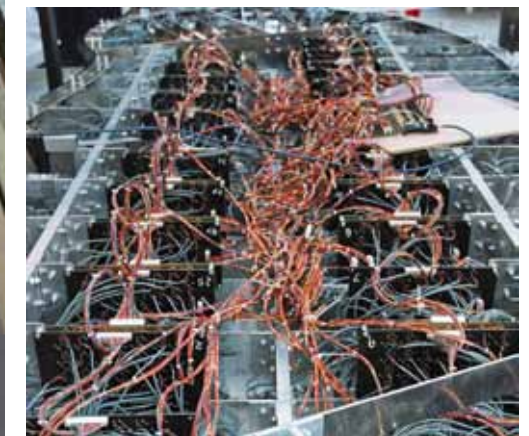


SINCE HEATHROW'S TERMINAL 5 OPENED IN 2008, TROIKA'S CLOUD INSTALLATION HAS ADORNED THE ENTRANCE ATRIUM OF BRITISH AIRWAYS' LUXURY LOUNGES.



'Objects are bigger than their physical borders'
Eva Rucki

THE INSTALLATION IS A NOD TO THE 1970S TECHNOLOGY USED TO MAKE DEPARTURE-BOARD SIGNAGE FOR RAILWAY STATIONS AND AIRPORTS.



The trio twists convention and puts basic – or obsolete – technologies to good use, sometimes reinventing or 'bastardizing' them. In addition to the flip-dots featured in Cloud, Troika has also used the zoetrope, an optical toy from the 1830s, a primitive motion-picture projector; and the Fresnel lens, which was invented in the 1820s and used to magnify the light produced by lighthouses.

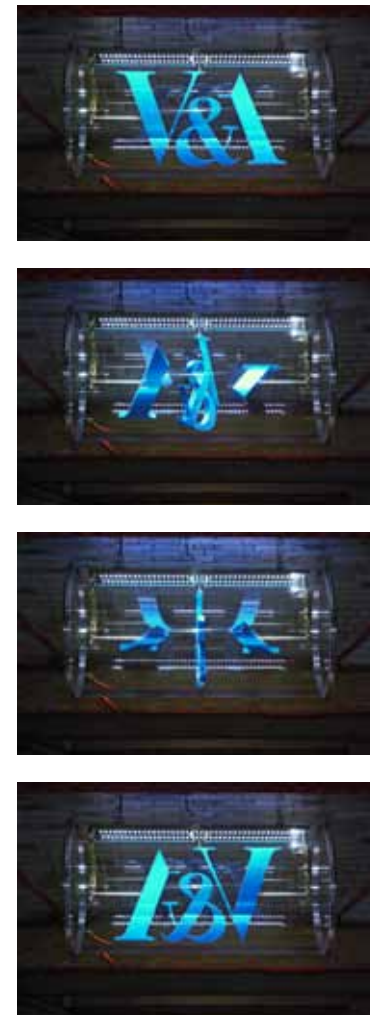
For All the Time in the World, the trio developed a new segmented typeface. 'Usually they are very crude,' explains Freyer. But Troika tried to push the design as far as possible from anything resembling a conventional digital installation and to make something softer and smoother. The designers came up with four versions of the typeface they had in mind, ultimately opting for a lower-case script

because they liked the idea of 'handwritten animation' and found their choice 'more human, and warmer'.

The lines you see above the letters are lines that supply the various elements with electricity. 'They don't have to be there, but we wanted them there,' says Freyer, bringing up a leitmotif in Troika's pieces: a desire to reveal the underlying processes, thoughts and technologies behind each work and to make them an intrinsic part of it. Transparency is a key commandment for Troika. It follows, therefore, that this is one of the few design studios whose website offers an incredibly generous amount of text, explanation and contextualization – partly because the work has a poetic and contemplative edge to it that lends itself to words, but partly because these three

want the public to know how they achieved the end result.

What resonates throughout Troika's output is a sense of purity, of simplicity. Or, in Freyer's words, a refusal to 'use technology just for the sake of technology'. In the case of All the Time in the World, for example, the piece was also a reaction to the hundreds of other plasma screens in the terminal that guzzle energy and are used only to display flight and gate information. 'It's a waste,' says Noel. Each small display consumes about 3KW of energy, whereas the whole of All the Time in the World requires a comparatively humble 700W to illuminate and is 25 m long. When I ask why the Cloud installation in Terminal 5 does not respond to the warmth or movement of bodies – why it isn't interactive – Freyer is quick to ask: 'Would it gain anything? In this >>>



PALINDROME IS A KINETIC SIGN DESTINED TO JOIN THE PERMANENT COLLECTION OF THE VICTORIA AND ALBERT MUSEUM. PLACED AT THE ENTRANCE TO THE V&A (CLOSE TO THE SOUTH KENSINGTON TUBE STATION), THE SIGN WELCOMES VISITORS TO THE MUSEUM.

specific case, we thought absolutely not.' Noel immediately backs her up: 'If it adds to the meaning of the piece, why not? But if it is just to say we are going to make it interactive, then...'. He shrugs. 'It's like a selling point for convincing the client.' Rucki doesn't recall 'seeing a piece that works with a group of people. You would need to track so many things that what is being tracked would become entirely unclear.'

