THE ANXIOUS PROP
CASE 3: THE BLACK SWAN ISSUE

October 4, 2010, Salon Populaire, Bülowstrasse 90, D-10783 Berlin

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With contributions by Morgan Belenguer, Miodrag Kuč, urbikon; external contributions by Ross Adams, Hilary Brown, François Bucher, Jean Gardner, Mark Jarzombek, Pia Marais, Walter Mercado, Paul Ryan, and Hannes Schmidt.

The group is Jussi Ängeslevä, Stephan Baumann, Morgan Belenguer, Caitlin Berrigan, Luis Berríos-Negrón, Elín Hansdóttir, Mendel Heit, Vladimir Karaleev, Kim Köster, Miodrag Kuč, Fotini Lazaridou-Hatzigoga, The Product, TRACKnFIELD, urbikon, Leah Whitman-Salkin.

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Overleaf: Study for Lissajous Wind Harp (Elevation 3) *(2009), for the Reykjavik Concert Hall, Iceland. Concept by Elín Hansdóttir, development by Luis Berríos-Negrón with Steve Form*

THE ANXIOUS PROP

The Black Swan Issue at Salon Populaire, October 4, 2010

In an effort to review the dialectic of the natural and the political on the one hand, and of the esoteric and scientific on the other, we resort to an intuition about collectivity. We set forth with early Soviet theater, more specifically revisiting Vsevolod Meyerhold's biometrics and Lyubov Popova's scenography for *The Magnanimous Cuckold*.

In revisiting both this political period and theater work we remain steady in wanting to nurture our curiosity to work with local, collective practices. In considering the Black Swan we focus on the inverse: low impact, high probability events. But in order to do so, we opted to engage a method to create an initial discourse within the collective, and later with the audience. Paul Ryan, a seminal video artist, developed a technique he terms "Threeing," a model for resolving confrontations in human relationships based on the interaction of three elements. For the past month the main players of Case 3—myself, Elín Hansdóttir, Mendel Heit, and Fotini Lazaridou-Hatzigoga—have been in a continuous dialogue using this technique, a process we intend to project onto the space and audience.

Using Ryan's assimilations between catastrophe and chaos, we take this feuilleton as the site of intervention. We use it as a vehicle to challenge the Marxist concept of *Tätigkeit*, where we not only transform the art salon into an industrial space, but we open ourselves and the public to a relationship with the assembly line, to stage our potential as micro-practitioners. The feuilleton becomes the conduit for unassuming improbability, perhaps yielding a personal unknown.

Luis Berríos-Negrón

This feuilleton is both a sporadic publication and a loose collective operating under the aegis of The Anxious Prop. That which is common is the desire to work with two looping, yet sequential parameters: 1. We are into the labor of producing forms, shapes, and figures as a method to explore collective knowledge by challenging the discourse of digital fabrication; 2. These forms, shapes, and figures emerge with the disposition to be activated, triggering their condition as theatrical objects and their consequent instrumental or anthropological role in the world.

Overleaf: Parametric Control Spline for Lissajous Wind Harp (Elevation 4) *(2009), for the Reykjavik Concert Hall, Iceland. Concept by Elín Hansdóttir, development by Luis Berríos-Negrón with Steve Form*

Ross Exo Adams is an architect and writer who holds a BS in Material Science and a Masters of Architecture which he received from the Berlage Institute in 2006. His architectural work has been exhibited widely, including at the 2006 Venice Biennale, and his writings have been published in several international journals including *Radical Philosophy, Log, Thresholds, Project Russia*, and others. He is currently writing his doctoral thesis, a political critique of urbanism as a body of knowledge and set of practices emerging form and operating in close relation to liberalism, at the London Consortium.

Morgan Belenguer is a French choreographer based in Berlin, Germany. He completed his education at L'Ecole-Atelier Rudra Béjart in Lausanne, Switzerland. After winning the second prize and the critics' prize at the International Choreographers Competition, Hanover, Belenguer was invited to pursue his choreographic work internationally for CCR Dance Company Istanbul, Stadtheater Hannover, and the Holland Dance Festival, among others. Since 2007 he has produced various choreographies in Berlin; his last production "Parsème" was performed at Dock 11 in 2010. He has collaborated with Luis Berríos-Negrón on the exhibition "Immediate Archeologies" at Program Berlin in 2009, with the fashion designer Emilie Luc-Duc on the project "Undo" at .HBC in 2010, and directed music videos and visuals for Ellen Allien and the band Jahcoozi. His most recent work, "it becomes visible," at PSM gallery in Berlin is part of an on-going performance "Endless Beginning."

Luis Berríos-Negrón focuses on visual arts, material economies, and mass customization through the lens of architecture. He has received various awards, including the Parsons-Michael Kalil Award for Smart Design and the Massachusetts Institute of Technology-Schnitzer Award for the Visual Arts. He has had solo and group exhibitions, installations and architectural design projects in over ten countries. His most recent projects are The Turtle and Nonspheres series, including the "Urban Customization Workshop" (Berlin/Hamburg/Munich), "Stonemasonry in Context" (Mallorca), "Immediate Archeologies" at Program (Berlin), and "Immediate Archeologies Two or the Children's Crusade" (Dresden).

Hilary Brown graduated from NYU in 2006 with a degree in visual arts. She changed course and was hired as an analyst at a small structured financed company. The next four years were spent researching homebuilding companies, land developers, swaps and subprime mortgage CDOs. She is currently based in Santiago.

François Bucher is an artist and writer from Cali, Colombia, living in Berlin.

Jean Gardner is an activist, writer, teacher, and consultant on sustainable design issues. She is co-author with Brian McGrath of *Cinemetrics: Architecture Drawing Today*. She also wrote *Urban Wilderness: Nature in New York City*, the first book ever published on the subject. The national American Institute of Architects Committee on the Environment awarded her graduate course Issues and Practices in Architecture and Urbanism special recognition for eco-literacy teaching. The New York City Chapter of the AIA awarded her a Special Citation for her work as an Urban Ecologist, Author, and Educator in both the architectural field and in the public realm. Gardner was part of a team led by David Rockwell to commemorate 9/11 that exhibited at the 2002 Venice Biennale "The Hall of Risk," a participatory center for conflict resolution. She currently is an Associate Professor of Social-Ecological Design in the School of Constructed Environments, Parsons The New School for Design.

Overleaf: Hannes Schmidt, How long is long? *(Art Cologne), 2009; C-Print, Dimensions variable*

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Elín Hansdóttir creates site-specific installations which take many forms, including auditory or optical illusions, labyrinthine tunnels, and motion-activated architectural elements. She creates self-contained worlds that seem to operate under their own set of rules, completely transforming a benign space into one that defies expectations and seems only to exist at a particular moment in time. Though her installations are complex in construction and technical craft, they take on a stark aesthetic, so that her work operates as a kind of blank slate for viewer experience and interaction. She has created and installed her work in a number of international venues including the National Gallery of Iceland, Reykjavik Art Museum, Frieze Art Fair, London, and ZKM, Karlsruhe, Germany.

Mendel Heit is a product designer living and working in Berlin. He primarily works on research projects, as well as co-designing and cooperating with other agencies. His works go towards interaction, 3D printing, new (generative) shapes, innovative concepts, intelligent and sustainable solutions, hardware hacking as well as DIY/open-source ways of thinking and making. He has worked with Coordination Berlin, ITD Braunschweig, and ART+COM. He also worked at the Jerszy Seymour Design Workshop on several products, exhibitions and art shows. Since 2009, he has also contributed to the Palomar5 Network, and started new projects involving DIY, bioplastics, and fab labs within the same spirit.

Mark Jarzombek is the Associate Dean of MIT's School of Architecture and Planning where he is Professor of History and Theory of Architecture. He has taught at MIT since 1995, and has worked on a wide range of historical topics from the Renaissance to the modern. Jarzombek, who was an undergraduate at the University of Chicago, received his architectural diploma in 1980 from the Eidgenössische Technische Hochschule and his PhD from MIT in 1986. He was a CASVA fellow (1985), Post-doctoral Resident Fellow at the J. Paul Getty Center for the History of Humanities and Art, Santa Monica, California (1986), a fellow at the Institute for Advanced Study, Princeton, NJ (1993), at the Canadian Center for Architecture (2001) and at the Sterling and Francine Clark Art Institute (2005). He has worked extensively on nineteenth and twentieth century aesthetics, and the history and theory of architecture. Jarzombek teaches a range of courses at the graduate and PhD level in the History Theory Criticism program (HTC) of the Department of Architecture.

Miodrag Kuč is an interdisciplinary artist and urban theorist trained as architect/urban planner in various cultural settings. His work explores role of ephemeral structures in uncertain conditions and spatial appropriations of marginal social groups. Using an array of communication tools to facilitate participation and micro-politics of informal social groups, Miodrag Kuč investigates potentials of temporary use in integrative urban development. He is the founder of the movement ParaArtFormations, which offers conceptual planning approaches for local communities and empower them through process of alternative education and environmental awareness. He is currently working on his PhD at Bauhaus University in Weimar (Department of Urban Studies and Social Research), observing innovative nature of informality in Berlin.

Fotini Lazaridou-Hatzigoga is an architect and researcher. She studied architecture at the Aristotle University of Thessaloniki, Greece, and at Harvard University on a Fulbright Scholarship. In 2006 she moved to Berlin and co-founded PROGRAM – initiative for art and architecture collaborations, a project aimed at diversifying the ways we understand and make architecture through exhibitions, research projects, workshops, lectures and residencies. Alongside PROGRAM, Lazaridou-Hatzigoga is engaged in collaborative projects that explore the ways we relate to each other and our surroundings, through video, interventions, research, and design.

Overleaf: Hannes Schmidt, How long is long? *(Art Cologne), 2009; C-Print, Dimensions variable*

Pia Marais grew up in South Africa, Sweden, and Spain. She studied sculpture and photography in London, Amsterdam, and Düsseldorf before going on to study film at the German Film & Television Academy (dffb) in Berlin. She made several shorts, including *Loop* (1996), *Deranged* (1998), *Tricky People* (1999), and *17* (2003). After several engagements in the film business as a casting director and assistant director, she made her feature debut with *The Unpolished* (Die Unerzogenen, 2007), which screened at many international film festivals and won various prizes, including the Tiger Award in 2007 in Rotterdam. Her second feature film *At Ellen's Age* (Im Alter von Ellen, 2010) was developed in the Résidence du Festival de Cannes.

