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Golan Levin

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beautiful users
designing for people
Ellen Lupton
In a world of complex hi-tech products, some users seek to expose the covert workings of manufactured things. OPEN-SOURCE DESIGN builds on the open-source software movement, which invites multiple authors to write and test code. Personal 3D printing technologies are moving design and manufacturing into the hands of users, allowing MAKERS to create (and share) digital files for producing physical objects. HACKING, associated with penetrating the secrets of software, has extended its conquest to the world of physical things. Users are taking apart and reassembling consumer products, treating the world of manufactured goods as a kit of parts to be reworked and rewritten.

Confronting questions about intellectual property, open-source culture, and reverse engineering, the Free Universal Construction Kit consists of nearly eighty two-way adapter bricks that enable connections among ten popular children’s construction toys. Users can download the files from various sharing sites and print them on a MakerBot or other personal manufacturing device. The Kit demonstrates “reverse engineering as a civic activity: a creative process in which anyone can develop the necessary pieces to bridge the limitations presented by mass-produced commercial artifacts.” The designers scanned existing toy components with an optical comparator that is accurate down to one ten-thousandth of an inch (0.0001 inches, or 2.54 microns), allowing them to
create precise fits between components. Golan Levin and Shawn Sims conceived the Kit and released it through the Free Art and Technology (F.A.T.) Lab and Synaptic Lab collectives. It was developed with support from the Frank-Ratchye STUDIO for Creative Inquiry at Carnegie Mellon University and is represented, for legal purposes, by Adapterz, LLC.
viewer's eyes and adding them to the grid; each shot lasts as long as the
eyes of the viewer are open between blinks; see Figure 3.6.11

I would like to discuss Eyecode from the point of view of the uncanny,
but first, I would like to mention the blinking of the users' eyes that mark
the beginnings and endings of the captured images; for me, blinks are
like delimiters—unconscious open-and-close brackets that articulate
what we see. Levin has piggybacked the opening and closing delimiters
of his capture with the opening and closing delimiters of his viewers'
blinks.12 Levin shows to each viewer a snapshot of his or her look—an
uninterrupted look of a certain span of time. And each viewer is placed
in the field of the other in a diachronic displacement of a synchronic event.
By synchronic in this case, I mean simultaneous; by diachronic, I mean
sequential. One person looking at another takes place synchronically (I
look at you as you look at me); in Eyecode, one person looks; the look is
captured and shown back exactly as you would have been seen (I look at
you and then I see you looking back at me) in inverted form.

If there is a logical reason I referred to this experience as uncanny, it
can only be because it seems distantly familiar. According to Freud, “the
uncanny is that class of the terrifying which leads back to something long
known to us, once very familiar” (Freud 1958: 123–124). The German
word for the uncanny is unheimlich, and Freud understands a certain
familiarity (heimlich) to be nested inside the unheimlich as a distant,
repressed memory. In his exhaustive look at the various meanings of
uncanny in various languages, Freud discovers that the meanings of
heimlich and unheimlich often converge; he discovers that the meanings
can be interchangeable:

Among its different shades of meaning the word heimlich exhibits one
which is identical with its opposite, unheimlich … In general we are
reminded that the word heimlich is not unambiguous, but belongs to two
sets of ideas, which without being contradictory are yet very different: on
the one hand, it means that which is familiar and congenial, and on the
other, that which is concealed and kept out of sight.

(Freud 1958: 129)
“Thus heimlich is a word the meaning of which develops towards an ambivalence, until it finally coincides with its opposite, unheimlich” (Freud 1958: 131).

In general, a premise of this entire book is that the uncanny underwrites much of the experience of electronic art in early twenty-first-century social space; but there is a much more precise cultural resonance to feeling the uncanny in Golan Levin's Eyecode. As Freud mentions in his essay, quite often “the feeling of something uncanny is directly attached to the figure of the Sand-Man, that is, to the idea of being robbed of one's eyes” (Freud 1958: 136).\footnote{13}

I would like to return to something I mentioned above—the look of the viewer that is presented back to him or her in inverted form. There are two sources of this inversion: (1) the image of the self that is reflected back in inverted form in the mirror stage; and (2) the inversion that occurs in our access to the Other when the ego confronts Lacan's well-known “wall of language.” I would like for now to begin this exploration of the visual field in Lacan with the mirror stage and its visual inversions. I will return at a later time to the second inversion having to do with the subject's constitutive inversion as it hits the wall of language both separating and connecting the imaginary ego with the Other.\footnote{14}
Most of us know the mirror stage as the experience of holding a small child up to a mirror (or in front of one's own face) and watching a child imitate smiles of jubilation either in the reflected image in a mirror or the histrionics of one's own facial gestures. The mirror stage begins in most children around six months of age and wanes when the child is about a year and a half. For Lacan, “the human child, at an age when he is for a short while, but for a while nevertheless, outdone by a chimpanzee in instrumental intelligence, can already recognize his own image as such in a mirror” (Lacan 2006: 75). The prematurity of human birth is absolutely essential to Lacan's thesis for a crucial shift in perception that occurs from the initial jubilation described above to a readiness to exit the Imaginary and enter the Symbolic. Early in the mirror stage, the child is captivated by the image of the ideal other; once he or she gains motor capacity, the ideal other wanes, seems like the two-dimensional image that it is:

For the total form of his body, by which the subject anticipates the maturation of his power in a mirage, is given to him only as a gestalt, that is, in an exteriority in which, to be sure, this form is more constitutive than constituted, but in which, above all, it appears to him as the contour of his stature that freezes it and in a symmetry that reverses it, in opposition to the turbulent movements with which the subject feels he animates it.

(Lacan 2006: 76)

We will return to the implications of the end of the mirror stage later. For now, I would like to focus on the reversing effect, the inversion of the image that occurs in the passage quoted above, and in Levin's work. For one thing, there is a reversing effect in the mirror itself; Lacan points out that “[w]e note that the image in the mirror is reversed, and we see in this at least a metaphorical representation of the structural reversal we have demonstrated in the ego as the individual's psychical real (Lacan 1953: 15).

One aspect of inversion is an otherness—a flipping along a bit axis. One can invert an image and make up/down and down/up; one can invert a melody, making ascending intervals descend and descend intervals ascend. In image inversion, two things happen: (1) r becomes left and left becomes right; and (2) a spatial “hereness” becomes a “thereness”—there is a movement, a transposition
displacement. Levin's work relies on a representation of both, with reversed and disembodied eyes, joining others' eyes in a quivering grid that silently counts each captured look.

Golan Levin collaborated with Zach Lieberman in Reface; see Figure 3.7.\textsuperscript{16}

As in Eyecode, Reface uses the blinks of the user to change video clips taken not only of the viewer's eyes, but his or her noses and mouths as well—an interactive, electronic version (as the online documentation states) of the exquisite corpse game.\textsuperscript{17} Reface vividly recreates a sense of fragmentation upon which the mirror stage relies:

The mirror stage is a drama whose internal pressure pushes precipitously from insufficiency to anticipation—and, for the subject caught up in the lure of spatial identification, turns out fantasies that proceed from a fragmented image of the body to what I will call an “orthopedic” form of its totality—and to the finally donned armor of an alienating identity that will mark his entire mental development with its rigid structure. Thus the shattering of the Innenwelt to Umwelt circle gives rise to an inexhaustible squaring of the ego's audits. (Lacan 2006: 78)

![Figure 3.7 Reface (Portrait Sequencer) by Golan Levin and Zachary Lieberman, 2007. Used with Permission.](image)

From Eyecode to Reface, the fragmentation ante is raised substantially; in Reface, the viewer sees whole faces but the wholeness is made up of heterogeneous parts. In Eyecode, each clip of disembodied eyes that looks back at the viewer does so implicitly from a position of having
been members of a single, whole face. In *Reface*, each video clip of eyes is impossibly combined with video clips of noses and mouths that slide back and forth to form impossible faces. For me, the affect projected from these impossible faces represents/embodies a primitive aggressivity out of which the mirror stage develops. But the aggressiveness is not only due to the fragmentation of the subject after birth and before the mirror stage, it is also a product of the very alienating effect that the mirror stage inaugurates:

[The] ego ... is frustration in its very essence. Not frustration of one of the subject's desires, but frustration of an object in which his desire is alienated; and the more developed this object becomes, the more profoundly the subject becomes alienated from his jouissance. It is thus a frustration at one remove, a frustration that the subject—even were he to reduce its form in his discourse to the passivating image by which the subject makes himself an object by displaying himself before the mirror—could not be satisfied with, since even if he achieved the most perfect resemblance to that image, it would still be the other's jouissance that he would have gotten recognized there.

(Lacan 2006: 208)

In *Reface*, parts of the subject's face are grafted onto the facial parts of the other, right before his or her eyes. The ways in which these captured body parts shift and find alignment despite their radical alterity to each other represents/embodies the radical alterity inherent in subject formation through mirror identification. How is frustration, aggression, alienation indexed into the affect involved in using, viewing, confronting the fragmentation, particularly in light of my claims implying a negative, threatening response, and the obvious sense of playfulness that one sees in online documentation of the works (*Eyecode* as well as *Reface*)?

I would like to suggest that the playful affect of a user/viewer/subject triggering the fragments of these works derives from their interactivity. What is happening here is a transformation of an experience based on passivity gaining power (retrospectively) through active representation. Having laid out the basic dynamic of the fort-da game in *Beyond the Pleasure Principle*, Freud asks himself: “How then does his repetition [of the fort-da gesture] of this distressing experience as a game [of enacting the absence of the mother] fit in with the pleasure principle?” (Freud 1961: 15). And Freud answers himself:
On an unprejudiced view one gets an impression that the child turned his experience into a game from another motive. At the outset he was in a passive situation—he was overpowered by the experience; but, by repeating it, unpleasureable though it was, as a game, he took on an active part.

(Freud 1961: 15, original emphasis)

For me, art with an interactive component can increase the subject's sense of mastery of archaic memories of fragmentation and alienation that we all, necessarily, experienced in passivity. And Freud follows this perception with a striking addendum:

But still another interpretation may be attempted. Throwing away the object [the child's "fort"] so that it was "gone" might satisfy an impulse of the child's, which was suppressed in his actual life, to revenge himself on his mother for going away from him.