Troika likes to operate in a collaborative way within a digital-design and art community that is very open, according to these three, and actively encourages sharing. They also thought it lacked a platform and that someone should write in more depth about it. So in November 2008 Troika published a book called Digital by Design, which features not only some of its own work but also projects by another 80 'digital'

designers. 'We found that it is sometimes difficult for design critics to write about our work, because it is so rooted in context and in the history of technology - if they miss that area, the review can end up being a bit too much of a project description,' says Noel.

Perhaps the best expression of Troika's great attraction to transparency and to the revelation of normally inaccessible information is the 'electroprobe', a small gadget the team developed several years ago. This very simple magnetic amplifier allows users to listen to their electronic surroundings - to hear a parallel world of sounds that is surprisingly cacophonous and musical. 'It is just an analog circuit,' says Noel, 'that picks up everything at the same time.' The electroprobe makes people aware of the radiation transmitted through

everyday objects while also, Rucki tells us, bringing about 'a realization that objects are really bigger than their physical borders'.

As I wander around their studio wearing the headphones and brandishing the probe aloft - moving it close to computers, phones, light switches, even a coffee machine - I feel like a cross between a metal-detector aficionado and a doctor attempting to make a diagnosis based on the whirring, hissing, thudding and tapping in my ears. The most memorable soundscapes Troika has heard through the electroprobe include a watch stall in a market in Guangzhou (Noel imitates the manic audio jangle of ticktocks to great effect) and the automatic starter of a broken fluorescent strip light: 'really melodic' and 'weirdly crystalline'. The electroprobe is also special because it reveals the poetry and >>>



A desire to reveal underlying processes, thoughts and technologies is Troika's leitmotif

ABOVE AND BELOW: FOR THE UK PAVILION AT WORLD EXPO SHANGHAI, TROIKA MADE MAPS OF THE NATION'S CITIES SHOWING ONLY THE GREEN ZONES - NO BUILDINGS.



TRANSPARENT SCALE MODELS OF TYPICAL ENGLISH ARCHITECTURE, SUCH AS VICTORIAN HOUSES, REFERRED TO THE OPEN, GREEN CHARACTER OF CITIES SUCH AS LONDON.





IN 2006 TROIKA WAS COMMISSIONED BY ONEDOTZERO - WHICH CALLS ITSELF A 'MOVING IMAGE AND DIGITAL ARTS ORGANIZATION' - TO DESIGN AN INSTALLATION AND A VISUAL IDENTITY. COMBINING THE TWO, THE TEAM CAME UP WITH A HIGH-TECH VERSION OF THE 19TH-CENTURY ZOETROPE. IT FEATURES AN ABSTRACT PATTERN THAT MAGICALLY STARTS TO FORM WORDS BY MEANS OF RAPIDLY BLINKING LED LIGHTS. CONTROLLING THEIR FREQUENCIES MAKES IT POSSIBLE TO DISPLAY DIFFERENT WORDS OR PATTERNS, DEPENDING ON THE SPEED OF THE FLASHING LIGHTS.



beauty of a modern malaise usually associated with sickness: electromagnetic radiation.

In some ways Troika comprises an unlikely partnership made up of different backgrounds and personalities. Noel is easily the most flamboyant of the three; Rucki and Freyer have a more considered way of articulating thoughts and concepts, which is accompanied by a strong undercurrent of passion and humour. What they have in common is an almost gargantuan knowledge of various technologies and approaches, not to mention forceful personalities that can, they admit, lead to heated discussions. 'That is what it sounds like when we fight,' says Freyer, alluding to brief bickering between Rucki and Noel about where they saw something. When I ask why the partnership works, Noel's reply is: 'Because we constantly argue!' The implication

is that their differences make them stronger. With at least three extra staff members, two interns and various other floating collaborators and interns, Troika has outgrown its current premises off Shoreditch High Street and is moving east to a new, larger studio. Currently, members of the group are working on signage for the V&A in London, three art installations for a new building on the Toronto waterfront (which is being redeveloped), and a range of self-initiated projects that they regularly dip into when they have the time. One thing is for sure: whatever Troika does next is bound to involve a lot of research, a great deal of thought and plenty of expertise. It is certain to raise a lot of questions, too. This is design at its purest and most thought-provoking. ■■■■

troika.uk.com

TROIKA DESIGNED FIVE SETS OF BATS INSPIRED BY RON ARAD'S DESIGNS. ONE SET HAS INTEGRATED LEDS THAT SPELL OUT PING AND PONG IN MIDAIR WHILE PLAY IS IN PROGRESS.



'It's difficult for design critics to write about our work'
Sebastian Noel



BUILDING ON ARAD'S LONG-STANDING ASSOCIATION WITH TABLE TENNIS, TROIKA CREATED A TABLE TENNIS TOURNAMENT FOR HIS RETROSPECTIVE AT THE BARBICAN ART GALLERY.



TROIKA PRESSED AND SHAPED TWO BOOKS - NABOKOV'S LOLITA AND DOSTOEVSKY'S THE IDIOT - INTO PADDLES, ONE OF WHICH RON ARAD USED DURING THE TOURNAMENT.