Walter Mercado is an internationally renowned astrologer and psychic. He has dedicated more than twenty-five years inspiring and captivating the multitudes with his advice and accurate predictions. This highly successful Spiritual Master is at the helm of a conglomerate of services that bring enlightenment to more than 120 million people who turn to him each day for advice. His impressive television repertoire includes: *Walter y las Estrellas* (Walter and the Stars) a segment of Univision's highly rated magazine program, *Primer Impacto* (First Impact) *Walter Mercado y los Signos del Amor* (Walter Mercado and the Love Signs) and *El Show de Walter Mercado* (Walter Mercado's Show). He is also recognized for his daily horoscope columns, which appear in New York's *El Diario-La Prensa*, Miami's *El Nuevo Herald*, Puerto Rico's *El Nuevo Día*, and also newspapers in Bogota, the Dominican Republic, Panama, Quito and San Salvador. He also publishes a magazine, has written several books among which Warner Books published his latest title, *Beyond the Horizon: Visions of the New Millennium*.

Dan Paluska is an artist and engineer who works in kinetic, robotic, and various other media. He has BS, MS and ABD from MIT in Mechanical Engineering. He has been on the Discovery Channel, the cover of *Wired* magazine, and been the recipient of the Prixars Award of Distinction for Interactive Art (with Jeff Lieberman). He is inspired by the ideas from lean manufacturing, evolution, the open source community, and market economics and how these might help us to build tools that help us collaborate better. Currently he is working on setting all of his information free.

The Product is a Berlin-based spatial and media related design studio. Over the last years the studio has focused on interactive installations, augmented objects, physical interfaces, and generative systems. The designs are located at the interface between the virtual and the physical world. More than just an investment in digital media itself, the studio is interested in its intrinsic properties: the responsive, the interactive, the procedural, the volatile, the many, the precise, the playful, the narrative… in short the "signature of the digital." Hence the procedurally shaped pieces of wood, the computationally processed sheet of paper, or the mechanical construction plays an equally important role in our work as a projector, a sensor, or a micro-controller. The studio strongly believes that technology can be transformed, by sharp thinking, technological competence, and formal sensibility, into a meaningful, warm and emotional something.

Paul Ryan is an artist whose video work has been presented in Japan, Turkey, France, Germany, Holland, Spain and throughout the United States, including at "The Primitivism Show" at The Museum of Modern Art and "The American Century Show" at the Whitney Museum of American Art. Ryan authored *Cybernetics of the Sacred* and *Video Mind, Earth Mind*. His articles have appeared in numerous journals including *IS Journal*, *Millennium*, *Leonardo*, *Terra Nova* and *Semiotica*. NASA published his Earthscore Notational System. Ryan was part of the early video movement, founded and edited a bioregional magazine in North Jersey, and co-founded and directed the Gaia

Overleaf: Hannes Schmidt, How long is long? *(Detail), 2008; C-Print, Dimensions variable*

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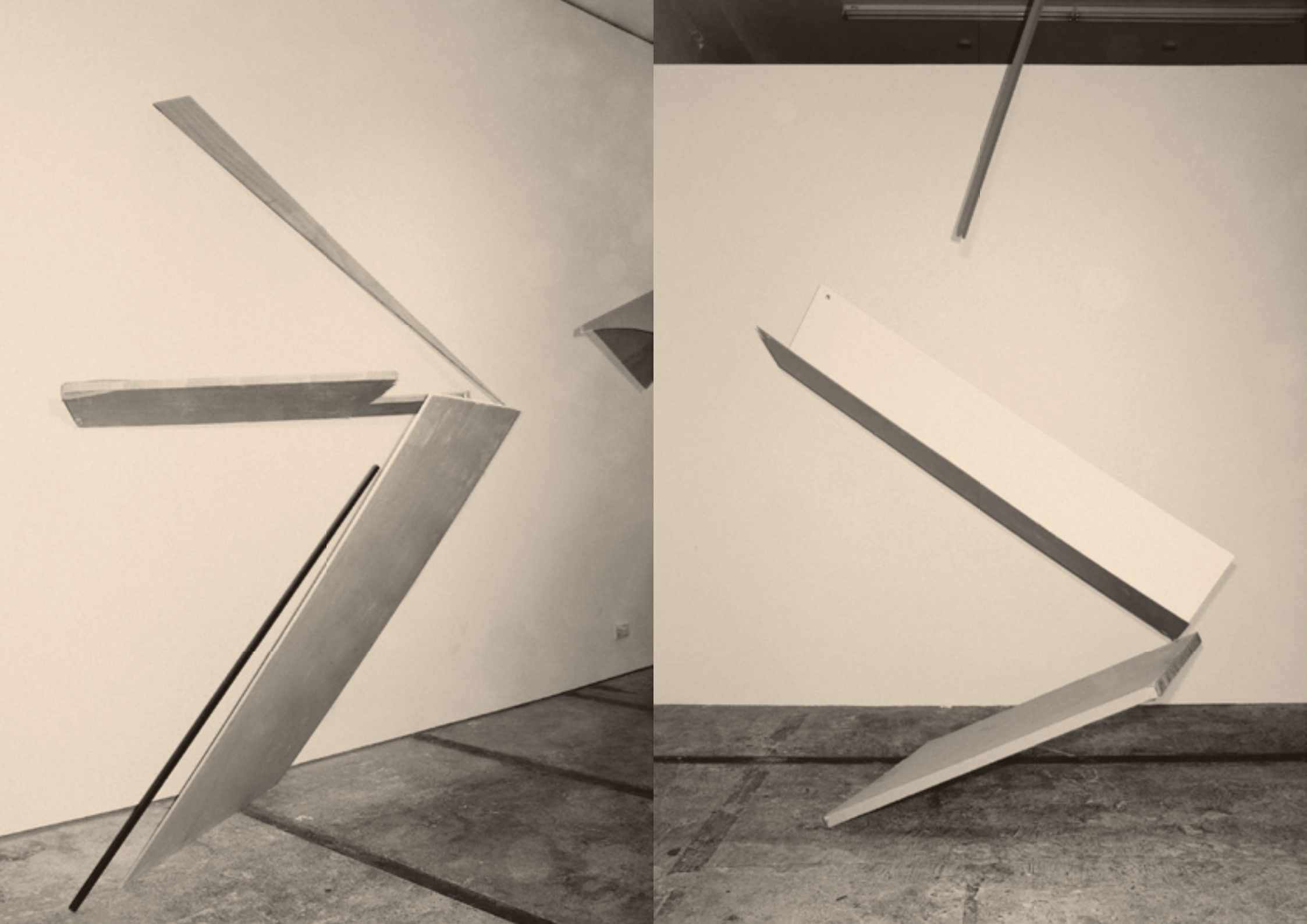
Institute at the Cathedral of St. John the Divine in New York City. His design for an Environmental Television Channel has been presented at the United Nations. Ryan studied with both Marshall McLuhan and Gregory Bateson. His teaching experience includes New York University, SUNY New Paltz, The Savannah College of Art and Design, and Parsons School of Design. Currently he is a member of the core faculty at the Graduate Communication Program at the New School in New York City.

Hannes Schmidt received his fine arts diploma in 2003 from the Hochschule für Kunst und Design Burg Giebichenstein/Halle. He is the recent recipient of the Kunststiftung Baden-Württemberg grant. His work has been shown internationally, with exhibitions at Kunsthalle Exnergasse, Vienna; DUMBO Center of Arts, New York; DESTE Foundation for Contemporary Art, Athens; Evas Arche und der Feminist, New York-Berlin; and Nice & Fit Gallery, Berlin. He has upcoming exhibitions at Pro Choice, Vienna; Basso, Berlin; and at the Kunststiftung Baden-Württemberg, Stuttgart.

urbikon is a team of architects and landscape architects with different professional backgrounds and orientations. According to the requirements of the different projects the team is extended with specialists including economists, artists, craftsmen, designers or scientists. For each project a taskforce is put together to be able to follow our interests on different scales. Our activities reach from furniture design over building construction over urban design strategies to communication design. Located in Leipzig and Berlin, Germany, urbikon was founded in 2002 and team members include Kai Dolata, Lola Meyer, Sebastian Stiess, and Jan Bovelet.

Leah Whitman-Salkin works as a freelance editor and writer in Berlin. She currently contributes to *Kaleidoscope* magazine, Manifesta publications, and various artists' and curatorial projects and books.

Overleaf: Hannes Schmidt, How long is long? *(Detail), 2008; C-Print, Dimensions variable*



THE PARAMETRICS OF WALKING AT SUPERSONIC SPEEDS: AN INTRODUCTION TO THE BLACK SWAN ISSUE

Luis Berríos-Negrón

I dreamt the other night that I was living inside the Arctic ice cap, my mascot was a yeti. Of course, very tall, my yeti had the power to walk supersonically through ice. Me and a crew of Hells Angels would follow. Does this dream mean that war will soon break out between Norway and Russia? Maybe. But it is not so difficult to imagine this unlikely conflict. Walking at supersonic speed, well, that is an entirely different matter.

It is that different, metaphorical matter that incites a review of the recent popularization of the Black Swan effect by economist Nassim Taleb in his best-seller The Black Swan. Taleb's triple layered model for identifying Black Swans, being "rarity, extreme impact, and retrospective (though not prospective) predictability" is what this issue of The Anxious Prop wants to distance itself from, while simultaneously be informed by.[1] While we are willing to concede, albeit reluctantly, that his theory may hold up only in the characterization of "low predictability and large impact" in regards to financial crises, we are quite skeptical about extending it to historical events.[2]

Taleb's model is the source of our distrust, simply because it is yet another tool of capitalism that is wide-open to distortion, most explicitly by the author himself. The weakness of the model lies in its third layer, which he expands to not only unexpected events, but further to the non-occurence of expected events. To structure this third layer of his Black Swan identification model, he cites a range of natural disasters and unexpected landmarks of innovation such as the creation of the Internet, while turning to those of a "historical" nature, such as the fall of the Berlin Wall, the end of the Cold War, revolution in Iran, etc. Most predictable is Taleb's instrumentalization of September 11, 2001 as a Black Swan. And so, whether by trigger-happy presidents or dynamite-strapped pawns, the use of 9/11 (willingly or by proxy, as fact or as conspiracy) to manipulate and shape politics is an example of what is of concern here. Meaning that, by elucidating on our "need" to hone our senses to benefit from the unpredictable, Taleb unwittingly formulates an oppositional blueprint for a willingness to wager on the demise of others as a method of profit.

These methods of profit, guided by the faith on financial models and the transgressive expansion of the global market, clearly makes even First World, stable nations like Iceland and Greece prone to the whim of predatory profiteering. These methods now gain exponential acceleration as the demise of natural resources also grows as a variable (if dependable) instrument.