(Freud 1961: 15)

In *Reface*, part of the glee that the users in online documentation feel may piggyback on this archaic memory of destruction—brought out by the artists in the blinks of the eyes that slash faces apart on the screen.

Rafael Lozano-Hemmer did a work entitled *Blow Up* in which an image of a subject is captured and reproduced in 2,400 miniature frames; see Figure 3.8.18

Seeing one's image fragmented, duplicated, and projected back in so many small screens embodies the irreducible disruption latent in the mirror stage. And at this edge of the (mis)recognition inherent in the mirror stage, we can take a peek at the Real. For Lacan:

The real is apprehended beyond all mediation, be it imaginary or symbolic. In short, one could say that such privileged experiences, and especially it would seem in a dream, are characterized by the relation which is established with an absolute other, I mean an other beyond all intersubjectivity. This beyond of the intersubjective relation is attained most especially on the imaginary level. What's at issue is an essential alien … who is neither the supplement, nor the complement of the fellow being … who is the very image of dislocation, of the essential tearing apart of the subject.

(Lacan 1991b: 177)
Fluxus movement, conceptual art, participatory art and pre-internet media-based works, such as Participation TV, some of which have already been explored for their impact on the digital arts (see Chapters 2, 3 and 5 in particular). The emergence of digital technologies has propelled internet art forward as an ever-increasing area within the digital arts (also see Chapters 2 and 9). While exploring the effects of emerging technologies on internet art, we also reflect on the technological innovations that have been catalyzed by artists innovating across a number of digital media.

Furthermore, we will discuss the impact of social networking, open-source software, new operating systems and programming environments (including recent developments in Java applets, Flash and Shockwave technologies). This exploration entails an understanding of the way artists have initiated developments in digital technology. In addition to online communities and net cultures, we explore the key concepts of telepresence, appropriation, agency and aesthetics. At the chapter’s end, we conclude by returning to ‘internet art’ as a concept and movement. What was once a form of ‘new media’ existing at the fringes of the mainstream art world is increasingly becoming an accepted part of global arts practices, reflecting the evolution and maturation of internet-based technologies in the broader society. In preparation for Chapter 8, we also note the methods that museums and galleries have evolved for displaying, promoting and preserving works of internet art. The artists included in case studies are Australian code poet Mez Breeze, Slovenian ASCII-based net art pioneer Vuk Cosic, American new media artist Golan Levin, American designer Joshua Davis and Russian experimental filmmaker and internet artist Olia Lialina. Featured projects include jodi.org (1995–), āda\'web (1994–8), 7–11 (1997–9) and VNS Matrix (1991–7).

WHAT IS INTERNET ART?

Known also as online art, browser art, net.art, network art or net art, internet art makes use of and integrates into works the ‘participatory, connective and dynamic’ features intrinsic to online environments in general (Ippolito 2002: 485). These terms are usually used interchangeably. Josephine Bosma in her book Nettitudes (2011) defines net art simply as ‘art based in or on Internet cultures’ (24). In 2002, Tilman Baumgärtel offered this definition:

Net art addresses its own medium; it deals with the specific conditions the Internet offers. It explores the possibilities that arise from its taking place within this electronic network and is therefore ‘Net specific’. Net art plays with the protocols of the Internet, with its technical peculiarities. It puts known or undiscovered errors within the system to its own use. It deals creatively with software and with the rules software follows in order to work.
the fifth revision of Tim Berners-Lee’s original HTML from 1989, HTML5 more fully integrates multimedia and improves user readability. As one of the first online art projects to use HTML5, *The Endless Mural* produces a gesture-based environment (pointing, clicking or swiping across the page) in which randomly selected motifs are mapped to patterns drawn by the user. Images and source code are downloadable, foregrounding the customization of web environments that dominates the internet today. The work of Davis offers another example of the potential of the internet to democratize art, in the sense outlined in Chapter 1.

**Case Study 6.5**

**Golan Levin**

Golan Levin (b. 1972) is an artist-engineer once affiliated with the Massachusetts Institute of Technology (MIT) Media Lab’s Aesthetics and Computation Group. Levin is known for developing software tools to facilitate the ‘real-time manipulation of computer graphics and audio’ (Salter 2010: 178). His works *Environmental Suite* (1998–2000), *Scribble* (2000), *Dialtones: A Telesymphony* (2001) (discussed in Chapter 9) and *Messe de Voce* (2005) demonstrate the ways that digital art boundaries are becoming more indistinct. For *Environmental Suite*, Levin created code ‘that enabled a performer to treat image and sound in a highly abstract, textual manner that gave fluid life to digital floating lines, skeins, blobs, and tendrils, all in real time’ (Salter 2010: 178) (see Figure 6.3). Levin’s more recent installation work employs iPhone and robotic technologies to make art that is ‘expressive potential of the new tools we have’ (TED 2009). Interactive and immersive bodily experience defines *Interstitial Fragment Processor* (2008) in which participants explore the negative shapes formed around their bodies. Furthermore, the creative agency of participants is central to the work *Opto-Isolator* (2007) as one robotic eye in a black box blinks in response to the viewer’s blinking.

This chapter has considered the democratizing of art through the internet and associated technologies. As we have seen through case studies and other examples, net artworks are neither restricted to museum or gallery locations nor to the internet itself. Internet art contains elements of conceptual, participatory and performance art, while crossing between many technological platforms, theoretical positions and web environments. Indeed, the internet itself has evolved far beyond the web of its formative years, and internet art is testimony to this. The way in which artists exploit the internet reveals the hidden potentials of technology, continually redefining human relationships to computers, robotics and digital inventions. Yet, the democratizing potential of internet art poses challenges to the conservation of the digital artworks themselves, as Chapter 8 goes on to explore. For example, in 1999, the Guggenheim Museum launched the Variable Media Initiative in an effort to preserve performative and media-based works (The Solomon R. Guggenheim Foundation 2013). The project allows the translation of the artwork into a different
medium once its original medium becomes obsolete. Included in the initiative is Paik’s *TV Garden* (1974), among many others. Therefore, while internet art redefines the creation of art in today’s world through enhanced agency, interactivity, collaboration and online–offline flows, the conservation approaches used to keep it alive also themselves help to redefine museum practices (discussion continued in Chapter 8).

**Reflection**

For a moment, we encourage you to think like an internet artist. Using your phone and any apps you might have available, briefly outline your plans for an artwork that can incorporate an app of your choice. How would the artwork involve a network of artists, viewers and participants? What kinds of concepts would inform the work?
aspects ‘beyond the boundary of “normal” functions and uses of software’ (Cascone 2000: 14). Cascone argues that the Italian Futurist movement, specifically the painter Luigi Russolo, and John Cage’s ‘silent’ composition 4’33” (1952) established the groundwork for the emergence of postdigital music and its emphasis on technical limitations and equipment breakdowns. Following Cascone’s position, we maintain that postdigital art inverts the conventional applications of technology to forge new aesthetic vocabularies and social possibilities. The levelling of technology through exposing its imperfections results in a humanizing effect; machines, like humans, are not perfect.

Reflection

Early media artists were known for intentionally distorting the conventional uses of technology. Consider again, for example, Paik’s Magnet TV, discussed in Chapter 2. How might the goals of postdigital practices differ? In what ways might postdigital art mark a renewal of pre-digital practices?

NEW TECHNOLOGICAL FRONTIERS AND THE FUTURE OF DIGITAL ART

As we have argued throughout this book, artists love experimenting with technology. History attests to this fact. This section outlines a number of emerging technologies adopted as tools and mediums by contemporary digital practitioners. Ubiquitous computing, wearable technology, gaming and MMORPG networked environments, social media, mobile telecommunications, open-source software and wiki platforms for generating open-ended, interactive and collaborative works will be considered. The artists and artworks included in this section collectively allude to a number of possible directions for digital art in the coming years. While conclusive predictions are impossible, artists will continue to devise novel modes of hybridizing technology and art. These include Yacov Sharir’s use of computerized choreography in performances such as Intelligent City (2003), Ian Bogost’s game poetry, Feng Mengbo’s political game-based video work in Long March Restart (2009), the Twitter art of Man Bartlett and Brian Piana, Golan Levin’s mobile phone musical composition Dialtones: A Telesymphony (2001–2) and Lauren McCarthy’s wiki-based performance Script (2010).

UBIQUITOUS COMPUTING AND WEARABLE TECHNOLOGY

The division between virtuality and physicality arguably dominates our perception of digital technology in our lives. Certainly, the binary division between the virtual
social media platforms is Man Bartlett. In the performance work #24hEcho (2010),
based physically at the P. P. O. W. Gallery in New York City and virtually on Twitter,
Bartlett read a stream of Twitter feeds into a webcam over a twenty-four-hour
period, requiring only ‘a table, 12 glasses of water and the internet’ (Bartlett 2010)
(see Figure 9.1).

MOBILE TELECOMMUNICATIONS

Mobile telecommunications offer a dynamic example of ubiquitous computing with
which most of us are familiar. As with social media, it is hard to imagine a world
without mobile phones – a time in which phone access was limited to handsets,
telephone lines and coin-operated payphones. In 2010, there were an estimated 5.4
billion mobile phones globally. But the history of mobile networks extends back to
the late 1970s when AT&T established in Chicago the first analogue network of
mobile phones. By 1979, NTT in Tokyo released a commercially automated mobile
network, which in 1984 became the first national mobile network, covering the
whole of Japan. In 1981 and 1982, the NMT (Nordic Mobile Telephone Group)
introduced international roaming as a feature of its network. By 1992, the GSM
(Global System for Mobile Communication) emerged as the European standard,
including enhanced signal quality, stronger frequencies, greater potential for a larger
subscriber base and the introduction of the SIM card (Balbi 2013: 216–17; for
an introductory overview, see Green and Haddon 2009). Digital artists have been
exploring mobile phones as mediums since the early days of the technology. We
expect the utilization of mobile communications by artists to swell as the technology
becomes omnipresent – enhancing audience interaction with artworks and contrib-
uting to the democratization of art through technology. Maurizio Bolognini’s
Collective Intelligence Machines (CIMs) (2000) series is an early mobile communica-
tions work that made use of networks to facilitate audience participation and to link
installations in different geographical locations. The images created by the CIMs and
projected onto public buildings were modified in real time by participants through
SMS (short message service) data uploaded to the installation from their mobile
phones. This form of art-based ‘electronic democracy’ is generative, interactive and
public (Bolognini 2008).

