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REVUE – Magazine for the Next Society

Das Magazin für eine Gesellschaft im Umbruch
Stories, insights and tools for a society in transition

REVUE Magazine for the Next Society HEFT 15 Rohstoffe

REVUE

Magazine for the Next Society

HEFT 15 FRÜHJAHR/SOMMER 2014

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Markus Keibel, »NIKOLAUS KOPERNIKUS, ÜBER DIE UMSCHWÜNGE DER HIMMLISCHEN KREISE«, Asche, Pigment und Acryl auf Bütenpapier, 70 cm x 100 cm, 2012

Editorial

Erst war es das Öl, nun sind es die Daten. Der Zugang zu ihnen und die Algorithmen ihrer Zähmung sind heute die Grundlage für Innovation und Reichtum. Aber sie machen uns auch zu Gefangenen statistischer Korrelationen. Wissen ist Macht – das nutzen nicht nur Google, Facebook und die NSA.

In unserem Schwerpunkt zum »Rohstoff Daten« (ab S. 38) baten wir WikiLeaks-Botschafter Joseph Farrell und die Regisseurin Angela Richter zum Gespräch über den Fall Snowden, die Methoden von WikiLeaks und den Zusammenhang von Daten und Wissen. Beides ist symbiotisch miteinander verknüpft, so Farrell.

Gerade deswegen sind nicht nur Daten, sondern das, was nicht kopiert werden kann und tendenziell unendlich ist – Liebe, Vertrauen, Mut, Authentizität –, die Rohstoffe der Zukunft, so Kevin Kelly vom Magazin *Wired* und der Futurologe Matthias Horx. Aber Big Data ist nicht nur Big Business. Die Open-Data-Bewegung zeigt, dass es auch anders geht (S. 54 & S. 100).

Doch Datenschutz und Transparenz sind nur ein Aspekt der Diskussion, die geführt werden muss. Der andere ist die Frage der analogen Zugriffsrechte. Die Big-Data-Player versuchen, nicht nur die virtuelle Welt, sondern auch unsere Realität zu modellieren. Von vernetzten Haushaltsgeräten bis hin zu fahrerlosen Autos: Vor unseren Augen entstehen ungefragt Schürfrechte an unserem Leben, die über die intelligente Steuerung unserer Aufmerksamkeit hinausgehen. Das Internet der Dinge verspricht die Gewinne, zu denen Social Media und die raffinierte Platzierung von Anzeigen nur das Vorspiel waren.

Die Reportagen dieser Ausgabe bringen Licht in den Zusammenhang von analogen und digitalen Rohstoffen und zeigen auch die schmutzigen Seiten auf: Von Nickelabbau (S. 22) über Landgrabbing (S. 94) und Wasserverteilungskonflikte (S. 72) bis hin zu Seltenen Erden (S. 30).

Und die Aspekte dieser gegenwärtigen wie zukünftigen Rohstoffe werden auch in der Kunst thematisiert. Die Fotos der Maidan-Proteste von Yevgenia Belorusets (S. 10), die Arbeiten von Robert Ochshorn (S. 50), der Foto-Essay von Edward Burtinsky und die Werke unseres Featured Artist Markus Keibel (S. 84 & S. 58) zeigen: Uns verändern die Dinge, die wir bislang zu verändern glaubten.

Wir begrüßen Sie herzlich in der Frühjahrsausgabe der REVUE!

Das Redaktionsteam

First it was oil, now it is data. Today data and the algorithms that domesticate them are the basis for innovation and wealth. But they also make us prisoners of statistical correlations. Knowledge is power – and it is not only Google, Facebook and the NSA that know it.

We asked WikiLeaks member Joseph Farrell and theatre director Angela Richter to talk about the Snowden case, the methods of WikiLeaks and the relationship between data and knowledge in our focus on data as a resource (from p. 38). Data and knowledge are linked symbiotically, says Farrell. And this is why it is not just knowledge, but infinite, irreproducible qualities like trust, courage and authenticity that are the raw materials of the future, according to Kevin Kelly of *Wired* Magazine and the futurologist Matthias Horx (p. 18).