Taleb's statement, "Black Swan logic makes what you don't know far more relevant than what you do know," sounds uncomfortably close to a Diesel Jeans campaign, or better surmised as "ignorance is bliss," no matter how intellectually loaded his position might be.[3] This is how Taleb's Black Swan turns into an evading metaphor. The elegant, poetic topology we believe the Black Swan has provided for hundreds of years—as the emblem of a sublime improbability, as a ghost in the machine—is lost. This is not a nostalgic, pastoral truism, but a reminder that human agency plays a definable role upon historical events, and that the metrics of models, not as Jon Elster would argue through mechanical determinism, but more in tune with the parametric determinism of Ernest Mandel,[4] which is what opens that greater, poetic malleability of life. It is Mandel's model of parametrics that becomes more compelling for it engages both the dialectic of the paradox and the synesthesia of the metaphor. As for this instance, these conditions speak of the two queries operating here: the matter of models and the matter of human agency.

Therefore, if we are going to prepare for something, it should not be to recognize exploited countries, rigged elections, car bombs, oil spills, airplane hijacks, terrorism or state sponsored terrorism, as Black Swans these are not. And to spectacularize inventions? Well, yes, it is exciting to know that exploration has provided unexpected tools and life-saving solutions. But, do I think that the absence of jetpacks, space stations, or summer homes on the moon are to be Black Swans as Taleb's model would suggest, especially if it potentially meant to instead deal with predictable problems here on Earth? No thanks, I do not agree, and I am fine without them.

In the end, the reason why the Black Swan-as-metaphor is so powerful, is not necessarily its relationship to what we cannot predict but certainly what we cannot control: volcanoes, earthquakes, tsunamis, love, luck, and melancholy. To rest on our preparation to capitalize on the unknown seems like yet another anesthetic continuance of the passive suicide of unregulated globalized market charlatanism.

To engage in the scientific understanding of why human agency is creating shifts in atmospheric phenomena, oceanographic behavior, on human health and/or social justice does continue to be necessary. But so is the celebration of those other considered esoteric practices that lubricate the flow of information between the numbers and letters, between space and dreams.

We are therefore interested in the admission that Alain Badiou recently stated:

> I remain convinced that every philosophy that eliminates the category of the subject becomes unable to serve a political process. That is not to say that a subject should be identified from the outset as the working class or the like. Certainly, there is subjectivity in politics and there is subjectivity in art and subjectivity in love and subjectivity in science itself. As such, I attempted to completely rethink the relation between formalization and subjectivity.[5]

It is with this in mind that you will find written contributions by our friends and colleagues Ross Adams, Hillary Brown (who incited this issue in the first place), Jean Gardner, Mark Jarzombek, Dan Paluska, Paul Ryan, and Walter Mercado. You will also find related visual works recently produced by François Bucher, Pia Marais, and Hannes Schmidt, and contributions from within the collective by Morgan Belenguer, Elín Hansdóttir, Mendel Heit, Miodrag Kuč, Urbikon, and yours truly.

I leave you by answering two questions posed by the Madrid-based group Ludotek:[6] "Have you felt powerful? Was it at someone else's expense?" Meaning, will I invest in betting for a war between Norway and Russia? No. "Have you felt powerful? Was it with someone else's expense?" Meaning, will I invest in finding out how to walk at supersonic speeds? Absolutely.

[1] Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable* (New York: Random House, 2007), xviii.
[2] Ibid.
[3] Taleb, *The Black Swan: The Impact of the Highly Improbable*, xix.
[4] Ernest Mandel, "How To Make No Sense of Marx," *Analyzing Marxism: New essays on Analytical Marxism*, ed. Robert Ware and Kai Nielsen (Calgary: The University of Calgary Press, 1989), 105–132.
[5] Alain Badiou, *The Concept of the Model: An Introduction to the Materialist Epistemology of Mathematics*, trans. by Zachary Luke Fraser and Tzuchien Tho (Melbourne: re.press, 2007), 88.
[6] Manuela Zechner, Paz Rojo, and Anja Kanngieser, eds., *Vocabulaboratories* (Amsterdam: Association LISA, 2008), 43.

Film still from Im Alter Von Ellen ©*2010 Pandora Film, directed by Pia Marais*

Film still from Im Alter Von Ellen ©*2010 Pandora Film, directed by Pia Marais*

THE FIRSTNESS OF THIRDNESS

Paul Ryan

For this issue of The Anxious Prop, we turn to both to the writings and techniques of Paul Ryan. Ryan's life-long work is of particular relevance for it is in large part dedicated to developing models of notation and performance in human relations and the natural environment.

We recently asked him about his current work, and where he would position Black Swans within it, particularly in terms of Alain Badiou's writings on models.

He responded: "I am trying to understand how Badiou uses Paul Cohen's mathematical notion of 'forcing.' My motivation here is that a clear understanding of 'forcing' might help me figure out whether and in what ways 'forcing' might be a viable way to introduce the practice of Threeing in human affairs. Regarding Black Swan Theory, Badiou would be a fecund resource for engaging the theory, if for no other reason than his integration of poetic, metaphoric thinking with philosophic concern. For myself, I would ground engagement with Black Swan Theory in [Charles S.] Peirce's 'firstness of thirdness.' Given our 'digital age,' I would want to understand the differences between Badiou and Peirce. Badiou builds from set theory, a theory friendly to digital devices. Badiou uses Cantor's transfinite sets as given and celebrates the non-oneness of multiplicity. Peirce critiques Cantor and works toward a diagrammatic, non-algebraic notion of topology. Although aware of multiplicity, Peirce celebrates continuity, a continuity that could give us a way to ground our lives in bioregions rather than continuing to 'live' in nation states under the digital count."

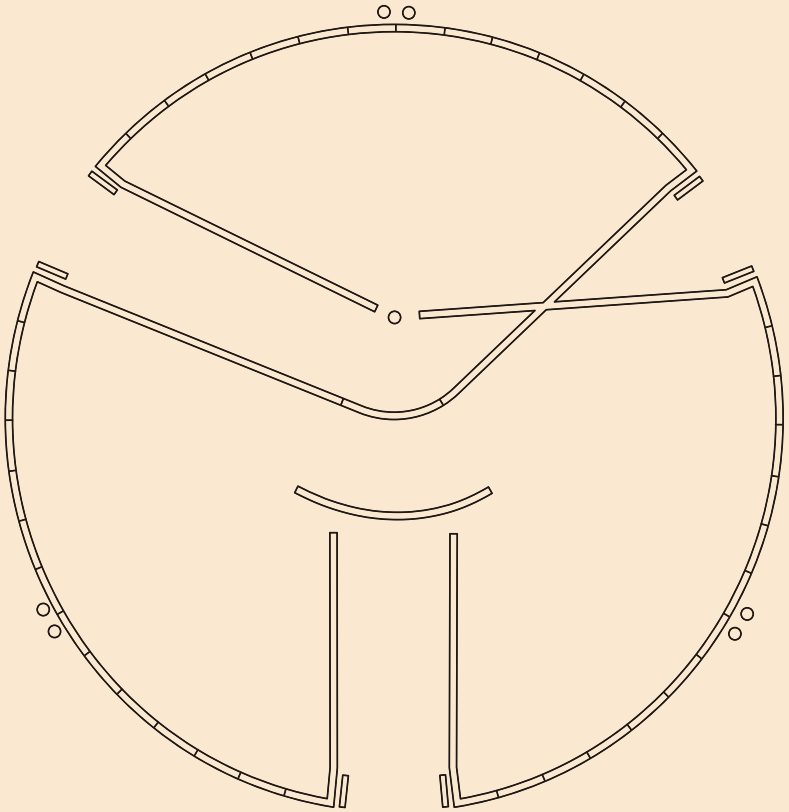
We incorporated Ryan's notational models into the development of this iteration of The Anxious Prop, which helped us work through the kinks of our collective process, especially with regard to the questions we want to raise about Black Swans, as metaphor and as topology. As such, hoping to trigger that curiosity further, we reprint a section of his "Introduction to the Earthscore Notation System for Orchestrating Perceptual Consensus about the Natural World." Enjoy Threeing. *Luis Berríos-Negrón*

Video recording and playback, with its possibilities of time lapse and slow motion, enables us to understand natural patterns in a non-verbal way. Think of time lapse film studies of budding flowers and slow motion studies of insects. Watching these moving images, it is possible to understand the pattern presented in a single gestalt without rational inference using language. The moving image allows the natural event to occur in the mind like a fist in the hand. There is a spontaneous, intuitive appreciation of a pattern in nature. Peirce would call this "the firstness of thirdness." This intuitive appreciation of natural patterns through perception is the fourth component of the Earthscore Notational System. It is important to understand how the firstness of thirdness relates to the categories of firstness, secondness and thirdness.

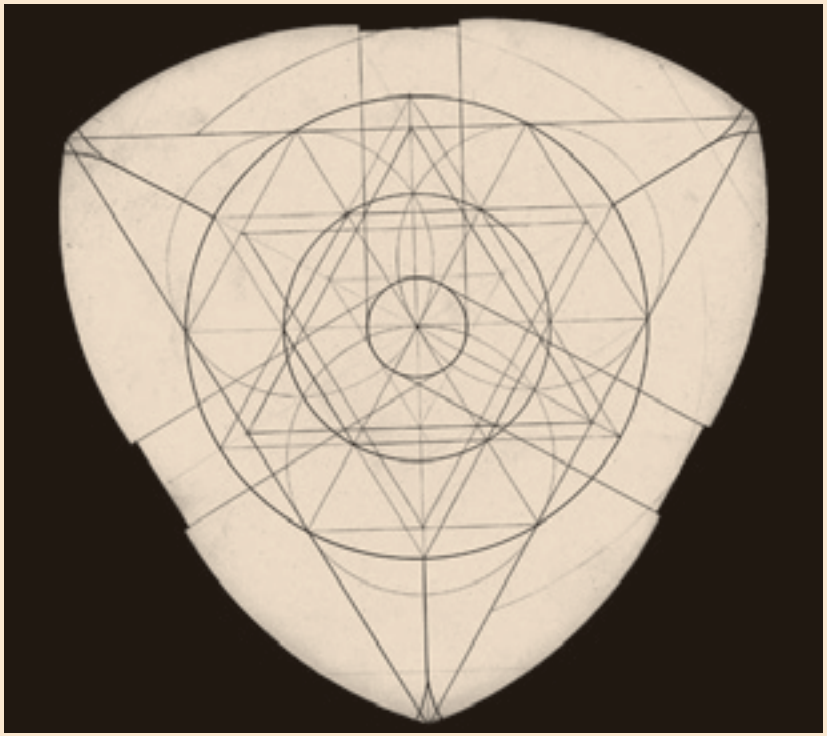
In Peirce's categories, firstness is not separated from secondness, nor is firstness separated from thirdness. There is a firstness of secondness. The "ouch" sounded by someone struck with a thrown rock is an instance of the firstness of secondness. The brute fact of the rock hitting the person is actually there, secondness. It is not constructed or determined by the person's feelings alone. Yet for the person a feeling attaches to the brute fact, a feeling evident in the involuntary cry.