Another seminal mobile communications work, Golan Levin’s Dialtones: A
Telesymphony (2001–2), was a collaborative performance in which sounds were
produced through the orchestrated ringing of about 200 audience members’ mobile
phones. Described as a telesymphony performance, Dialtones included an interdisci-
plinary team of composers, engineers and software developers and premiered at the
Brucknerhaus Auditorium in Austria as part of the Ars Electronica Festival (Hope
2006: 43). Merging symphony, conceptual artwork and social commentary, the
1. Domenico Quaranta: *Beyond New Media Arts* (Domen Ograjsek)
4. The accompanying program / review of the *FUCK & QR Digital Nomads* (Domen Ograjensek)

The Golana Levin *FUCK & QR Code for Digital Nomads* is included in the accompanying program of the *Oncry of Media Arts Seminar*, thus joining the performance of Emil Kozolet with the title *E-dentity*, performance / installation Andree Knezović, entitled *On the Threshold*, and the lecture and Heath Bunting Workshop. In this context, there is an opportunity to consider the work concerned at the premises of Axiom until 9 May in relation to the issues raised by the seminar.

The Axiom exhibition consists of the *FUCK - Free Universal Construction Kit* and part of the *QR code for digital nomads*. In this way, two different themes intertwine in the exhibition space, which, after all, is shared by the sociocritical orientation and technological backing. As such, the exhibition is a good indicator of the baselessness of a schematic distinction between contemporary and new media art. So the baselessness of schematism. It overlooks the complementary nature of conceptual perfection and media or technological innovation. Last but not the least, the question arises as to whether the flowering of the digital age can still be ignored by media and technology impregnated everyday.

*FUCK* or *Free Universal Construction Accessories* in this way problematizes the closed nature of social universes. On their boundaries, we encounter the everyday use of products that are limited in their compatibility to the commodification set of the respective brand. Through the skillful use of 3D printing techniques, the artist seeks to fill the gap of competitive patenting. This is achieved by the production of various plastic interfaces, which enable the connection of so far invisible pieces of construction toys, such as Lega® and Dupla® toys. The exhibited artefacts are just some kind of physical reflection of the work of art or its translation into the exhibition space, but it maintains its right place in open-source accessibility of the interface design itself. This property, which shares both exhibited parts, *Certainly not something negligible. It speaks of a sociocritical gesture of the re-appropriation of knowledge from the yoke of political and economic property. That is why they are the essential words of the artist when he says that “reverse engineering is a civic duty”. In this sense, we can say that we must not accept the frames set by bare business enterprises, as only in this way can we avoid the complete commodification of our reality.*

The QR code for digital nomads, on the other hand, offers a set of templates that can be used to graphic QR codes. These reading codes are revealed in their meaning only through the transmission of various readers, including mobile phones. The exhibited artefacts are just the tools by which we extend the possibility of codified communication and thus we appropriate the symbolic landscape of public spaces. But why coded language? It seems that in the information hustle of modern public life it is difficult to maintain a satisfactory level of literacy. That is, who would successfully face the saturation of the media landscape. It must be asked whether this rudimentary form of communication, as a mere supply of information, is still sufficient in a world of increasingly confusing public opinion?
Among the projects that the artist puts together with his colleagues, there are also series of templates that enable the graphing of socially relevant statistics on the one hand and the simplicity of 5-star value judgments on the other. Given that in the age of the Internet there is not a lack of raw facts, but rather the means for their interpretation, this move seems unusual. This is especially true in the case of simplistic value judgments, which by their simple principle eliminate the need to form more complex opinions. It is therefore imperative to ask whether their translation from virtual to physical is for the in-depth passivation of public opinion.

Despite all the reservations in concrete use, the code used by the artist is, however, the last junction between language and words, which reminds us of our own programming. So we do not notice our personal involvement in the medium, which is in the course of everyday life. Last but not least, every corner of our site will be just a line of code waiting for your command. But we are already alienated as such.

We have therefore come to understand the interpretative gap between the more intense passivation of society and the last warning of our own estrangement. Before the split, which speaks primarily of the conceptual incompleteness, which is completely redundant in the field of social criticism. If Dominico Quaranta calls art criticism to abandon the cover of its technological and media ignorance, we must, on the contrary, invite artists to, in the case of the conceptual placement of their works, also properly conceptually complete them. Only in this way can be prevented by a poem that, in the name of contemporary art, is trying to marginalize its new media.

This time, the art-area broadcast in the media is concluding with the message of Heath Bunting, which he gave to all listeners of Radio Študent.


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LIGHT WORKS: EXPERIMENTAL PROJECTION MAPPING

Experimential Projection Mapping

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LIGHT WORKS
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Frieder Weiss.............................................................................................. p.104
“Footfalls” is an interactive audiovisual installation in which the stomping of the visitors’ feet creates cascading avalanches of bouncy virtual forms. In Footfalls, stepping and stomping sounds produced by the visitors’ feet are detected by microphones under the floor, and used to govern the size and number of virtual objects that fall from a six-meter high projection. The harder the visitors stomp, the more items fall. Using their silhouettes, visitors can then “catch” and “throw” these projected objects around.
Évora despliega la historia del arte interactivo

La muestra, organizada por el Fórum Eugénio de Almeida, reúne obras que se exhiben por primera vez en la península ibérica

ROBERTA BOSCO

El arte tecnológico puede ser tan delicado y deteriorable como un retablo románico o un dibujo antiguo. Por ello es tan extraordinario que el ZKM Center for Art and Media de Karlsruhe (Alemania), considerado el centro de arte y tecnología más importante del mundo, haya accedido a prestar una selección de obras maestras de la historia de los nuevos medios para una muestra fuera de su sede. La exposición, titulada INTER[IN]VENTION, reúne en el centro de arte portugués, Fórum Eugénio de Almeida de Évora, 33
obras míticas de la colección del ZKM, muchas de las cuales no han salido nunca de Alemania y se presentan por primera vez en la península ibérica.

Tras la muestra inaugural, que marcó el carácter experimental del centro y su singularidad, la historiadora y teórica Claudia Giannetti, que simultanea su comisariado con la dirección del Edith Russ Haus de Oldenburg, un prestigioso centro alemán dedicado a los nuevos medios, sigue apostando por obras interactivas, que involucran en una dinámica participativa un público, que en una ciudad universitaria como Évora aspira a convertir en habitual. Videoescultura, videoarte, instalación e performance audiovisual y obras sonoras, ofrecen un panorama exhaustivo que arranca en la década de 1960 con Beatles Electronique y Participation TV, de Nam June Paik y Duchampiana: Nude Descending a Staircase, de Shigeko Kubota, que establecen una asociación conceptual fundamental entre las vanguardias históricas y el media art. Aunque casi naïf en esta época de libros electrónicos, Beyond Pages, el libro virtual de Masaki Fujihata, conserva toda su fuerza poética, así como se mantiene el empuje coral de la Messa di Voce de Golan Levin y Zachary Lieberman, que convierte el público en máximo protagonista de la obra a través del uso de su voz. “La voluntad de establecer un diálogo entre obra y público, público y espacio y también entre los propios visitantes, toma formas distintas según el periodo y la tecnología y a menudo tiene un corte lúdico y entretenido, como en el caso del juego participativo con pompas de jabón virtuales de Bubbles de Kiyoshi Furukawa y Wolfgang Münch”, explica Giannetti.

Según la comisaria, este tipo de interactividad intuitiva, que no requiere conocimientos previos, tiene su expresión paradigmática en Telematic Vision del británico Paul Sermon, una obra clave para el desarrollo de la
telepresencia en ámbito artístico. Gracias a esta técnica, la instalación interconecta telemáticamente dos lugares alejados entre sí del inmenso Fórum Eugénio de Almeida (3.000 metros cuadrados de espacio expositivo), de modo que dos personas situadas en las dos salas se encuentran reunidas en un marco virtual, que se proyecta en sendas pantallas. “De ese modo el público se convierte en espectador de su propia intervención. Se trata de una de las primeras obras que difumina la división entre el cuerpo remoto y el cuerpo presente de los que participan en la acción”, indica Giannetti, recordando que desde los años Setenta el *media art* se enriquece con las instalaciones de circuitos cerrados, que permiten explorar un nuevo nivel de interacción y plantean tímidamente temas vinculados con la identidad y la intimidad, fundamentales para las prácticas posteriores.

‘Hello’, de Tony Oursler.
Cuestiones semejantes levantan las obras de Rafael Lozano-Hemmer, que en esta ocasión presenta Please Empty Your Pockets, una especie de escáner policial donde el visitante es invitado a colocar el contenido de sus bolsillos, para que la ‘mágica máquina’ del artista lo convierta en obra de arte. Todas las piezas requieren la acción del visitante: desde las plantas interactivas de Christa Sommerer e Laurent Mignonneau, que crecen virtualmente en pantalla cuando alguien las toca, hasta el espejo de Narciso, reinterpretado de forma líquida y digital por Fleischmann & Strauss. Cierra el recorrido la videoinstalación Good Boy Bad Boy de Bruce Nauman, que condensa varios estratos de crítica y problemáticas socioculturales y raciales, simbólicamente colocada en el Cubículo del Inquisidor, un espacio de especial carga histórica en el palacio que acogió el Tribunal de la Inquisición de Évora, donde se ejecutaron 507 personas. Según Giannetti, “El arte es un buen sistema para, de cierta forma, lavar el karma del edificio”.
Évora unfolds the history of interactive art

The exhibition, organized by the Forum Eugénio de Almeida, brings together works that are exhibited for the first time in the Iberian peninsula

ROBERTA BOSCO

Technological art can be as delicate and deteriorable as a Romanesque altarpiece or an antique drawing. It is therefore so extraordinary that the ZKM Center for Art and Media of Karlsruhe (Germany), considered the most important center of art and technology in the world, has agreed to provide a selection of masterpieces from the history of new media for a show Outside their headquarters. The exhibition, entitled INTER [IN] VENTION, brings
together 33 Portuguese works from the ZKM collection at the Portuguese Art Center, Évora Eugénio de Almeida, in Évora, many of which have never left Germany and are presented for the first time in the Iberic Peninsule.