But Big Data is not just big business. The open data movement shows us that there is another way (p. 54 & p. 100). Data protection and transparency are just one aspect of a wider discussion; another is the question of analogue access rights. Big data players are trying to shape not just the virtual world, but our reality too. From networked household appliances to driverless cars, without realising it we are giving up the right for others to look around in our own lives. The Internet of Things offers insights of which online advertising and social media analysts could not even dream.

Our reports show the dirty side of the relationship between analogue and digital resources: rare earth materials (p. 30), landgrabbing (p. 94), nickel mining (p. 22) and water distribution conflicts (p. 72).

Through the work of artists, we broach the issue of raw materials, both now and in the future. Yevgenia Belorusets's photos of the Maidan protests in Ukraine (p. 10) and the work of Robert Ochshorn (p. 50), Edward Burtinsky and our featured artist Markus Keibel (p. 84 & p. 58) show that the things we thought that we could change are changing us instead.

We warmly welcome you to the Spring Edition of the REVUE!

The Editorial Team



Unsichtbarer Maidan

Eine Fotoerzählung von Yevgenia Belorusets

»Ich stehe auf dem Korridor des Oktoberpalasts. In vorrevolutionären Zeiten ein Institut für höhere Töchter, in den Dreißigern ein Ort massenhafter Erschießungen, nach den Sechzigern ein Kulturzentrum. Am 20. Februar 2014 werden auf der Straße vor dem Palast mehr als 50 Menschen erschossen.«

In stillen Bildern hielt die Fotografin Yevgenia Belorusets das fest, was nicht in der Tagesberichterstattung zu sehen war – die Pause zwischen den Protestzügen, das Ausharren, die Menschen. Längst hat sich die Lage in der Ukraine gedreht – ihre Fotos sind Dokumentationen des Anfangs.



Kampf um die schwarze Erde

Eine Reportage von Fabian Weiss

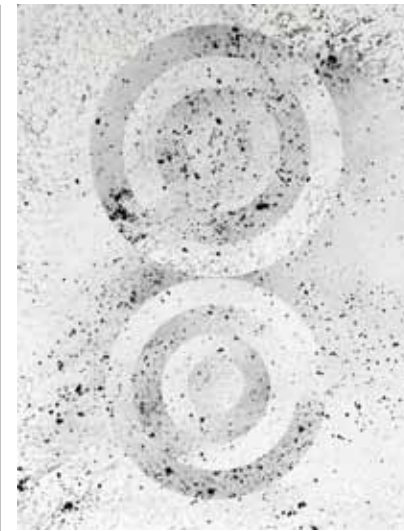
Bereits in den sechziger Jahren wurden die Nickelvorkommen um die russische Kleinstadt Nowochopjorsk entdeckt. Doch die Bevölkerung will die Mine um jeden Preis verhindern. Ein Präzedenzfall. Von 2011 bis 2014 begleitete der Journalist Fabian Weiss den Aktivistin Konstantin Rubakhin bei seinem Kampf um die schwarze Erde.



What do we talk about, when we talk about truth?

»It's so easy. You're reading and it's like watching a film. You become a passive recipient. If a person makes a good argument, facts don't matter.«

Angela Richter, German theatre-director and author of *Assassinate Assange* in conversation with Joseph Farrell, member of WikiLeaks, about the methods of WikiLeaks, Snowden, editing and the manipulation of the people.



Artist Feature

Markus Keibel

A difference which makes a difference

by Michael Short

Markus Keibel transforms material and immaterial resources into works which direct us towards the availability of new relationships with our society.

By establishing a context through the interaction with the viewer, his art's energy finds its purpose in a suspended state of wonder. — Resources become information and information becomes a resource.



Foto-Essay

Exploring the Residual Landscape

Edward Burtynsky

Nature transformed through industry is a predominant theme in Edward Burtynsky's work. He combines the raw elements of mining, quarrying, manufacturing and recycling into highly expressive visions that find beauty and humanity in the most unlikely of places.