Peirce provided as well for the firstness of thirdness, that is, the immediate perceptibility of law. Muybridge's famous photos of a running horse, done on a wager about whether the four hooves were ever all off the ground at the same time, is an instance of such firstness of thirdness. The firstness of thirdness in nature can also be understood in a formal way using the catastrophe theory of the topologist, Rene Thom (1975). Catastrophe theory is a qualitative method for modeling discontinuous phenomena. The theory models the states of nature as smooth surfaces of equilibrium. When the equilibrium is broken, catastrophe or discontinuity occurs. Thom has proven that in natural phenomena controlled by no more than four dimensions, there are only seven possible equilibrium surfaces, hence only seven possible discontinuous breaks, i.e., only seven elementary catastrophes. Thom named these seven as follows: fold, cusp, swallowtail, butterfly, hyperbolic umbilic, eliptic umbilic, and parabolic umbilic.

Catastrophe theory is to the medium of video what Euclidian geometry is to the medium of paper. Television and video monitor and record events (Cavell: 1982). Just as Euclidean geometry offers a formal understanding of geometric surfaces and solid objects, catastrophe theory provides a formal understanding of events or changes from states of equilibrium, i.e, discontinuous phenomena. Based on Euclidean Geometry, someone faced with tiling a wall knows with mathematical certitude that of all possible regular polygons (equalsided, two dimensional shapes) only three (hexagon, square, triangle) can fill the plane packed edge to edge. Based on catastrophe theory, someone observing nature with a video camera knows with mathematical certitude that there are only seven kinds of discontinuity possible in any natural phenomena controlled by four dimensions or less. Just as the continuous relational circuit constitutes the "staff" of the Earthscore Notational System, so these seven elementary models of discontinuity constitute the basic "notes" of the system. To suggest how these notes function in the Earthscore Notational System, I ask the reader to imagine a section of a stream in which there is a continuous flow of smooth water. The flow of water has four dimensions: length, width, depth, and rate of flow. Changes in these dimensions occur because of changes in the shape of the streambed and variations in the amount of rainfall. Catastrophe theory can model how changes in these dimensions control changes in the way the water behaves. The models provide both a control surface for the changing dimensions and a behavioral surface for the discontinuous action of the water itself. For example, if the width of the streambed begins to narrow very gradually, suddenly a *fold* will appear in the water's shape. If both the rate of flow and the depth of the stream increases the water may jump into the air as if jumping over a *cusp.* If a twig catches the water as it comes down, you may get a droplet forming at the end of the twig before it falls to the next surface. In catastrophe theory such periodic droplet formation in-between surfaces would map on the *butterfly* model. The butterfly is a like a cusp except it has another surface half way between the upper and lower surfaces, a pocket, on which the droplet could form. The swallowtail and the three umbilical models function in a similar manner. Whatever way the four controlling dimensions change, there are only seven possible surfaces on which the corresponding changes in the behavior of the water can be mapped, only seven basic "figures of regulation" for the water's behavior. I should note in passing another way of modeling water flow which has developed recently called chaos theory (Gleick: 1987). Chaos theory is particularly useful in approaching turbulence, a domain in which catastrophe theory has not yet been very helpful. To my knowledge, the formal interrelationship of



Rug design by Michael Kalil for Threeing



Rug design by Paul Ryan for Relational Circuit

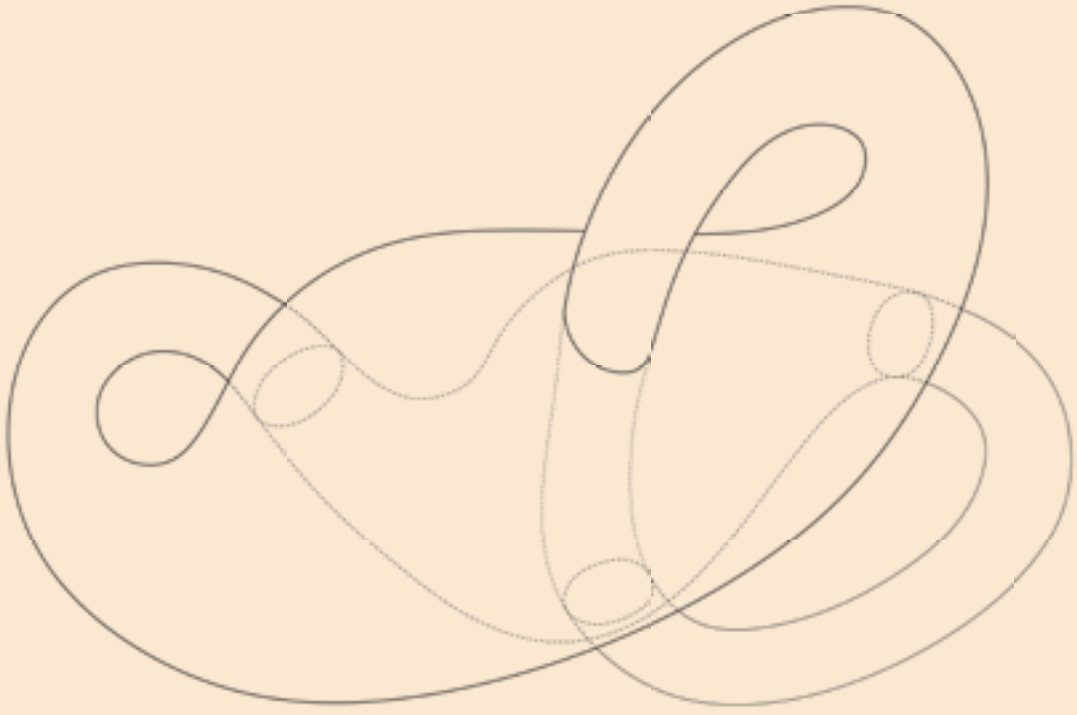
these two modeling systems has yet to be worked out, but in principle both could be integrated into the Earthscore Notational System.

In nature, the combinations of the basic seven catastrophes are multiple and not readily apparent. Yet the underlying structural stability of discontinuous phenomena in nature can be understood by careful observation. Each "event pattern" can be understood in terms of its "chreod." Chreod is a term taken from the Greek that means "necessary path": "chre" meaning "necessary," and "ode" meaning "path." If any natural process is disturbed it will return to the pathway necessary for its structural stability, like a flooded river returns to its riverbed. These necessary pathways of nature, or chreods, can be rigorously modeled using the seven elementary catastrophes and variations on these seven (Casti 1988: 149ff.).

In my own work as a video artist, I have repeatedly returned to moving water as the richest single source for developing a vocabulary of "chreods" in nature. Water takes so many different shapes such as billows, droplets, back curls, waves, fantails, and cascades. Each of these shapes exhibits a different pathway in which water can flow, a different chreod. In 1975, I spent the year recording over thirty-five chreods on videotape at the waterfall in High Falls, New York. In 1983, I did a study of the Great Falls in Paterson which I edited into a tape with five sets of seven different kinds of chreods. In 1984,
I did a study of the coast of Cape Ann above Boston. In 1986, I crossed the Atlantic Ocean on a sixty-foot North Sea Trawler and videotaped over thirty hours of ocean waters. Currently, I am working on a video interpretation of nine different water ecologies in the Shawangunk Mountains at the edge of the Hudson Valley.

Building up a vocabulary of chreods can give us an articulate set of notes with which to score natural phenomena. Horseshoe crabs laying their eggs in Jamaica Bay is a natural process regulated by a chreod. The crabs only lay their eggs in the wet sand during the ebb tides created by the full moon in June. This assures maximum protection for the eggs from predator birds and land animals. The birthing activity takes place within a necessary figure of regulation. If you destroy that figure of regulation, that chreod—by stripping the beach of sand, for example—you have destroyed the natural process of birthing in that site.

To sum up this section on the firstness of thirdness, I am saying that the difficulty of discovering clear "notes" in the buzzing, blooming confusion of nature can be resolved with systematic observation of an ecology by video teams trained in Threeing and schooled to identify the chreods of an ecosystem. The systematic observation of "everything" would insure that we did not miss anything significant. By identifying the chreods we can rigorously model the underlying structural stability of the various events in the ecosystem. We can then find out, through more observation and study, how these various chreods relate to each other. The syntax of interrelationships between these chreods would, in effect, constitute the "score" for the ensemble of recurring events that constitute that particular ecosystem. We would be eliciting the score from the ecosystem itself by careful observation. Once we know the score we can observe and monitor how the ecosystem actually performs or fails to perform in compliance with that score. Failure to comply would mean that we need to reinterpret our score and/or to correct any behavior of ours that is making the ecosystem incapable of performing according to its natural score.



Paul Ryan, The Relational Circuit, 1971

pieces of narrative part Zwei

Scalable rewards or scalable repeatability

finance and business people often talk about and seek scalable rewards. scalable profits. increased revenues cost less to deliver than current revenue. selling copies is one good example. music or movies or software. scalable rewards are sort of like the lottery. many bands make records. one or two make big cash. Scalable repeatability is the number of people who can duplicate your business in their local area. like pizza or bread. lots of local variations. profit is limited to the work you can do as an individual. if the service is needed, its easy to replicate on a small local scale.

presence by way of a menu

a menu is a listing of services. a customer places an order, you perform the service, collect the fee and then part ways. in order to continue to make money, you must continue to provide service. when was the last time you had a really good free lunch? is your value to society based in a product or in your process?

trying to piece together a narrative on why i want to be a service employee
{plumber, barber, chef, etc}

the 10,000 foot tall person

we have some basic intuition about how height of people varies. most people are between 5' +6' tall. {152cm - 183cm} outliers are usually between $\mu \pm 3\sigma$ {122cm + 213cm}. we have some idea of the frequency of "normal" + extreme. how does this intuition extend to networked + cultural metrics like money + fame? someday you are walking down the street and you run into bill gates, how tall is he?

am i a lottery player?

i went to school + studied math + science. i understand that the more you play the lottery, the more you lose. the system is designed that way. many pay in, one gets rewarded. the system main towers always get rewarded. i would see people buying tickets + say "i'm smarter than that." meanwhile i'm writing grants, working on art pieces, songs, videos, and academic papers with lottery style rewards. many create and apply, one or a small few take all the reward. am i addicted to gambling?