After the inaugural exhibition, which marked the experimental character of the center and its uniqueness, the historian and theorist Claudia Giannetti, who together with her directorate Edith Russ Haus of Oldenburg, a prestigious German center dedicated to new media, Interactive works, involving in a participatory dynamic a public, that in a university city like Évora aspires to become habitual. Video Sculpture, video art, installation and audiovisual performance and sound works, offer an exhaustive panorama that starts in the 1960s with Beatles Electronique and Participation TV, Nam June Paik and Duchampiana: Nude Descending a Staircase, by Shigeko Kubota, Which establish a fundamental conceptual association between the historical avant-gardes and the media art. Although almost naïve in this e-book era, Beyond Pages, the virtual book of Masaki Fujihata, retains all its poetic strength, as well as maintaining the choir thrust of Golan Levin's Messa di Voce and Zachary Lieberman, which turns the public into Maximum protagonist of the work through the use of his voice. "The desire to establish a dialogue between work and the public, public and space and also among visitors, takes different forms according to the period and technology and often has a playful and entertaining, as in the case of participatory game with bubbles of virtual soap Bubbles Kiyoshi Furukawa and Wolfgang Münch"

According to the curator, this type of intuitive interactivity, which does not require previous knowledge, has its paradigmatic expression in Telematic Vision of the British Paul Sermon, a key work for the development of telepresence in the artistic field. Thanks to this technique, the installation
interconnects telematically two places separated from each other by the immense Forum Eugénio de Almeida (3,000 square meters of exhibition space), so that two people located in the two rooms are gathered in a virtual framework, which is projected on each screen. "In this way the public becomes a spectator of their own intervention. It is one of the first works that blurs the division between the remote body and the present body of those involved in the action, "says Giannetti.

'Shel', by Tony Oursler.

Similar questions raise the works of Rafael Lozano-Hemmer, who on this occasion presents Please Empty Your Pockets, a kind of police scanner where the visitor is invited to place the contents of their pockets, so that the
artist's 'magic machine' In work of art. All pieces require visitor action: from the interactive plants of Christa Sommerer and Laurent Mignonneau, which grow virtually on screen when someone touches them, to the mirror of Narcissus, reinterpreted in a liquid and digital form by Fleischmann & Strauss. Bruce Nauman's Good Boy Bad Boy closes the tour, which condenses various layers of criticism and sociocultural and racial problems, symbolically placed in the Inquisitor's Cubicle, A space of special historical load in the palace that hosted the Tribunal of the Inquisition of Évora, where 507 people were executed. According to Giannetti, "Art is a good system to, in a certain way, wash the building's karma."
Machine Performers:
Agents in a Multiple Ontological State

by
Louis-Philippe Demers

A dissertation in partial satisfaction of the requirements for the degree of
Doctor of Philosophy (Ph.D.)
University of Plymouth

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Zurich University of the Arts (ICST)

External Advisor: Prof. Dr. Rolf Pfeifer
University of Zurich

September 15th 2014
3) *Opto-Isolator* (Levin & Baltus, 2007).

According to Golan Levin and Greg Baltus, the authors of *Opto-Isolator*, the sculpture inverts the condition of spectatorship: "What if artworks could know how we were looking at them? And, given this knowledge, how might they respond to us?" (Levin and Baltus 2007). The piece presents a solitary mechatronic blinking eye that responds to the gaze of the visitor with what they describe as “eye contact behaviours that are at once familiar and unnerving”. *Opto-Isolator* has elaborate eye contact feedbacks such as mimicking visitor’s blinks and looking away after a sustained stare.

![Image of Opto-Isolator](image.jpg)

Figure 32. *Opto-Isolator* (Levin and Baltus, 2007)
Permission to reproduce these images has been granted by the artists.

4) *Desire of Codes* (Seiko Mikami, 2010)

The installation *Desire of Codes* consists of three different parts responding to the movements of the audience: a large wall of sensors, a set of moving cameras, and a video display compounding images in the manner of insect vision. Again this work draws on the reversal of roles of object and subject and from the commissioners of this piece:

Audience who experience this artwork stands face to face with his or her own observed and encoded existence, the resulting data/codes, and ultimately, the repercussions of “the body as data” and “the desire of codes.” […] By turning the audiences bodies into both the objects of observation and artistic expression, this work aims to redefine our position in a time when all kinds of environments – including those of everyday life – are increasingly being information oriented society. (Mikami 2010) [sic]
Performance, installazioni, progetti interattivi...
Dimenticate tavolozza e creta, la fantasia volerà sulle ali dei codici informatici

O S T E R E O T I P O lo vuole ancora con gli abiti sporchi di tempera e la tavolozza dei colori in mano. E questo nonostante un Novecento che nell’arte ha visto di tutto: i barattoli di Andy Warhol, le linee infinite di Piero Manzoni, i neon di Mario Merz fino al dito medio di Maurizio Cattelan. Ma cosa succede all’artista quando il terzo millennio reclama il suo posto anche nella comunità dei creativi? Nel nord Europa, in Canada e negli Stati Uniti la rivoluzione è già in corso: i nuovi artisti sono i programmatori, l’ispirazione viaggia sui bit e il mestiere sono le stringhe di codice. Lo chiamano “creative coding”, è l’uso del software applicato al mondo delle arti: si parte dalla scrittura di un programma, che a sua volta genera una performance, un’installazione interattiva in cui il pubblico è chiamato a partecipare, un videogioco, un’opera di animazione. Zachary Lieberman, newyorkese, si definisce “artista, hacker e ricercatore, un po’ come se l’arte fosse il dipartimento di Ricerca e Sviluppo dell’umanità”. Ha studiato pittura e incisione, e nell’informatica si è finito per caso: gli serviva un lavoro, si è reinventato come web designer. Oggi il suo nome spicca nel panorama della New Media Art, al punto che la sua ultima opera ha avuto un committente d’eccezione: Google. “Si chiama “Play the world” (Suona il mondo) - spiega Lieberman - e consiste in uno strumento musicale, una sorta di tastiera. Quando si suona una nota, l’apparecchio rimanda a una stazione radio qualsiasi che nel mondo la sta trasmettendo. Il tutto grazie all’uso di un software che “ascolta” migliaia di emittenti web contemporaneamente, e sa identificare la nota giusta. Mi piace l’idea che possa capitarti la radio sportiva brasiliana, quella tedesca di musica pop, o quella indonesiana che manda in onda canti locali”.

Play the world fa parte di un progetto chiamato DevArt, che chiama a raccolta i migliori creative coders in circolazione. È stato lanciato a febbraio da Google con un con...
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Per Conrad Bodman, curatore di Digital Revolution, «Il creative coding è un ambito di sperimentazione che si sta sviluppando a ritmi velocissimi. Cresce il numero degli artisti, e con loro gli strumenti messi a disposizione dalla tecnologia. Pensiamo ad esempio alle opportunità che si spalancano grazie alle nuove realtà virtuali, mutuate dai videogame: dispositivi come Oculus Rift (il visore a realtà aumentata sul mercato dal 2015, ndr) o Microsoft Kinect (un sensore di movimento, ndr) offrono incredibili potenzialità per i creativi. Soprattutto per tutti quelli che mirano all’interazione con il pubblico».

Il fermento di cui parla Bodman si ritrova nel proliferare di festival dedicati alle arti digitali, rassegne già affermate come Ars Electronica, Art Futura, Bian (la biennale internazionale che si tiene a Montréal), Eyeo Festival, Resonate e molti altri. Ma anche gli ultimi nati come Unpainted, una manifestazione dedicata alla New Media Art che quest’anno si è tenuta a Monaco per la prima volta.

Viene in mente Golan Levin, artista statunitense, che durante un intervento al Ted (la conferenza annuale su idee e innovazioni da tutto il mondo, ndr) esordì così: «Immaginate di passare sette anni nei laboratori del Mit… per scoprire di essere un performance artist». Risatine dal pubblico, ma era tutto vero.

OPERA D’ARTE
O VIDEOGAME?
LA PROTAGONISTA È LA PRINCIPESSA IDA,
DA GUIDARE ATTRAVERSO ARCHITETTURE SURREAL,
ISPIRATE A ESCHER.
LO SCOPO È RAGGIUNGERE LA CIMA DI QUESTO STRANO EDIFICIO MUTANTE.

Non solo, il connubio fra arte e tecnologia si sta facendo strada anche tra i banchi di scuola. Per ora, soltanto all’estero. Se nel Regno Unito i linguaggi di programmazione sono già entrati negli istituti secondari, negli Usa si sta affermando un movimento d’opinione che vorrebbe andare oltre. Dopo i fondi stanziati per potenziare l’insegnamento nelle materie del cosiddetto Stem (Science, Technology, Engineering and Math), una nutrita comunità di educatori e intellettuali preme perché l’acronimo diventi Steam, dove la “a” sta per “Art”. Questo consentirebbe di sviluppare il potenziale creativo della scrittura in codice già a livello scolastico: tutto tempo guadagnato, insomma, per i futuri creative coders.