Die Organisation der Selbstorganisation

Loring Sittler, Leiter des Generali Zukunftsfonds, im Managertalk mit Dirk Baecker und Bernhard Krusche

»Alle sanften Revolutionen beruhen auf der Selbstorganisationsfähigkeit der Gesellschaft.«

Demographischer Wandel, Altersarmut, Bürgermoral, Unternehmerverantwortung – soziale Fragen werden in Zukunft immer bedeutender werden. Wie gehen wir als Zivilgesellschaft damit um? Welche Netzwerke brauchen wir, wo kann die Politik uns helfen?

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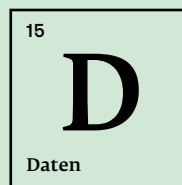
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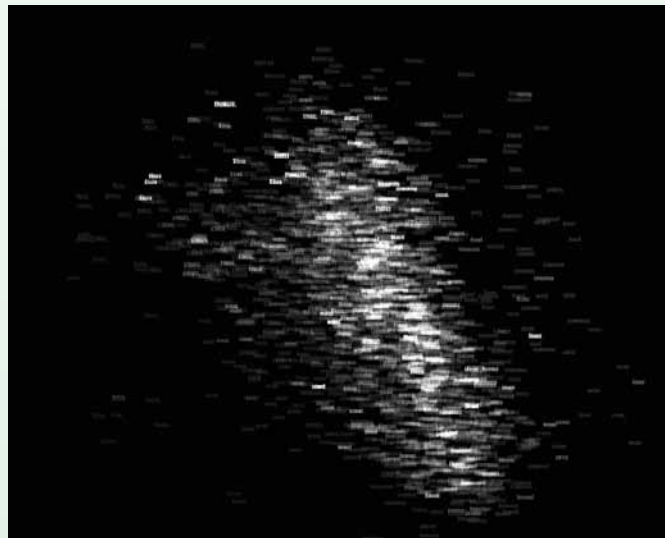
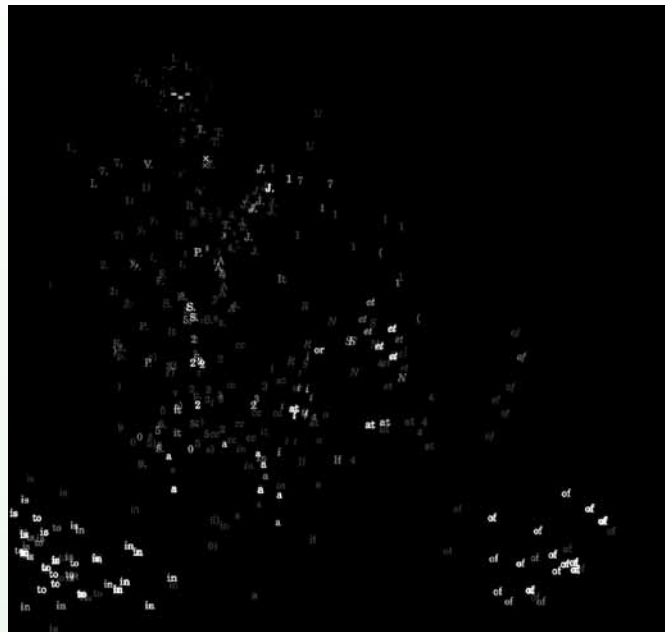
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PDF TO COGNITION (2014)

WORD-SHAPE REPRESENTATION OF TEXT, TRAINED ON THE NEUROSCIENCE LITERATURE. BY TAKING PDF JOURNAL ARTICLES AND SPLITTING THEM INTO WORDS—WITHOUT BREAKING THEM DOWN INTO LETTERS—R. OCHSHORN SAVED EACH WORD AS AN IMAGE, AND THEN BUILT UP A BASIS SET OF WORD-SHAPES. THE DISTANCE BETWEEN WORDS IS ENTIRELY A FUNCTION OF THEIR VISUAL SIMILARITY.

DREAMS ABOUT DATA

A talk with Robert Ochshorn, computer scientist & artist, about art and aesthetics, raw and cooked data and an audience that may not yet exist.