THE ANXIOUS POP

PREPARING FOR THE FUTURE AS NATURE DOES

Jean Gardner

Have you found a theory that can help you second-guess tomorrow's weather? Anticipate when the next nine-day, sixty-two-mile traffic jam on China's Beijing-Tibet expressway will happen?

Nor was there a theory that predicted the sighting of a black swan.

Likewise, no theory about climbing a tree ever helped me climb a tree. Only after climbing many trees, and falling out of several did I learn to climb a tree. No theory about riding a horse ever helped me to ride a horse. Only after riding many horses and being thrown off several did I learn to ride a horse, which is very different than predicting or controlling his behavior.

Likewise, no theory about rescuing someone from a subway track as a train enters the station ever saved a life. "We're OK down here," shouted Wesley Autrey, a fifty-year-old construction worker and Navy veteran, from under a New York subway train, after he had jumped onto the tracks to rescue a stranger. How did he do it? Autrey pushed the twenty-year-old film student into a space that was about a foot deep between the tracks and laid on top of him as the train passed over them.

Autrey, in a split second, was able to judge whether he and the student could fit in the space between the tracks because "In construction, we work in confined spaces a lot…. So I looked, and my judgment was pretty right. The train did have enough room for me." Apparently, just barely enough room: Autrey's hat was greased by the passing cars.

Likewise, no theory about landing a plane on water helped Sully Sullenberger when he successfully ditched US Airways Flight 1549 in the Hudson River off Manhattan on January 15, 2009, saving the lives of all 155 people on the aircraft. Shortly after take-off from LaGuardia Airport, a flock of Canadian geese was sucked into the airplane's engines, disabling them. The moments before the crash were "the worst sickening, pit-of-your-stomach, falling-through-the-floor feeling" that Sullenberger had ever experienced. Afterwards he observed, "One way of looking at this might be that for forty-two years, I've been making small, regular deposits in this bank of experience: education and training. And on January 15 the balance was sufficient so that I could make a very large withdrawal."

You could dismiss these two extraordinary events by saying: "Right person in the right place." But they are examples of the resilience we find in ourselves and in nature all the time. The 1988 forest fire in Yellowstone National Park burned 793,880 acres but vegetation almost immediately started to grow back. Some trees like the pitch pine actually need a fire to germinate. James Lovelock, the atmospheric chemist who convinced many that the biosphere is a self-regulating organism, argues that the Earth will calibrate a new homeostasis if we overstress it. Of course, the human species is not likely to survive such an adjustment.

The ten principles of Nassim Nicholas Taleb cannot save the Black Swan or us when the improbable unpredictably happens. For us humans, as for the rest of nature, only our own resilience can do that. Resilience is an internal dynamic, developed through the trial and error of repeated practices, especially of skills that integrate mind and body in relation to adaptability and flexibility, such as yoga, tai chi, and other somatic body practices. These can help shape us to respond to Earth rhythms in appropriate ways, no matter how unimaginable both the rhythms and our responses may be. But if we sit back, become couch-theorists, we won't make the day-by-day adjustments to our behavior needed to align ourselves with the essentials of the Earth homeostasis that birthed us.

According to Bjarke Ingels, founder of the Copenhagen-based architectural group BIG, adaptability, flexibility, and open-focus—seeing what is—ground his practice. "The true creative moment is when a big idea interacts with these uncontrollable but at times navigable forces of society."Navigating the forces of nature takes the same kind of skills as navigating the forces of society because society and nature form one entwined dynamic.

Practice the skills of navigating what is, and we might be ready to integrate what it means that the Black Swan exists!

Spread Reprint of Yes is More: An Archicomic on Architectural Evolution*, by Bjarke Ingels, Copenhagen, 2009, courtesy of BIG.*

Video Stills from François Bucher's La Nuit de L'homme, *HDV, 90 minutes (approx.), 2011*

Video Stills from François Bucher's La Nuit de L'homme, *HDV, 90 minutes (approx.), 2011*

ARCH-POP: IN PRAISE OF: IRONY, HUMOR, WIT, EXAGGERATION, READY-MADES, AND OTHER LOST CAUSES IN THE DISCIPLINE OF ARCHITECTURE

Mark Jarzombek

In 1922, Mies van der Rohe produced a now iconic drawing of a skyscraper looming over the lowly three- or four-story buildings of an anonymous German town.[1] The image spells out an equation that is still in play today. We are now living through a neo-modernist phase where culture's messy reality is shunned in favor of the ethos of modernist cleanliness. And this applies even to the work of Frank Gehry. Let me, therefore, speak on behalf of that messy reality. Though it exists in all of our cultural dimensions, it has practically no voice in architectural theory. Preservationist, UNESCO, and government regulations make sure, for example, that city centers are as static and immobile as possible. It used to be that cities reflected their times—their modernity—but today city cores—and indeed often entire landscapes—are increasingly museological preserves. The old-fashioned dialectic represented in Mies's drawing between the modern and the old is obsolete. Both have the same agenda to control, exclude, and above all to purify our aesthetic universe.

There is a solution, though it is only a tactical one, and only for the brave of heart. I call it ARCH-POP. It is a design strategy that embraces our fascination with our obviously untenable cultural predicament. It is, however, not about design-from-below. It is not trying to give voice to the "non-architectural" community. Its goal is ask us—as architects—to think outside of the conventional "design" ethos and make use of cultural productions, tropes and critiques that may not require "design" (and the proverbial "architectos") but that can be designed into the architectural imaginary. Unlike computational architecture, which seeks to salvage beauty in the body of the machine, ARCH-POP accepts the productions of culture without over-determined aesthetic presuppositions.

ARCH-POP seeks the truth of rupture over the myth of continuity.

There is very little history to ARCH-POP, but perhaps, on the POP side of the equation, one could look at the Chiat/Day Building, Los Angeles (1985–91) by Frank Gehry (Fig. 1). No one ever talks about this building today, but what about those giant binoculars? And what are those oddly aligned "sticks" holding up the roof? There was a time when tactical exaggerations and borrowings were considered a legitimate part of an architectural way of thinking, but for various reasons, this approach died. Soon after making this building, Gehry abandoned his fascination with Pop. I see no difference now between Frank Gehry and Jean Nouvel. Both produce buildings of Teflon.

One of the sources of the problem is in the schools of architecture. Beginning in the 1990s, the study of culture as its own construction became a taboo subject in the schools of architecture creating the split we have today between form and preservation—between a mythology of endless choice and a pathology of timeless permanence. The world turned serious and one of the great words of postmodernism—irony—disappeared from use.

What about the Urban Cactus of UCX with Ben Huygen and Jasper Jaegers? Unlike the other projects of UCX—which should be categorized as rather uninteresting examples of high-modernist reductionism—this building seems a bit more playful. It is defined by a series of curved balconies with trees on them. Is it ECO-POP? No. Obviously the UCX architects have not heard of Natalie Jeremijenko, who not only heals Polar Ice Cap Stress Disorder (get it?), but also plants trees upside down, as at MASS MoCA. The trees survive quite nicely. The project asks us to think about our manipulations of nature while at the same time showing us an extreme example of the non-natural. Had UCX hung their trees from the balconies the project might have been interesting, but as it is their project is little more than a tower with balcony plantings. The UCX architects, in other words, have not only NOT challenged us to rethink our attitudes toward nature, they have caved into the naïve notion of nature as an ideal—though constructed—landscape for the wealthy. That nature is constructed is obvious; that has been true for the last two hundred years at least. But do we engage that construction, how do we turn it on its head? This is what Jeremijenko does. Her upside down trees ask us to think through our expectations of nature. Had UCX really wanted to challenge the architectural cliché of the Photoshopped tree, they would have followed Jeremijenko's idea and hung the trees from the balconies.

Let me point to a far better project, the Nana Harbor Diner in Naha City Japan (Figs. 2, 3). It was designed by Takeshi Hazama and built by the engineering firm Kuniken Ltd.[2] There is some difficulty in knowing what to call it, but I will insist on calling it a building. Even so, it is not a project that would get even a passing grade as a studio project, despite the relatively sophisticated engineering that went into its construction.[3] The tree's bark was constructed by means of painted fiberglass reinforced panels supported by light gage steel frames. Hazama created small cracks in the panels and inserted mats and plants so that moss could grow from the branches. Eighty thousands small lighting fixtures were also installed on the tree skins and restaurant façade. At night, these lights illuminate and define the shape of the tree. It is an artificial/natural hybrid.

It is, all in all, an extraordinarily provocative design, especially as an alternative to the seductive tree romance of Avatar, which I see as extending the current (basically masculine) heroic fantasy of a computational fusion of nature and man. This tree plays on the difference between "nature" and "manmade." It is not a conventional tree house either, but has a modern—and rather provocatively standard—concrete building montaged into the branches. This syntactical fracture—in which both the tree and the restaurant are in quotes—is the key to this building's success. The design does not hide the restaurant in the tree, but launches it implausibly into its upper reaches, as if swept there by a great tsunami.

ARCH-POP challenges the idea of "ownership." All the basic images and imaginaries of the Nana Harbor Diner are nothing more than readymades. But by putting them together and placing them in a type of display against the banality of life—they get the core of the philosophical project of our unstable modernity.

Everything must be done to expose the transitory state as a cultural product. We can therefore take the Nana Harbor Diner one step further. My firm, ARCH-POP-INC, has, therefore, proposed to rebuild this tree—to clone it—next to the Stata Center designed by Gehry for MIT along Vassar Street in Cambridge Massachusetts. The Stata Center, after all, is part clone itself of the Gehry brand. So if architects clone their own work, and corporations work on the franchise model, why are we in the discipline of architecture so insistent in our pedagogy on our principles of authenticity and autonomy when this has long since been obliterated as a cultural model! The new Vassar Street tree is neither brand nor franchise, but an alien insertion that happily disrupts and exposes our cultural problem with "nature." Gehry's building is ostensibly a "sustainable" building and has received a Platinum Leed award, but it does not challenge us to think about either "nature" or "culture," or in the way their dual deaths are the only theoretical platforms on which architecture can legitimately operate. This new addition should make that possible. The area needs a good Japanese restaurant anyway.