MR KALIA
VINCENTE DEL CONCORSO INDETTO DA DEVART. IL PUBBLICO AVVIENA LE MUTAZIONI DI MR KALIA, UN PERSONAGGIO IMMAGINARIO, SU DI SE. GRAZIE A UNA TELECHIA IN GRADO DI TRACCIARE I MOVIMENTI DEL CORPO

OR-STENCILER
È UN SOFTWARE CHE CONVERTE UN CODICE QR IN UN PATTERN CHE PUÒ ESSERE STAMPATO SU UNO STENCIL. È ORTODOZI INVENTATI COI SUOI IMPRESI SULLI MURI DELLA CITTA CON UN’INDIACAZIONE PER I VISITATORI

I REMEMBER, FRENCH EDITION
UNA PIATTAFORMA WEB INTERATTIVA PER FINANZIARE LA RICERCA CONTRO L’ALZHEIMER. IL PUBBLICO SPERIMENTA LE MUTAZIONI DI MR KALIA, UN PERSONAGGIO IMAGINARIO, SU DI SE. GRAZIE A UNA TECNOLOGIA IN GRADO DI TRACCIARE I MOVIMENTI DEL CORPO

GIANT MAP
UNA GIANTESCA MAPPAGNA DI GOOGLE CON CU1 I BAMBINI POSSONO INTERAGIRE CAMMINANDOCI SOPRA COME FOSSERO L’INTERA CITTA, UMANO PAISAJE L’IMAGINE CAMBIA QUANDO PASSANO L’IMAGINE CAMBIA QUANDO PASSANO

QR CODES FOR DIGITAL NOMADS
È UN SOFTWARE CHE CONVERTE UN CODICE QR IN UN PATTERN CHE PUÒ ESSERE STAMPATO SU UNO STENCIL. È ORTODOZI INVENTATI COI SUOI IMPRESI SULLI MURI DELLA CITTA CON UN’INDICAZIONE PER I VISITATORI
Artware

CHIARA PANZERI

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Qualche volta, capita che siano gli sviluppatori a convertirsi alle Muse. Varvara Guljajeva, estone, è partita da una laurea in scienze informatiche che era diventata troppo noiosa, per approdare a un Erasmus a Helsinki dove ha scoperto le intersezioni fra arte e tecnologia. Lavora in coppia con Mar Canet, originario di Barcellona. Anche loro sono stati scelti da Google per partecipare a DevArt. «L’intera opera - racconta Varvara - è pensata per essere quasi una magia. Lo sforzo fondamentale resta sempre quello di nascondere la complessità che c’è dietro, come se il risultato finale godesse di vita propria. Abbiamo creato un “whishing wall”, uno schermo di fronte al quale invitiamo le persone a esprimere un desiderio, e a farlo ad alta voce. Una volta pronunciato, si trasforma in una farfalla: si può toccarla sul video, e aiutarla a volare via. Il software fa in modo che ogni farfalla sia unica, sia nella forma che nel movimento».

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© RIPRODUZIONE RISERVATA
Connecticut College holds Arts & Science Symposium

NoiseFold perform a multimedia concert at 8 tonight in Cummings Hall.

Having covered a few of Connecticut College's Arts & Technology Symposums, I can be the first to report how incredibly stupid I am.

The 14th biennial event - sponsored as always by the college's Ammerman Center and taking place today through Saturday in Cummings Art Center - is like a national park with dozens of geysers that spout brilliance. This year's theme is "Presence, Immersion and Location" and features a keynote address on Friday morning from Golan Levin, director of the Frank-Ratchye STUDIO for Creative Inquiry at Carnegie Mellon University.

In his remarks, Levin will "discuss the ways in which he seeks to shape culture through the revelatory power of visualization and the design of open systems that awaken people to their potential as creative agents."
There's a lot going on and to digest at these think-tanks, and there will be all sorts of panels, presentations, workshops, science-y fellowship and, at the end of each day's sessions, astounding multimedia concerts presented by a variety of artists and performers.

There is also an adjunct art exhibition of works related to the symposium's mission taking place in New London's Hygienic Art Galleries and running through March 15.

- RICK KOSTER

**Ammerman Center for Arts & Technology**, 8:30 a.m.-9 p.m. today through Sat., Cummings Art Center, Connecticut College, 270 Mohegan Ave., New London; most events are free to the public; (860) 447-1911, conncoll.edu.
Core77 Design Awards 2014: The Best DIY Designs of the Year

Winner: NeoLucida, by Pablo Garcia and Golan Levin

Inspired by the 19th century Camera Lucida, NeoLucida is a drawing aid that helps artists reproduce subjects by tracing a superimposed image from a prism. The jury was most impressed with Pablo Garcia and Golan Levin’s ability to update a historic tool into a modern and functional device: ‘There is something beautiful about art that allows other people to make art. It takes an old technology that is obsolete, revitalizes it and makes it open and accessible to people everywhere to make for themselves.’

> Learn more about NeoLucida

Runner Up: Tri-Horse, by Brian Campbell

On a search for stability, woodworker Brian Campbell designed a three-point sawhorse design fro Fine Homebuilding Magazine that faired much better than the quadruped designs out there. Tri-Horse is made completely from plywood and serves a myriad of purposes—from miter saw and table saw stands to a general catch-all station for your portable workspace. The jury appreciated the way the design encourages DIY spirit: “The Tri-Horse takes a very common tool whose flaws we have come to accept and re-engineers it in a simple but effective way. Like the NeoLucida, we like tools that empower people to make their own DIY objects.”

> Learn more about Tri-Horse

There's something singularly rewarding—magical, even—about sketching an idea, taking stock of materials on hand, crunching numbers on backs of envelopes, and then actually making it into a real thing... which is why we're always excited to see the projects in the DIY category of the Core77 Design Awards. And while many of the honorees seen here can be reproduced, with a bit of time and effort, by any maker out there, Awards duly recognize the folks who came up with them in the first place. Moreover, these projects are fun—which, as well all know, is as one of the most important aspects of DIY culture.

Led by Ayah Bdeir of littleBits, the jury team selected eight projects, which they felt best manifested the vitality and enthusiasm of the DIY community, for top honors this year.
FutureEverything 2014: Tools for the Unknown Future

Ali Gunn  |  09 Apr 2014

Knitted mince and mapping drone strikes – we take a look at the visual art on offer at Manchester’s FutureEverything festival

FutureEverything returns this year with Tools for the Unknown Future as the context for this year’s self-styled ‘festival as laboratory.’ With digital tools so ingrained in our everyday life, the festival seeks to explore what may be for the future and to open up a dialogue that spans across art, technology, music and science.

FutureEverything is a symbiotic festival: the physical artworks presented are supported and reaffirmed by presentations that have been carefully curated for the conference. Ideas play out in real time through workshops and art pieces, allowing spectators to engage in activity that might not normally be within their reach. Taking the city as a starting point for the exploration of the tools of the future, FutureEverything constructed a temporary citadel, City Fictions, that spans the NOMA’s redevelopment area in Manchester city centre. Empty offices that once housed business and commerce are transformed into hubs of activity predisposing ideas relating to our present and the future.
Down in the depths of New Century House, a DIY food lab, *Bio Strike*, takes over the old canteen; visitors brave enough to walk down the escalators into the dark tunnels of billowing plastic sheeting get a chance to test mystery meats to see their true animal content and grow bacteria in agar Petri dishes. Meat, synthetic biology and bacteria art are just a few of the ideas presented in the Superfictions presentation at the FutureEverything conference. Koert van Mensvoort, artist, philosopher and scientist introduces his speculations for the future of food in his witty presentation, including knitted mince that would be woven into your desired cut of meat and his cook book *Bistro In Vitro* filled with recipes for your lab grown steaks. With the recent horsemeat revelations and the very real success of the first laboratory-grown hamburger, Van Mensvoort's surrealist visions of future food production are uncannily realistic. Working in the realms of the real, Alexandra Daisy Ginsberg's curatorial and artistic work looks at the actuality of synthetic biology and applies it to her version of the future: where artificial life forms heal and protect endangered habitats. The design of our biological futures presented through Van Mensvoort and Ginsberg seem like far off futures, but as James Bridle states in his presentation, “The future is shorthand for the present,” it is easy to see how technology and bio engineering may not be that far off.

![Bio Strike // Image: Gary Brown](image)

Castlefield Art Gallery’s New Art Space Federation House provides the setting for a participatory lab, where visitors can do some 3D printing with Golan Levin or try their hand at building their own BUQS – electronic life forms that are scattered about the NOMA district, chattering like digital crickets. Garnet Hertz, at his conference presentation on Critical Making, describes makerspaces as being “kid friendly” and the Maker Movement as “Folk Art for engineers”. Reflecting this sentiment, the City Fictions workshops provides a welcoming space for anyone, native or newbie. Hertz’s presents his project, also titled Critical Making, where he produces a series of zines that explore DIY culture and the crossroads of art, design, technology and commerce. The commerce of maker technologies is explored further in Golan Levin's presentation where he delves into open source practice and reverse engineering as an empowering device creating “local solutions for local problems.” Levin’s *Free Universal Construction Kit*, consists of 80 adaptable bricks that can be used to connect building toys such as Lego and Kinex, and can be downloaded and 3D printed, allowing everyone to reap the benefits of Levin's reverse engineering. The open source ecology of the Maker Movement presents a utopian environment, where the little guys quash the big corporations through creative production and participatory learning.
How data is used and managed is explored in *Endless War*; a collaboration between YoHa and Matthew Fuller, part of Data as Culture, curated by Shiri Shalmy. What at first appears to be simply a powerful video installation is actually a playback of the real time analysis of the WikiLeaks Afghan War Diary by a computer that is mic'd up to reveal its inner workings. Revealing the software systems and processes behind war, YoHa and Fuller's work brings the machines that manage the data of war to the forefront, and reminds us how far removed they are from the human and environmental impact of war.

*James Bridle: Watching the Watchers // image: Gary Brown*

Revealing the physicality of digital technologies in order to question the motives behind them is a principal concern for artist, writer and technologist James Bridle. Coining the term New Aesthetic, Bridle seeks to unravel the cultural problem with conceptualising digital experience through exploring what digital things looks like. Born out of visualising the invisible, Bridle's work for FutureEverything, *Watching the Watchers*, takes a series of images from his Dronestagram project. Documenting the sites of drone strikes, by Instagraming images taken from Google Maps satellite view, the work reveals an aspect of contemporary war that is relatively hidden from the mass media. This is a war that is waged not by humans but by autonomous aircrafts that both kill and collect vast amounts of data about 'the enemy'. The aerial viewpoint for *Watching the Watchers* highlights the privileged position that the drone operators, who are far removed from the damage that they create, and reminds us of the silent war that is being waged by the machines that are made not to be seen. The lack of documentation surrounding these attacks is a concern for Bridle, and through his projects he is able to filter activism into his art: his hope is that by making the drone strikes visible it will engender people to feel politically and emotionally motivated.

Some of the artworks in FutureEverything's City Fictions present a duality in their visions of the future: issues such as state surveillance, synthetic biology and maker technologies highlighted both concerns and promise for technology. However, a key message from the festival is the necessity to have an open source and collaborative society, wherein ideas, methods and tools are shared to build a future where people have the ability to manage and control their own digital, social, political and biological futures.