Interview by Clara Herrmann
Fotos: Robert Ochshorn

You obtained a degree in computer science with a specialization in Fine Art. Your background includes media and journalism, electrical engineering, sonic/visual art, and activism. Are you an artist? Are you a scientist? Or are you an artist-scientist? My computer science education placed a lot of emphasis on efficiency, automation, and confidence—taking a system and making it more robust; replacing an analog process with a digital equivalent or enhancement; proving that your algorithm does what you think it does in a timely manner—but my work doesn't take the problem as a given. I'm not a scientist because my work is far too subjective. I don't quantify success. I don't know if I'm an artist either. I'm not so concerned with fitting myself to a label.

Why were you interested in art, or working with artists and artist groups? What was the collaboration like? To a certain extent, I've been engaged with visual culture for most of my life—photography, amateur video, & computers—but I remember very clearly when I discovered the work of Lissitzky and Rodchenko. I sometimes used to hide in the Fine Arts library at my school to concentrate on math homework, and one day chanced into a section on early Soviet constructivism. It was the first time I thought about art and aesthetics playing a pivotal role in social change. That was the constructivist pretense, at least. I'm not saying it worked, but I never managed to shake the idea of designing for a new sort of person—creating an audience that may not yet exist. I guess that's an important idea for your magazine as well.

What is data? How is it used as a resource for your art? Data is surrogate stimulus. Numbers, ca-

refully chosen to be used in lieu of sight, sound, smell, touch, and taste. Not only to simulate our observations, but to measure what we can not. I make interfaces between the computational and social/political processing of data. A well-designed interface is much like an instrument: it augments our capabilities in some way and allows for expression. Perhaps the design of these interfaces is itself expressive, but I don't think of my work as primarily an artist's practice.

In my video interface, InterLace, authorship is a process of creating interpretive meta-data, so that not only the filmmakers but also their viewers can create meaningful continuities.

What is your focus in working with data? Language about data-work often assumes a cooking metaphor. Data begins »raw« and needs to be processed before consumption. I made a pair of videos last year, Chewing and Digesting, trying to represent the transformation of time and image into static data (Chewing), and in the latter how we can make meaning out of the accumulation of our own data-traces (Digesting). We're constantly leaving data behind—maybe in terms of how we focus our attention, »reading« can be twisted into a form of writing.

Very few people see the whole data cooking process. Sometimes the hidden stages reflect social organization, for example a director cutting (»raw«) footage into a narrative for an audience, while other processing stages are opaque owing to technical structures, such as the encoding of a video into a compressed file format suitable for networked distribution. The human and algorithmic processes both concern themselves with determining what is



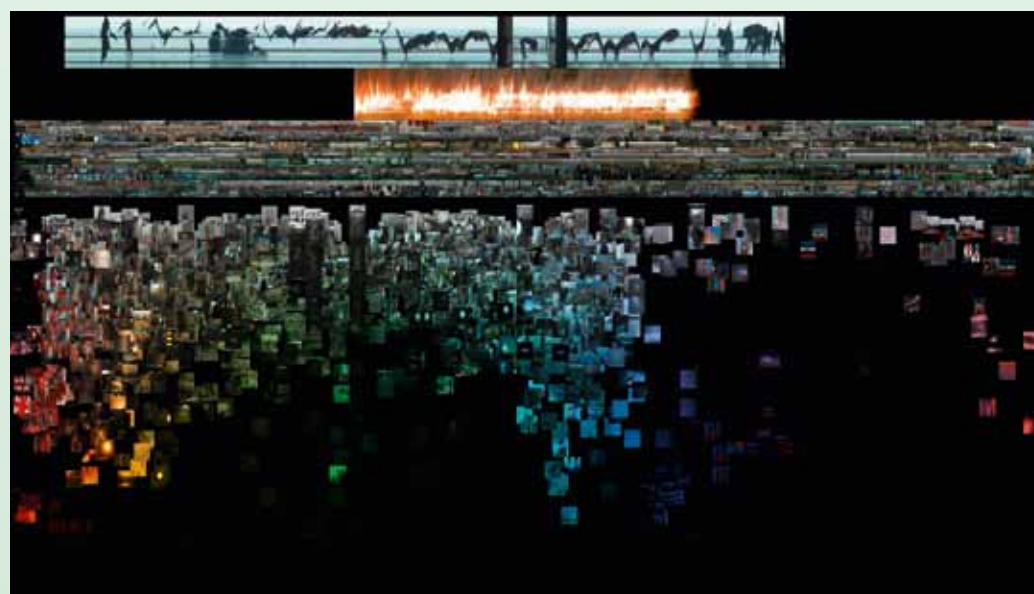
CHEWING (2013)