Fig. 1 see Mark Jarzombek

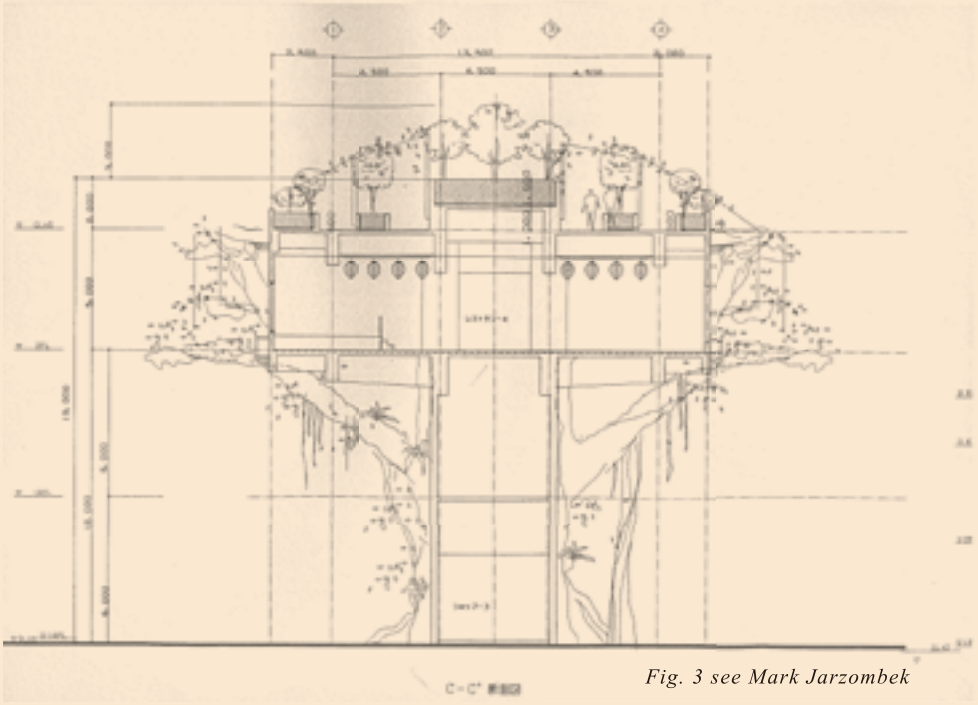


Fig. 3 see Mark Jarzombek

1. For an image search the site <http://www.moma.org/explore/collection/index> with the keywords "Glass Skyscraper, project, Elevation study."
2. Takeshi Hazama is a registered architect in Japan, although he has never been trained as an architect. He considers himself a designer, not an Architect. Hazama lived for many years in Italy where he worked as an assistant art director for the Italian movie director Federico Fellini. He was then hired by 20th Century Fox as an art director in Los Angeles. He then went on to produce TV commercials in Japan. Now, he bases his business in Japan as a designer-producer. He was part of the team that came up with some of the themes for the scenes of opening and closing ceremonies of the Atlanta Olympics. Though he is a licensed architect, Hazama is what one might call a "conceptual designer." The client of the restaurant was Kiyoharu Kakazu, the former head of the Ryutou Inc., which used to be Ryukyu Seito, a local sugar manufacturing company. The site is between the city of Okinawa and the airport, and, according to the architect, lacks good "Ki" or "quality." The tree was meant to compensate for this. It represents the gajumaru tree (Ficus Microcarpa), which grows in the region. Hazama envisioned that that the tree would form the basis of a commercial village around it, providing "Gokujo Kokage" ("the Best Shade under the Tree"). Feng shui was also taken into consideration. Four living Gajumaru trees were placed at the bottom of the tree.
3. I would like to thank Norihiko Tsuneishi, who interviewed Hazama for me and made the necessary translations.

$$N = R^* \times f_p \times n_e \times f_l \times f_i \times f_c \times L$$

The Drake equation states that:

where:

N = the number of civilizations in our galaxy with which communication might be possible;

and

R^* = the average rate of star formation per year in our galaxy
f_p = the fraction of those stars that have planets
n_e = the average number of planets that can potentially support life per star that has planets
f_l = the fraction of the above that actually go on to develop life at some point
f_i = the fraction of the above that actually go on to develop intelligent life
f_c = the fraction of civilizations that develop a technology that releases detectable signs of their existence into space
L = the length of time such civilizations release detectable signals into space.

Fig. 2 see Mark Jarzombek

THE ANXIOUS POP

A WALK IN THE PARK WITH MODELS

Hilary Brown

Some argue that models can be used to predict economic performance, stock movements, prices, and shopping patterns, among other things. Not only do models accurately predict values, but the models themselves can influence our future economic processes.[1] Time after time these models will fail to predict high impact and otherwise implausible events. In defense of models, their users will tell you that these events happen once in a lifetime, and their own models work in "normal" environments. Yet, in the past twenty years we have seen asset bubbles burst and financial crises in Asia, the United States, South America, and Europe. All of these are events would qualify and were described as once-in-a-lifetime events.

Broadly speaking, all models used in the financial sector are mathematical equations that give a value based on certain inputs used in order for companies to be able to give investors future performance guidelines. Businesses need economic guidance in order to make decisions. Financial companies need to value complex financial instruments. Put bluntly, models are used to make money, to figure out how much money can be made, as an alternative to marking financial instruments at fair value on corporate balance sheets, to provide mediocre to good guidance in certain times, poor guidance in uncertain times, and to appear that we are exterminating risk and uncertainty from our financial markets. Outside of finance, models can be used for forecasting purposes such as forecasting population for urban planning purposes, or for general government statistics.

In early 2007, the subprime mortgage market collapsed due to high default rates. A year earlier, despite slowing business, not one bank or homebuilder publicly acknowledged the coming crisis. When the crisis started by wreaking havoc on unregulated subprime lenders, banks, homebuilding companies, and most financial analysts were not initially worried. As a credit analyst looking at homebuilders, I saw the evolution of how these companies thought the crisis would affect them. Initially they were mostly confident it would have little to no impact on business operations, later they were confident it wouldn't last long, finally they were only confident that it would take a long time to get through.

Of course, these organizations were not basing their guidance on gut instinct. These are professionals who back up their statements with data and sophisticated models, which they use to forecast housing demand, prices, etc. A researcher turned consultant who worked for Credit Suisse, Ivy Zelman, made an interesting observation regarding homebuilding companies during housing crises. As their forecast models take past performance as guidance for future performance, it can take a very long time for homebuilders to realize how much they lost and to accurately forecast new demand. According to Zelman's research, the average time it took for homebuilders to figure out how bad it was going to get during a housing bust was when losses peaked. Essentially, you won't know how bad it will get until the worst arrives.[2]

1. Jon McKenzie, "Performativities, Counter-Performativities, and Meta-Performativities" (paper presented at the conference Performing the Future at the Haus der Kulturen der Welt, Berlin, July 8, 2010).
2. This document is not publicly available. My company paid Credit Suisse for research.

If you read any investment literature you will see the words, "Past performance is not indicative of future performance." Since models that look at past performance can have major flaws in predictive abilities, where do mathematically based models come into play? The Black Scholes Merton Model (BSM Model) is such a model.

The formula—$C(S,t) = SN(d1) – Ke –r(T – t) N(d2)$—is specifically used for what is called a "European call." A call gives one the right to buy a stock at price agreed upon by the buyer and seller. A European call allows one to buy the stock at the specified price only on the date the contract expires.

The formula says: the price of a call of S at time "t" is equal to option's delta minus the strike price to the power of negative risk free rate "r" (that is continuously compounded) multiplied by the time to expiration then multiplied by the asset's volatility.

This model, like all other models, makes assumptions about the environment that it operates in:

- The price of an underlying asset follows a lognormal distribution.
- The (continuous) risk free rate is constant and known.
- The volatility of the underlying assets is constant and known.
- Markets are frictionless (meaning there is no restriction to short selling, and no arbitrage).[3]
- The underlying asset generates no cash flows (i.e. no dividends, if it does you must adjust the model).
- The options are European (can only be exercised on the end date).

These assumptions are not realistic, except for the last one. At certain times arbitrage will be possible. In fact, some traders will use modified versions of this formula to find arbitrage opportunities. The volatility of the underlying asset will change. Additionally, the price of the asset is not lognormal, to assume so underestimates the risk of extreme price movements.[4]

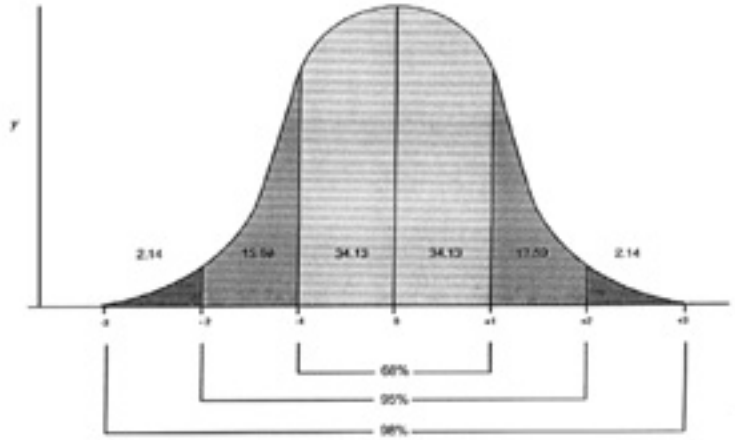
Since this model cannot handle the possibility of any deviation in volatility, it allows portfolio managers who use options and the BSM Model to take on large amounts of risk. For example, Long Term Capital Management, the hedge fund that employed the BSM Model's namesake Nobel Prize winning economists, imploded in the aftermath of the Russian financial crisis in 1998. Before the crisis, the fund and its investors enjoyed total returns of forty percent. The Federal Reserve Bank of New York organized a bailout due to the massive exposure of banks to the fund.

Let's look at the assumed lognormal nature of the underlying stock measured through Gaussian mathematics. The risk of a stock is measured with σ its standard deviation. Let's say I have a stock X, with an average value of ten and σ of five. If we plot all the possibilities of price outcomes of this stock, according to Gaussian principles, the graph will look like the one shown below.

3. Arbitrage is defined as riskless profit where equivalent assets have different prices.
4. Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable* (New York: Random House, 2007).

Overleaf: Elín Hansdóttir, One of three random incidents of visitor destruction, all occurring at the same location in PATH *(2008, National Gallery of Iceland)*

This is a standard normal distribution chart. Stocks are assumed to be lognormal since the value cannot go below zero. Lognormal distributions are skewed above zero. We have a sixty-eight percent chance the price of the stock will be between five and fifteen; a ninety-five percent chance that the price will be between zero and twenty. Of course, practically speaking, the stock price cannot go below zero, but just in the case that it can, we have a two percent chance that that will ever happen.