FutureEverything ran 27 Mar-1 Apr
How does technology help you to collaborate with peers around the world?

I'm a professor of computational design and emerging media arts at CMU, where I also direct a lab for “atypical research” at the intersection of art, science, technology and culture. In a nutshell, I write code to make art.

There are only a few thousand people who work in my field. We're distributed around the globe, and our projects require more technical expertise than any one person could have. So, we have to depend on each other – and on networked technologies to collaborate. Systems and communities that support open source software development figure critically into this. We work together, at a distance, on tools we can use in our trade.

I depend most on Github and Twitter. Github (an online repository and toolset for open source code) is the locus where we collaborate – the place where we build our shared dreams, line for line. On the flip side, Twitter is the agora: the public space where we share big ideas, find out what's new, and join in the “Great Conversation”.

Like any guild, we sometimes have to speak in private. We've got a secret mailing list for that, which we use for gossip, verbal jousting, and extraordinarily arcane technical voodoo.

Golan Levin is a new media artist who utilizes his technical background to blend software with art to create interactive and often participatory experiences. His piece DoubleTaker (Snout) combined artificial awareness with daily interactions. Levin displays his art in galleries around the world, but also works as an Assistant Professor of Electronic TimeBased Art at Carnegie Mellon University. Levin is the Director of the STUDIO for Creative Inquiry at Carnegie Mellon University where Nathan Martin,
Golan Levin - F.U.C.K. & QR kode za digitalne nomade

Aksioma – Zavod za sodobne umetnosti, Ljubljana, v sodelovanju z FH Joanneum, Gradec, predstavlja:
Novomedijska razstava
www.aksioma.org/fuck

Aksioma/Projektni prostor
Komenskega 18, Ljubljana
23. april – 9. maj 2014

Odprte: sreda, 23. april 2014, ob 20. uri

Večina umetniških del Golana Levina se osredotoča na oblikovanje sistemov za ustvarjanje, manipulacijo in izpeljavo istočasnega podobe in zvoka kot del splošne njega raziskovanja formalnih jezikov interaktivnosti in neverbalne komunikacije v kibernetskih sistemih. Projekta na tej razstavi – v produkciji zavoda Aksioma v sodelovanju s FH Joanneum iz Gradca – pa se osele drugačnega nabora vprašanj, ki so tesneje povezana z hekersko etiko in z razširitvijo filozofije odprte kode na ustvarjanje sredstev za družbeno ustvarjalnost in izražanje. Oba projekta sta nastala za F.A.T. Lab, organizacijo, ki se posveča bogatnjenu področju javnosti s pomočjo raziskovanja in razvijanja kreativnih tehnologij in medijev.

Sodobni proizvajalci skoraj ne čutijo potrebe, da bi svoje izdelke naredili kompatiblne z izdelki kogar koli drugega. Kljub očitnim prednostim, ki bi jih od tega imeli uporabniki po vsem svetu, je izpostavljen vzajemne obratovalnosti (1) različnih blagovnih znamk lahko malodane nemogoča zaradi zapletenih omejitev patentov, pravic oblikovalcev in blagovnih znamk, ki so vpleteni v to. F.U.C.K./Free Universal Construction Kit (Brezplačni univerzalni konstrukcijski príbor), ki je nastal v sodelovanju s Shawn Sims (Sy-Lab), ponuja rešitev, saj omogoča prožno post fact princip takšnih vzajemne obratovalnosti in konstrukcijskih igrate. F.U.C.K. je zbirka skoraj osemdesetih prilagojenih kock (adapterjev), ki omogočajo popolno vzajemno obratovalnost desetih priljubljenih otroških konstrukcijskih igrač (igrač: Lego®, Duplo®, Fischertechnik®, Gears! Gears! Gears!, K’Nex®, Klinkles®, Bristle Blocks®, Lincoln Logs®, Tinkertoys®, Zome®, ZomeTool® in Zoob®).


F.U.C.K. demonstrira model vzvratnega inženirinjata kot civilne dejavnosti: to je ustvarjen proces, v katerem lahko vsako razvije potrebne elemente za preseganje omejitev, ki jih obsegajo množično proizvedeni komercialni izdelki. Projekt tudi vabi ljudi k refleksiji o našem odnosu do materialne množične kulture in o hitro razvijajočih se možnostih prilagajanja te kulture naši domišljii.

F.U.C.K. kaže družbeni in kulturni potencial tridimensionalnega modeliranja in tiskanja, projekt QR Codes for Digital Nomads (QR kode za digitalne nomade), ki je nastal v sodelovanju z Aso Fosterjem III. pa prikazuje, kaj bi se lahko zgodoilo, če bi se združili odprtokodna programska oprema, lasersko rezanje, hitroodzivne kode in grafifi. Hitroodzivne kode oziroma kode QR (quick response) so oblika dvodimenzionalnih črtnih kod, ki so splošno razširjene kot sredstvo za posredovanje naslovov URL in drugih kratkih besedil s pomočjo pametnih telefonov s kamero. QR_STENCILER (QR_SZABLONAR) je brezplačna odprtokodna in popolnoma avtomatizirana programska oprema, ki nalogi QR kode in jih spremeni v vektorske šablonske vzorce, ki so primerni za lasersko rezanje. S pomočjo te programske opreme sta avtorja izdelala QR_HOBO_CODES (QR_KODE_SZELONSKIH_DELAVEC), zbirko stolih šablona, ki jih je v urbanih prostorih mogoče uporabiti za to, da ljudi posvarimo pred nevarnostjo ali da jih opozorimo na nekaj dobrega. Te šablone je mogoče razumeti kot prirk sistem oznak, ki v urbanih prostorih usmerja, informira in v svojo digitalne nomade [2] in ki so predstavljene kot sodobni ekvivalenti s kredo izrisanih vznakov
sezonskih delavcev, ki so jih v devetnajstem stoletju razvili potepuh i potujoči delavci [3], da bi se lažje soočili s stiskami nomadskega življenja. In rez zbirka šablona, predstavljenih v tem projektu, vsebuje kar nekaj klasičnih znakov sezonskih delavcev v QR formatu (»tu zavij desno«, »nevaren pes«, »delo za hriano«), pa tudi nekaj novih, ki so specifični za sodobne razmere (»brežično omrežje brez varnostne zaščite«, »skrite kamere«, »vegani, pazite!«). Celotno zbirko šablona QR_HOBO_CODES je mogoče prenesti z interneta, s pomočjo programa QR_STENCILER pa si lahko vsak ustvari šablono s svojim sporocilom.

To vnaprej določeno zbirko doma izdelanih »informacijskih grafitov«, ki so namenjeni občanom za označevanje in posredovanje informacij na lico mesta, bodo okrepile in povečale številne druge QR kode, ki jih bo lahko samostojno izdelalo lokalno občinstvo, obiskovalci galerije in udeleženci delavnice, ki bo namenjena boljšemu razumevanju logike QR kod in konvencionalne sodobre »digitalnomadsko« semiotike. Delavnica bo polegala v Projektnem prostoru Aksioma v soboto, 26. aprila ob 10. uri in je namenjena otrokom od 8. leta naprej v spremstvu staršev. Zaželjeno je, da imajo udeleženci s seboj pametne telefone in prenosne računalnike.

Top 10 most-funded Chicago design & tech Kickstarter campaigns of 2013

Startups are more frequently turning to Kickstarter as a means to obtain funds to get up and running. Chicago startups are no stranger to this fundraising strategy. The top ten Chicago-based startups in tech and design alone raised almost $3 million in 2013. From the world’s thinnest watch to an iPhone expansion device, these products were the most successfully-funded Kickstarter campaigns of last year.
In an essay on the work of Charles and Ray Eames, the design critic Ralph Caplan fixes upon a quote from Charles: “The details are not the details. They make the product. The connections, the connections, the connections.” “Connections between what?” Caplan then asks rhetorically, answering, “Between such disparate materials as wood and steel, between such seemingly alien disciplines as physics and painting, between clowns and mathematical concepts, between people—architects and mathematicians and poets and philosophers and corporate executives.”

If that’s the task of the designer, imagine the task of the design museum that must explain all the connections—a design problem itself. How to bring together building models and slide rules and folios and quill pens and executive desks from over the centuries, explain their origins, tell the stories of their use, and make a visually dramatic display, without being boring or pandering? More prosaically, how do you make people pay to see forks and phones, when we have forks at home and phones in our pockets? That’s been the struggle for the Cooper Hewitt, Smithsonian Design Museum for many years. In 2011, the museum took the major step of closing its heavy front doors for what it was calling a transformation. Today, they open to the public again.

You may have heard that the new Cooper Hewitt has touch-screen tables, an interactive Immersion Room, and, arriving in early 2015, a special pen that will allow museumgoers to virtually collect items from their visit. But what it also has are lots of fascinating, three-dimensional objects. What the new Cooper Hewitt is trying to do is to love things and the Internet of things at the same time.
The first thing you may notice: they fixed the logo. What once was Cooper-Hewitt, National Design Museum, Smithsonian Institution is Cooper Hewitt, no hyphen, in a bold all-caps, sans-serif font designed by Chester Jenkins, of Village; it’s available for download, should you need to revivify an institution. The decision by the graphic-design team, led by Pentagram’s Eddie Opara, to keep the founders’ names rather than blowing up “design” or “Smithsonian” feels like a new peace with the museum’s roots, its historical collections, and its glorious mansion.

At a time when so many museums seem intent on new spaces for new design and new art (like the Whitney, Upper East Side deserter), it’s a relief that the Cooper Hewitt finally spent the time and the money to make their 1902 Carnegie Mansion sing. Rather than being a straightjacket, the mansion’s ornate rooms and halls now form a rich and idiosyncratic frame for design objects of all ages. Gluckman Mayner and Beyer Blinder Belle worked together on restoring, updating, and adding to the architecture. The cases, designed by Diller Scofidio + Renfro, are crisp and clean, designed for sightlines and visual connections across the grand salons. The firm, as it did at Lincoln Center, has also jazzed up the outside: a new typographic canopy on Ninetieth Street leeeceans toward Fifth Avenue, and there’s L.E.D. lighting on the granite piers out front. Another example of new and old meeting in an elegant place is Boym Partners’ rendering of the mansion as emoticon: architecture transformed into “#”s, “+”s, and “[]”s, and applied to mugs, playing cards, and notebooks.