ROBERT OCHSHORN'S CHEWING (2013) IS THE RESULT OF A COMPUTER PROGRAM WRITTEN TO TRANSFORM A VIDEO FROM TIME INTO SPACE, APPLIED TO JOHN SMITH'S SHORT FILM THE GIRL CHEWING GUM (1976). EACH ROW OF THE VIDEO REPRESENTS ONE MINUTE OF TIME, WHICH IS MAPPED FROM LEFT-TO-RIGHT AND TOP-TO-BOTTOM AS IN A BOOK. THE ENTIRETY OF SMITH'S FILM IS PLAYED FROM TOP LEFT TO BOTTOM RIGHT WITH THE SPACE BETWEEN THE FIRST AND LAST FRAME FILLED WITH SHRINKING FRAMES AT THEIR CORRECT SPATIAL-TEMPORAL POSITION. IT IS AS IF A HUNGRY VIEWER IS ATTEMPTING TO VIEW THE ENTIRE FILM AT ONCE. AND THIS HYPOTHETICAL VIEWER IS THEN, MOST LIKELY, SOME KIND OF MACHINE. CHEWING IS WRITTEN TO BE READ DIFFERENTLY, OR INTUITIVELY.
(TEXT BY ANTHONY ILES, [HTTP://FLATNESS.EU/CHEWING-TEXT.HTML](http://flatness.eu/chewing-text.html))

important and what can be discarded; my focus is in exposing and unifying the intuitive and algorithmic modes of processing.

How can machines »compress« images in a way that helps us understand salience? My Sublimation project is one experiment in a visible, lossy compression. But also how can interfaces allow us an awareness and instrumentation of the powerful statistical techniques like Principal Component Analysis, that already underlie machine data analysis /compression?

What's next for your work? While perception is instantaneous, data persists. It is stored on and trusted as memory. Our memories, individual and collective, are externalized as data. I'm interested in the dreams of this data: dreams in terms of (un-realized) fantasy and possibility, but also dreams as subconscious associative access.



GOD (STUDY)

I DEVELOPED THE SOFTWARE FOR EYAL SIVAN'S WEB DOCUMENTARY, MONTAGE INTERDIT, OUT OF MY RESEARCH ON COMPRESSION AT THE JAN VAN EYCK ACADEMIE. AS A DATA-BASED FILM, CONTINUITY IS NOT A LINEAR NARRATIVE, BUT IS RATHER ACHIEVED AT »RUNTIME« BY THE VIEWER, WHO CAN NAVIGATE BY TAG OR BY SOURCE, RESORTING TO MAKE NEW CONTINUITIES AND MONTAGE. THE ACT OF AUTHORSHIP, THEN, IS IN THE CREATION OF METADATA RATHER THAN NARRATIVE. AN EARLY STUDY (PICTURED) ALLOWED EXPLORATORY VISUAL NAVIGATION THROUGH 15 GODARD FILMS.



ROBERT M. OCHSHORN

Born 1987 in California, USA. studied computer science at the Cornell University in Ithaca, NY, USA. After receiving his BA in 2009, he worked as a research assistant with Krzysztof Wodiczko in the Interrogative Design Group at MIT and Harvard. In 2012 he completed a fellowship at the Jan van Eyck Academie in Maastricht/Netherlands, where he developed the open-source InterLace software that was used in collaboration with Eyal Sivan to create the web-based documentary Montage Interdit (presented at the Berlin Documentary Forum 2 in June 2012 in Germany). He has performed, lectured, and exhibited internationally. He is currently a fellow at the Akademie Schloss Solitude, Stuttgart (January until July 2014).

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