The normal distribution is easier for descriptive purposes, and both distributions have the same problem: underestimation of tail risk (extreme possibilities). Additionally, we must remember that past performance is not indicative of future performance. The the risk profile or standard deviation of the stock can change at any time in the future.

Another fault of this model is that Gaussian mathematics does not fit with what is actually observed. As you can see from the example above, not only is it easy to exclude extreme events from the range of possibility, but the math underestimates less extreme events—events that only deviate 3σ from the average. In purely mathematical models, the assumed Gaussian nature of data will skew the results to the average.

In Berlin, citing the work of Donald MacKenzie, Jon McKenzie stated that the possibility our future is performative, exemplified by the models we have developed and rely on. That is, originally designed to predict the future, our models can have the power to construct the future. The price of a European call is such because the BSM Model says it is—forget supply and demand and self-fulfilling prophecy. As Donald MacKenzie sees our current world, the BSM Model has "lost" its performative powers because the volatility of the underlying asset is no longer flat. According to MacKenzie, assets lost their flat volatility around Black Monday in 1987.[5] He does not speculate that we had an imperfect understanding of the assets in the first place, but that our markets waded into a less performative state.

5. On Monday 19, 1987, worldwide markets crashed by a huge margin, losses ranged from twenty-two percent to forty-five percent.

Overleaf: Elín Hansdóttir, Trace*, archival inkjet prints, 2010*

A WALK IN THE PARK WITH MODELS THE ANXIOUS POP HILARY BROWN

Blaming the underlying data is a common theme when constructing and using models, i.e. the statement, "Our housing forecast models are not working because they did not take into account the shadow inventory just unexpectedly released into the market." As this type of math can be applied to most disciplines, it seems all too easy to blame our lack of modernity and fix the data to fit our regression patterns and Gaussian bell curves.

Friedrich Hayek, a libertarian and anti-socialist economist, warned about applying rigid mathematics to economics. When a government tries to increase employment by stimulating demand, it can do more harm than good. There only seems to be a correlation between (aggregate) demand and employment because they are the most easily measurable metrics, but the correlation is impossible to prove.[6] On the opposite side of the political spectrum, Alain Badiou declares economic models and their graphical representation to be a tool of the bourgeois for economic enslavement. In a government's efforts to show "balanced expansion," it wards off social instability through its visual representation instead of scie ntific justification. This balanced expansion is merely governmental interventions in the economy designed at placating the lower classes while simultaneously allowing the bourgeois to retain power and property.[7]

Reliance on models can be more costly than imploding hedge funds as they have the power to shape societies, individuals, and determine how government interacts with both. Richard Sennett bemoans models of suburban development, advocating for densely populated areas and cities that are flexible to a dynamic evolving population. Hakim Bey rails against our social mores, the serfdom of children, and supports poetic terrorism aimed at injecting a little chaos in our lives.

The question is not simply binary, as in, "should we use models because they work properly or should we banish them because they fraudulently deceive." The recognition of a world not rationalized by math or another metatheory is unpalatable to most. Indeed, most proponents of this type of thinking often leave their readers unsure of precisely what is being proposed. These open ended (anti-)systems are complex, chaotic, unpredictable, anarchist, Marxist, laissez-faire and who knows what else.

When models are presented in any field, we can use them as tools, or theoretical constructs with their own limits. I propose not to be fooled into complacency about a world that can be simplified by rigid structures. In doing so we unwittingly submit to the very blindspots that these neatly crafted promises fail to articulate or simply ignore, which is exactly what puts our societies, our livelihoods at risk.

6. Friedrich August von Hayek, "The Pretence of Knowledge" (Lecture to the Memory of Alfred Nobel, December 11, 1974, http://nobelprize.org/nobel_prizes/economics/laureates/1974/hayek-lecture.html).
7. Alain Badiou, *The Concept of the Model, An Introduction to the Materialist Epistemology of Mathematics*, trans. by Zachary Luke Fraser and Tzuchien Tho (Melbourne: re:press, 2007), 12.

THE ANXIOUS POP

FEELING THE GLITCHES

Mendel Heit

The end of the 1990s brought the introduction of the first glitch music records to the public. For some the new type of music—made of clicks, cuts, disturbances, interferences, and noises—was just another chapter of electronic techno garbage (at this time, techno was called *Dosenmusik* by the elderly in Germany, literally "tin can music"). On the other hand, glitch music was a challenge, in the most positive sense of the word, with its producers taking bits and pieces from found sound, broken tapes, failing cell phones, *acouphènes*, and recorded industrial sounds, mixing, assembling, and finally composing something potentially hearable. Today music software companies and DIY music communities have figured out ways to incorporate clicks and cuts and audible glitches into our daily music consumption; plug-ins for music authoring software allow you to generate, control, and modify the quality of your glitches in a few clicks.

In digital imaging, glitches manifest themselves in pixel exchange and replacement, and color mixing, rendering their primary uses null. Often, memory of an old image lingers and is mixed into a new image, making the original image only slightly changed or completely modified. Pictures tend to slice with a stair effect, becoming oversized and re-colored. Distortion is common, with images slightly bent to one side. Scan-line and interlace artifacts recompose and cut into the image. Glitched images might stay recognizable in the background, under a slightly transparent layer; alternatively, everything could be covered with the no trace of the original. On top of these formal and color-based distortions, pieces of text or meta-data elements, like numbers, characters, and symbols, can be randomly incorporated.

Videos are also very accustomed to glitch-attacks. Compression algorithms, and slow or defective hardware often help create surprising visual disturbances. The effects here are enhanced because of the image flow. Sometimes video glitches follow a moving subject in a static shot like a halo of colorful pixels and signs. Like the aforementioned still images, the memory of a previous moving image may be integrated into the current frame. The viewer sees a fraction of an image that is static, while the rest continues in motion. These moments are optimally experienced with older digital TV receivers with slow hardware components, or a low TV signal.

In electronics and programming glitches belong to everyday life. Designing electronic circuits and programming aren't easy disciplines, the languages are rather complex, making errors and malfunctions a part of the design process. Programming itself is an unlimited resource and platform for surprising effects within well structured and designed systems. For the human eye, software and hardware glitches show themselves in all sorts of applications. In computer games some 3D objects lose their texture, screen and controllers start flickering, or the sound might even start hanging like an scratched CD that repeats the last five seconds of a track over and over again. A favorite is the glitch drawing effect achieved on your computer screen when your computer freezes. While your mouse cursor moves, the image of the previous position of your cursor stays, or the windows of your operating system superimpose themselves dramatically, leaving no space for a peaceful exit unless you hit the power button. Printers can also output glitches on texts and images by replacing typography with illogical signs, numbers, and geometric shapes.

The production of objects can experience glitch-like elements as well. Injection molding machines, as well as packaging, CNC-milling, extrusion, 3D-printing, laser, or waterjet-cutting machines can produce defect objects: material can be squeezed out of the mold, the milling tool can potentially burn the material or not mill according to the programmed design, packaging can close itself before the product has been inserted. Very impressive glitches also happen with specific materials like glass or metal: air bubbles can become caught in glass objects, metal surfaces absorb modified colorations, wood warps in specific conditions, plastic degenerates.

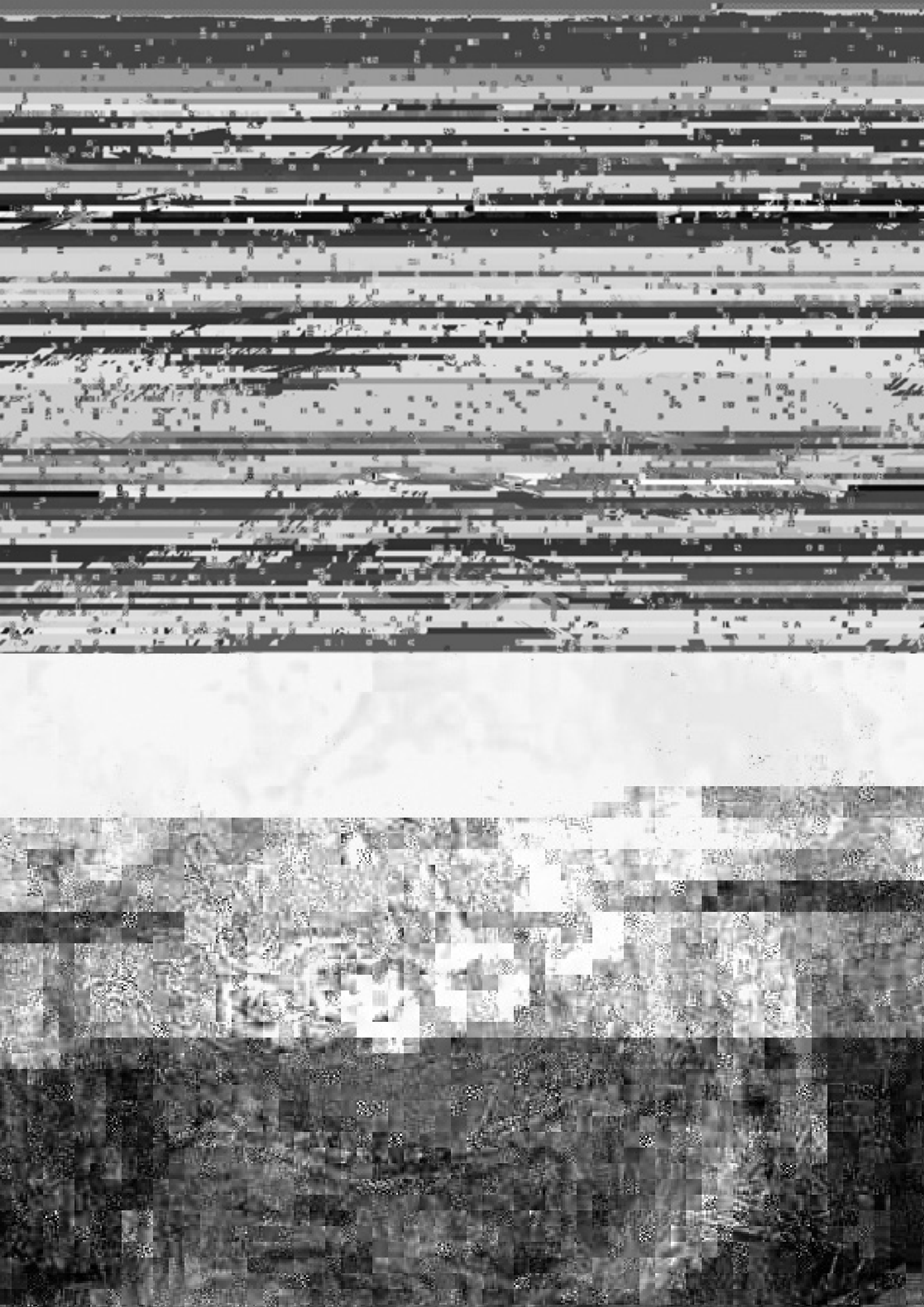
In most cases, glitches are unexpected and surprising. But it is also possible to purposefully generate or design them. Cartridge tilting is a glitching technique among (old school) gamers consisting in the abrupt removal of the game cartridge out of the console during gameplay, thus interrupting the data flow. The effects can vary from missing sound or textures to total freeze.