If you’re already tired of designers’ names, well, that’s part of the lesson here. Design is not made by one pair of hands, and the team effort required to restore, redesign, fit out, and rebrand a design museum shouldn’t be lumped under the name of one famous, usually male person. Each element that you interact with (and there is a lot of interaction) was created by a different set of skilled people, before you even arrive at the objects on display. It’s only fairly recently that museums have credited Charles Eames and his wife (not brother), Ray, with much of their work, as well as investigated the other talented hands in the Eames office.

The renovated museum now has four floors of galleries, and sixty per cent more exhibition space. The new exhibitions on the first floor ease you into it. “Beautiful
Users,” curated by Ellen Lupton, concerns user-centric design and data-gathering. It features many familiar and everyday products, tweaked to make them easier, more flexible, and “smarter.” These include Sabi’s pillboxes, the 3D-printable Free Universal Construction Kit (because why can’t Tinkertoy, Lego, and Zoob just get along?), and the 2011 Nest thermostat, appropriately displayed next to its design grandfather, Henry Dreyfuss’s 1953 Honeywell Round. Much of the coverage of the Nest focussed on the designer Tony Fadell’s short-term callback to his work on the original iPod wheel; we need design museums to point out that there were round thermostats before Fadell was born.

Next door, there’s “Maira Kalman Selects,” the artist’s meditation on time that’s told through a selection of objects, including Abraham Lincoln’s pocket watch, children’s books, and fragile glasses. On one podium, Kalman quotes Charles Darwin: “One lives only to make blunders.” Then, around the corner, a Process Lab—a chance to D.I.Y. Stubby pencils and paper, and the command to “Try it!”: mash up two objects from your purse or backpack, or add gels, twist ties, and wire to customize a gooseneck lamp. Interactive museum-going isn’t just for kids.

If you feel like you already know something about design, though, I’d recommend heading straight up the stairs to the second floor, where four exhibits highlight different aspects of the museum’s permanent collection. I understand that the museum is reintroducing itself as an accessible, hands-on sort of place, but I missed the Cooper Hewitt’s equivalent of MoMA’s helicopter: something big and beautiful and immediate that you are not expecting to see in a museum. Maybe DS+R’s swoopy visitor-services desk is supposed to be that, but it read as Zaha lite—and, with white Sayl chairs behind it, a little like the “Hunger Games” control room.

The real futuristic moment is upstairs, in the Immersion Room: a touch-screen table, developed by Local Projects and Ideum, catercorner to the door, facing a pair of blank walls. A river of patterned circles wends its way across the middle of the table. Tap a circle and the pattern pops onto those walls, immersing you in what is now a period room decorated with one of two hundred wallpapers from the collection. Delft tiles or faux concrete, mossy lace or trompe l’oeil picture frames—the variety, complexity, and scene-setting power of wallpaper is on display. There’s something delightful in using
technology to animate the fustiest of design-museum categories; it’s not only a gimmick but an updated version of flipping through swatch books. (Now they just need to get the color corrected.) Let’s not confuse looking with acting like a designer, though. To get a taste of that, play with another feature of the tables that lets you draw a pattern and see it repeated on the walls, which seems closer in spirit, and in clunky results, to the pencil-and-paper sketching offered downstairs.

More traditional, but just as spectacular, is the long, south-facing second-floor gallery that is split by a stair-stepped white display case fitted out with three hundred and fifty items from the museum’s permanent collection. These are arranged by loose, suggestive themes such as “Color” and “Line,” juxtaposing industrial design, fashion, graphics, and tableware from many decades. It is hard to resist the pull of the red area, with Ettore Sottsass’s Valentine typewriter, a noodle chair by the Campana Brothers, and a classic bandana. On the wall opposite, illustrating “Line,” the curators combine one of Joris Laarman’s baroque 2007 radiators, Milton Glaser’s 1966 Bob Dylan poster, and a waveform cut-paper stencil from turn-of-the-century Japan. That’s creative curation, one that generates an infinite string of your own sinuous visual references.

If your mental image search is lacking, that’s where more of those iPhone-like tables (there are seven total) could help. Draw a curve on the surface and the table presents something from the collection that contains the same shape, whether an arabesque in a textile or the outer bulge of a vase. You can also watch the river of circular vignettes running down the middle of the table, and tap on something you recognize or would like to see more of. Up it pops, with credits, tags, and a row of items deemed algorithmically similar. Both of these functions were enriching, and I could how they could be used to gain deep knowledge on the spot, after viewing the real things before you.

The critic Justin Davidson already sounded the alarm about all that D.I.Y. tech undermining the curators’ thinking. The tables are indeed like a bigger, better version of your ever-distracting phone. If you spend your time at the Cooper Hewitt parked at one, you might as well be at home surfing the Internet. But there is a reason why the tables don’t have chairs and don’t make noise: you can ignore them, and long-term loitering would be pretty uncomfortable. The combination, in a smaller gallery, of a big table in front of a whole wall hung with the founding Hewitt sisters’ collections
seemed very smart. It made an easy connection between the plenty in three dimensions and in the digital sphere. The one place I found a table obtrusive was in the second-floor hallway, where prime real estate could have been used for a few more I.R.L. objects—including a historic table.

It’s a shame, then, to arrive on the third floor and feel a loss of energy. Here’s where the museum finally got the plain, flexible, six-thousand-square-foot gallery it has been wanting for years. This gallery has been installed with the truly topical exhibition “Tools: Extending Our Reach,” curated by Cara McCarty and Matilda McQuaid, with tools, patents, code, and tunnel borers from all branches of the Smithsonian. As our handheld electronics are called upon to be more and more multi-functional, it’s important to reconsider how we got from hand axes to silvery solids, and to recognize all the ways in which design augments our abilities. There is a homely early-twentieth-century child’s tool chest, from the National Museum of American History, that provides an inadvertent lesson in the continuum of gender stereotyping (“Bliss … for Boys”), and there are out-of-this-world displays like the Solar Wall, from the Harvard-Smithsonian Center for Astrophysics. (I chatted with the scientist who designed the software that lets us look at the sun.) Downstairs, it felt as if the elements were speaking to one another, and they came together in vivid tableaux. Up on the third floor, Thinc, the exhibition designers for “Tools,” spaced things out and made it harder to make temporal or cross-disciplinary leaps. I loved the giant slide rule—a classroom model—hanging from the ceiling, but what came next? What came before? My mind strayed to Maira Kalman’s selections, and a numbered sampler upon which a nineteenth-century girl had practiced her stitches.

Which is another way of saying: I made a connection. A museum reopening after a three-year hiatus has to flood the zone: six thousand here, three hundred and fifty there, two hundred there. Hacking and 3D-printing and interactive. But I do think, once the excitement dies down, that there are many things to discover on the walls and in the cases, plus a glorious mansion (with a perfect new downtown-minimal staircase) to explore, classes to take, and, indeed, tables to fondle. If a Luddite and a technologist were to fall in love, the Cooper Hewitt would be an excellent place to do it—and the museum shop could provide the engagement gift.

*Correction: A previous version of this post misattributed a quote.
The game, as you’d expect, get progressively more difficult, demanding ever more complex gestures to navigate them. To ensure that each one could in fact be solved, the brothers essentially designed them in reverse. First they looked around for an interesting shape—say, a violin clef—and then broke it down into component parts, like a spiral, a ribbon or a wave. They’d then draw up patterns of dots that lined up with those fragments, and string those together to arrive at the game's diabolical later stages. Throughout the process, Denis says, he was reading Kandinsky’s “Point and Line to Plane,” an ingredient that's evident in the game's expressionist vibe.

Though this process guaranteed at least one solution for each level, it left open the possibility for countless others, and one of the greatest joys of Blek is experimenting with your approach. There are no lives or penalties; you just draw until you land on a gesture that works. Inevitably, it’s a process of refinement. The later levels demand patient iteration as you try to line things up just right.

Still, each new level represents a blank canvas; a chance to think creatively about the puzzle in front of you. You can approach the problem like an engineer, devising a shape that gets the job done with perfect precision, or you can take a more artistic approach, doodling looping phrases that might unexpectedly snag the dots you need it to.

"It is really interesting to see how different and 'personal' the gestures are that each player makes," Denis says. "I think I can recognize any of my friends playing Blek by just looking at a solution he or she has found for a certain level."

For the brothers, this first foray into game design has been a success. They’ve moved enough downloads to finance further development, with a version for iPhone due next week and one for Android on the horizon. Mostly, though, the enthusiasm with which Blek’s been received has confirmed a suspicion the developer harbored throughout the process: that there are all manner of new mobile games out there left to be discovered.

“We strongly believe that touchscreens offer many unexplored depths, and we love to explore them,” Denis says. “We’ll keep this aim in our next game too.”
Twist and shout: The making of Blek

June 25th, 2014 - 12:40pm
By Kirk Mckeand, Contributing Writer

Blek is a game about expression. Although a puzzle at heart, the game requires the player to trace a line on the touchscreen to take out set targets and avoid obstacles in their path. The line itself then comes to life, looping and twisting around the screen, creating the kind of freeform set up where no two solutions are the same.

Indeed, it's this adaptable, personal approach that seems to have made Blek appealing to a growing mobile audience.

Coming from humble beginnings, Blek currently sits at over one million downloads - not bad for a premium game developed over six months by two brothers.

Getting creative

Denis Mikan and his brother, Davor, both have degrees in computer programming, although they both focused on different things.

Davor - the creative force behind Blek, who developed the game singlehandedly in Unity - is mostly interested in sound, creating software algorithms for sound transformation and composition. His music is published by the media-label Crónica.

On the other side of the team, programmer Denis has both written and published many short stories, as well as a German novel called "Emil." It's fair to say creativity isn't in short supply in the Mikan family.

Fittingly, then, that the initial concept behind Blek was a desire to take an old formula and spice it up for the modern mobile era. The brothers began brainstorming just how they could translate Nokia's classic Snake to touchscreen devices.

"At the same time, my brother was reading a book by the Japanese poet Matsuo Bashō, which contains prints of ink drawings and calligraphy," says Denis Mikan. "This was his main inspiration, as one day he came up with the concept of a line representing an idea that springs to life after it has been drawn.

"Also we've been influenced by the art of several game creators generally - Patrick Smith, Adam Saltzman, Zach Gage, Jenova Chen, to name just a few - but we don't feel that other games made direct impact on the design of Blek."

The Mikan brothers aren't afraid to talk about other games they like, or what it is that makes them exceptional, under that caveat that none of them directly influenced Blek. The game is as unique as each player's solution to its many puzzles.

"I believe [other games are] all taking part on our journey, but I can't really point to a single one and say something like, 'That's how Windowsill influenced one or the other step in the process,'" continues Denis. "In general, all ideas of videogames as toys, and games as meaningful experiences attract our attention."

Brothers

Blek's fresh approach is impressive enough, but even more so when you consider the time scale for development and the fact it was the brothers' first game together. The pair even built the game's website and produced its trailer.
"We had never worked together before and we wanted to check if we could do something worthwhile, having fun while making it," continues Denis. 

"My brother used to make little Flash games for a living. Then he saw some potential in producing digital toys, but the companies he worked for didn't want to take risks. Once he told me about it, we started talking about the idea - and one year later, Bilek was ready for the App Store submission."

From the initial draft of the idea, the game came alive and, like the game itself, started to form its own shape. The brothers claim, however, Blek never underwent any radical changes during development, always staying true to the pair's initial goals.

"Soon after we started with the development process, we had a good idea of where we wanted to go with the game," recalls Denis. "What took a lot of iterations - and a few months of work - was the level design.

"Our friends helped us with advice and they did a lot of testing, so we were able to make and finish the level design which was the most important part; and also the hardest one."

**Growing pains**

The main challenge in designing the levels was in keeping the player engaged over 60 of them, by introducing new twists on the formula each time: some levels require big, looping coils; some require a short, scatty slalom to avoid the minefield of obstacles - represented by black circles - placed within them.

"We tried to encourage players to play with the mechanics, to explore the system," says Denis. "Ultimately, with the design, we wanted to imply that there isn't a single approach which will 'beat the game', on the contrary, there are many of them and a good meta strategy could be not to rely on previously elaborated methods but to often change the strategy by altering the way you look at the game."

Indeed, sometimes a drawn shape will snake across the screen and bounce back in ways the player doesn't expect. It isn't just shape, Blek takes into account, either - speed and angle are also accounted for.

First, the duo asked themselves how to make the speed of the gesture matter. The solution was introducing a new type of target, which rotates and detonates upon impact, firing off little shrapnel balls. This made timing crucial for the player. Portals were also added to mix things up.

**Signature**

"We wanted to reward playfulness and experimentation," adds Denis.

There were some experimental things left screwed up in the bin, however.

"When you draw a closed shape in Blek, it becomes a static loop - the gesture does not change its position with every repetition and therefore you can't solve a level with this kind of line.

"Initially, we thought to let the game respond in a different way when the player draws things like a triangle, an endless sign or a heart. We had several ideas, but only the circle found its way into the game. The other ideas fell out mainly because they didn't seem justifiable from the programming-time or game-experience-benefit perspective.

"But we are not sure if this was the right decision. Imagine the experience of this girl [see video below] if the game had responded in some way after she drew a heart."
The controls, which capture speed, hesitancy and shape were relatively simple to program for Davor Mikan.

"Gesture looping is pretty simple to program and it’s something Davor often uses in order to transform sound in real time," says Denis.

"Algorithms like these are part of his vocabulary and they have been around for quite a while now. To my knowledge, Golan Levin was the first one who came up with gesture-looping – long time before the iPhone even existed.

Loop de loop

You can see - or, more aptly, hear - Davor’s sound design chops in Blek, too. There’s an otherworldly feel to the sound design, especially in the human-like groan that signals failure when the player hits a black circle. The sounds used, however, are far from alien.

"We used sine waves and noise - the most simple and the most complex sound on earth," Denis concludes.

"And the human voice when the line hits the black dot are excerpts from ‘Yamaguchi Mouthpiece 1,’ by the composer and vocalist Erin Gee – a composition professor at the University of Illinois."

With the Android version just finished, and a major update planned for the Autumn, the brothers have a well-deserved break planned. After that, they plan to start thinking about their next project. Hopefully that, too, springs to life and twists toward success similarly to Blek.

Blek is available from the Apple App Store, priced $2.99 [iTunes link]

TAGS: Indies #MakingOf
Sounds of nature get a 'remix' for Phipps project

BOB KARLOVITS (MAILTO:TRIBCITY@TRIBWEB.COM?SUBJECT=RE: SOUNDS OF NATURE GET A 'REMIX' FOR PHIPPS PROJECT STORY ON TRIBLIVE.COM) | Saturday, June 21, 2014, 5:51 p.m.

Sound artist and composer Abby Aresty and Executive Director Richard Piacentini at the Center for Sustainable Landscapes at Phipps Conservatory and Botanical Gardens Friday, June 6, 2014. Aresty has created a sound art installation for the center that is composed of natural sounds recorded such as bees, water flowing, rain on different surfaces, and the wind, that is then put together and played throughout the building with surface transducers.

Ludwig van Beethoven wrote his violin concerto for colleague Franz Clement.

Duke Ellington wrote alto saxophone parts for Johnny Hodges.
Abby Aresty is writing a work to be played by a building.

Aresty calls herself a “sound composer” and is constructing a piece of music built on the sounds of nature and everyday life in Western Pennsylvania. It is being installed at the Center for Sustainable Landscapes at the Phipps Conservatory & Botanical Gardens in Oakland as “a way of bringing nature into the building and to the staff,” says executive director Richard V. Piacentini. It will officially debut at the end of July.

They are the sounds of such things as water hitting metal, birds, wind in trees, frogs — sort of the horns and clarinets of nature.

While her work at assembling the sounds is noteworthy, so will be the performance of the piece. She says the music will be structured in an ever-changing fashion by a computer program that will measure heat, humidity, wind, precipitation and other features to determine what is appropriate.

The sounds will be produced by 12 speakers in the atrium of the LEED Platinum-certified building. But, she says, it also will be played by the building itself when some of the glass will be used as transducers.

Golan Levin from Carnegie Mellon University says Aresty is creating a “sound collage” that is “much more than anyone would believe.” He's an assistant professor of electronic art and director of the Frank-Ratchye Studio for Creative Inquiry, where Aresty has a residency during her time with Phipps.

Levin calls Aresty's work “generative music” because of the way it will be generated by the elements read by the computer program.

“Instead of fixed pieces, the computer with make it sound different all the time,” he says.
He says seasonal elements of the computer program will make sure the sounds in the atrium are not inappropriate. For that reason he calls it a “year-long piece of music.”

Aresty has gathered and is gathering sounds from all over the area — on the rooftop garden of the center, riverfront trails, neighborhoods. She says the place doesn't matter “as much as the time of day.”

Piacentini appreciates that comment. He invited her to his home in Highland Park, where a collection of starlings make great statements at the beginning and end of each day.

His appreciation of that noise — and the lack of others — led to Aresty coming to Phipps. He says he was attending a Living Futures Conference in Seattle in 2013 when he began investigating artists who might create a soundscape for inside the center.

That search was prompted by his effort to keep the center an actively engaging building for staff and visitors. Another aspect was an effort to solve an issue created by the solidity of the building.

“I walked through the building once in February,” he says, “and it was deadly quiet. All the windows are triple-paned, and it was eerie.”

He calls that blockade of nature “un-Phipps-like” and decided he wanted to bring the sound of the outside inside.

In Seattle, he was led to Aresty, who had done a soundscape called “The Music of Trees” for the Washington Park Arboretum. For it, she recorded sounds at various areas and amplified them to emphasize the listener's aural experience.

The attempt appears to have worked, says Sarah Reichard, director of the arboretum, which is run by the city and the University of Washington.
“We kept getting comments from people on how different it was to actually hear things,” she says.

Her soundscape in Seattle was on display for a month. Here, “Of Earth and Sun” will be an indefinite part of the center. At the end of July, it will join an art display in the building called the Beta Project, which focuses on works that represent the instinctive bond between humans and other forms of life.

Aresty has her bachelor's degree in music composition from the Eastman School of Music in Rochester, N.Y., her master's from the University of Michigan and her doctorate from Washington. Her next project will be a teaching-research project in Iowa, where she will spend a couple years.

She says her studies always have been centered on using natural sounds, work that goes back to France's Pierre Schaeffer (1910-95), who also dabbled in electronics.

Aresty says she started adding electronics in her studies at Washington. CMU's Levin says that mixture of composition and technology was one the elements that made the pairing between the university and the conservatory seem attractive. The university could provide the electronics she needed while Phipps could supply the natural side.

He calls it a “great collaboration” in the way it gives the creative inquiry program an area of study and also helps Phipps.

“She is creating a piece of sonic architecture where sound co-exists with the building,” he says.

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Chrome Plug-In Offers A Visual Map Of Your Internet Activity [Video]

Iconic History displays users’ browser history as a stack of Favicons.

LEAH GONZALEZ 21 MARCH 2014

Iconic History (http://shan-huang.com/browserdatavis/) is a Chrome extension that visualizes the user’s browser history as a massive series of favicons.

A favicon is that tiny icon associated with a website. It usually shows up on the browser address bar or next to the name of the website in a list. Iconic History displays the favicons of all the sites the user has visited in the past four months in one page. The favicons are sorted based on when the user accessed them.

Hovering over a favicon displays the name of the site and the time it was accessed. Clicking on it takes the user to the website itself. The stack of favicons can also be filtered based on time periods.

The grid of icons helps the user see which sites they visit most often and when, and gives them an insight into what interests them online. It also allows them to see patterns in their browsing history and how they relate to specific events in their lives.

The Chrome extension was developed by Carnegie Mellon University student Shan Huang for her Interactive Art and Computational Design course with Golan Levin.

Iconic History is available for download in the Chrome Web Store (https://chrome.google.com/webstore/detail/iconic-history/hfacpfhpgpafiabmngbiikfgeiook).

Watch a demo of the program below.

Iconic History (http://shan-huang.com/browserdatavis/)

Source: Gizmodo (http://gizmodo.com/see-your-entire-browser-history-in-a-somewhat-terrifyi-1547823926)