If you want a digital image to be tortured, if you want to create dissonant sound with a musical instrument, or create randomized unique shapes for a same object, you can generate it. Like many other creative disciplines, typography dared to play with glitches. Typefaces can be modified to look dirty, used, or speckled, but you can also manipulate them to appear distorted and imperfect. Antonio Roberts, a glitch collector, worked on a piece of code to generate a glitchy typeface called "dataface," which mutates at every compilation. Generating glitches into digital images is also known as databending, and can be done with more or less control. Graphic and interaction designers use glitch in their work to generate attention, by assembling startling sounds or visual disturbances to catch the eye.

As music did with the incorporation of audible glitches and noises, other creative fields now use and generate functional elements and formats that were formerly considered as errors and dissonant statements. Sometimes a glitch can lead you to a totally new and innovative idea for your business, inspire a book title, or define a basic idea for a new product, even inspire a new formal language. Glitches grab our attention, shake us, and trigger our imagination. They can hurt or activate our feelings during gameplay or TV watching, feed our visual and audible space with new aesthetic choices, or inspire new working processes. The act of generating glitches itself then becomes entertainment, research, and production.

Even if at first a glitch disturbs our comfort zone, hustles the systems and models we install and follow on a daily basis, they should not be considered as damaging elements to a design process. Our prefabricated models tend to keep us safe from errors and change, and these errors occur more often than we would presumably like them to. By daring the glitch and generating imperfection, we open ourselves to new poetic ways to embrace the unknown, experiment with new techniques, and refute the notion of a finished, end product.

Overleaf: Mendel Heit, Glitch images*, 2010*



BLACK SWAN SPACES

Miodrag Kuč

"Is it not the confrontation with the unexpected which makes the city such an exciting place?"[1]

Ecosystem Patterns

There is a long history of making parallels with nature in an urban context. These relations usually transfer the logic of nature into the built environment by copying aesthetic patterns or searching for semiotics. Vast amounts of utopist thought perceive the city as an organism, constantly finding metaphors and looking for better infrastructural features of modern urban conglomerations.

Efforts to examine the city through its performability are particularly common in the sphere of urban planners that "predict" urban development based on economic and demographic growth. These efforts often ignore spaces that have been arranged as a set of unpredictable situations and mutations in conventional urban development. Is it possible to read the city by using the powerful symbol of the "Black Swan" phenomena?

Black Swan Spaces are created outside of a planner's radar. They are unexpected, indeterminate, and have no official function or program. They are marginal territories, niches for resistance characters, destinations for those who refuse the totalitarian nature of planning and urban politics.

Black Swan Spaces, as black swans themselves, have their own aesthetic qualities—they are not simply spatial anomalies, especially when we look into their socio-political meaning. Ignored by elites and forgotten by citizens, those "more then gaps" in urban development generate new cultural values, unknown to common anthropological studies.

How and Why Do Black Swan Spaces Appear?

First of all, the inability of urban planners to quickly respond to processes such as stagnation or recession, demographic turbulence, new climate realities, and increasing armed conflicts, can be understood as a starting point for the configuration of Black Swan Spaces. Secondly, the current egocentric position of architects as central figures in building processes (near Pop stars, hence the emergence of the term "starchitect"), and the entirely different and difficult reality in which the role of the architect is marginalized and manipulated contribute to the growth of so-called architecture without architects. Finally, the human factor itself and behavior patterns developed from simple rules (like in John Conway's Game of Life) define models of urban evolution. These are spaces that have been born without being planned, spaces that die without a decision to demolish them, spaces that survive radical changes in their environment by adopting new rules.

Given that networks generate today's dominant organizational patterns, Black Swan Spaces exist in a state of tension. The transnational character of resistance contributes to this debate; grassroots activism and micro-politics went far beyond the concept of community gardens and materialize in entirely different cultural settings using the advantages of the blogosphere.

Not necessarily the product of urban failure, Black Swan Spaces should not be confused with ordinary shifts in an architectural program or space recycling concepts that turn post-industrial landscapes into clusters of knowledge production; their creation is unforeseen, has no clear scientific explanation, and involve a wide spectrum of factors.

1. Kenny Cupers and Markus Miessen, *Spaces of Uncertainty* (Wuppertal: Müller + Busmann, 2002).

Users as Indicators and Interplay Factors

Changes from public-private into restricted-neglected spatial relations generate new planning models that "destruct difference and contradiction in the name of preservation," and support social exclusion.[2] Typical users of Black Swan Spaces reject imposed architecture and initiate new programs that have no intention to be successful (in normative terms) or recognized by authorities. Going beyond survival strategies, new tenants also build sustainable communication systems and transfer these developments to new locations. They are not urban pioneers that simply bridge the holes in urban development, rather unknown heroes that repossess abandoned spaces and impose new socio-political values without coquetting with authorities.

Black Swan Spaces can also be transitional places for marginalized social groups (Fig. 1), places of informal economy (Fig. 2), or even places for illegal gatherings and entertainment (Fig. 3). What is obvious is that users serve as indicators of missing programs and urban polarization. Their micro-political statements in colonized spaces should be recognized by urban theorists not just as irregularities, rather as vital answers to urban uncertainty.

Furthermore, parallel to squatting strategies is the innovative nature of reclaiming, in which architecture acts as the scenography for the theater of everyday life. Different subcultures, marginalized society, and urban pirates bring voices of diversity into neglected territories, confronting the "banalization" of public life and the order of bureaucratic systems.

The appearance of Black Swan Spaces could be also understood as "poetic shock," reminding us that urban contradictions and paradoxes are equal part of the urban arena, right beside the planned city embedded in parameters and land-use policies. Dealing with the unexpected in urban areas, we also have to consider "individual logic of cities" where certain cultural and economic preconditions distinguish surprise.

As Black Swan Spaces are ephemeral and difficult to grasp, our only task is to interpret the messages that informal urban actors are throwing, without capitalizing on them for the sake of urban renewal and other forms of spatial control.

Fig. 1

Fig. 2

2. Cupers and Miessen, *Spaces of Uncertainty*.

HEAVEN ON EARTH: THE TOTAL STATE

Ross Exo Adams

By 1922, a certain notion of Empire was already clear for Carl Schmitt when he remarked of the European state that "[t]he machine now runs by itself."[1] What he was describing was the increasing embeddedness of the state within society—the "total state," whose rejection of transcendent sovereignty would see its concerns spreading more profoundly within the earthly affairs of society than ever before. Today, with the global triumph of liberal society, the notion of an immanent, "self-propelling machine" could, to a certain extent, be said to underlie many of our perceptions of contemporaneity: technology (progress), society (integration), and not least of all, politics (consensus). As Giorgio Agamben has argued, this eclipse of immanence over transcendence within the organization of Western society was something set in motion centuries ago.[2] Yet, while such an understanding can explain many facets of the development of the state, the division of public and private realms, the rise and hegemony of capitalism, etc., it does not directly account for the equally linear growth and dispersion of mechanisms of control and domination that Michel Foucault has eloquently described in his studies of governmentality.

Seemingly, thus, one could posit that we have in fact two parallel genealogies that were both born out of the same rupture in the late sixteenth century: that of an enlightened society exploring a universe without transcendence; one grounded in the newfound immanence of all worldly possibilities—sciences, arts, and human production; and that of political prognosis, the rise of apparatuses of control, discipline, and what Foucault would call mechanisms of security, both seeming to advance in reciprocity and unison. While both of these lineages are fairly uncontroversial in themselves, I would like to put forth the provocation here that the relationship between the two is bound by a certain anxiety new to human history that was produced by the slow erosion of any possible transcendent horizon—the elimination of the prospect not only of a divine plane of existence, but indeed of any constituent *other*, exteriority and difference to human existence. In this way, I want to postulate that the history of governmentality that Foucault articulates, its various mechanisms and apparatuses of control, regularization, security, and biopower, constitute a singular, negative response to the angst of a world maddeningly immanent to itself—a totality slowly losing site of its exterior in its efforts to maintain purchase on that which constitutes its ever-expanding interior. The state, from its birth in the late sixteenth century until today, with its obsessive and ever-totalizing attempts to gain mastery over the vastness of uncertainty of life, will be the motor behind this history.

Until the sixteenth century, within the eschatological framework of time that the Catholic Church provided, the history of human expectation and anticipation could be assured a sense of consistency, however uncertain the End of the World would prove to be. In this way, the Catholic Church maintained a kind of monopoly on the future and thus on the lives of those under its temporal sway. As an institution whose truth is predicated on the arrival of the apocalypse, the Church had to constantly integrate the future within its structuring of time. Its substantive existence as a worldly institution was based entirely on its perpetual indeterminacy with regard to the concrete End of the World: It had to constantly posit the possibility of this event, while never confirming its arrival. As a result, the production of all visions of the future was a task solely administered by the Church. By the early sixteenth century the Reformation would give birth to a war whose momentary peace with the signing of the Peace of Augsburg would grant for the first time the earthly activity of "politics" the power to now decide the fate previously determined by the heavens. For the first time in Christian history, peace was to be both the goal and responsibility of the modern states, whose birth was confirmed nearly a century later.

In contrast to most positivist accounts of the Renaissance, with no eschatological horizon, a terrifying liberation of worldly uncertainty was unleashed across Europe. All forms of astrological and apocalyptic presentiment beset a society deprived of its divine destiny. In this vacuum, the absolutist state began to recover control over the future relinquished by the Church, vehemently setting itself against any and all forms of prophecy and divination, monopolizing this task as its own.

Having, in this way secularized the future, time, under state rule, became the linear object of prognosis. As Reinhardt Koselleck tells us, political calculation together with humanist sobriety delineated the axes of a new, secular future. With its zealous disavowal of religious prophetic indeterminacy, the state employed rational political forecasting, giving both cadence and possibility to uncertain future events: the future became the domain of probability, and salvation, its knowledge. Koselleck enunciates the relationship between prognosis and the early state:

> Rational prognosis assigns itself to intrinsic possibilities, but through this produces an excess of potential controls on the world. Time is always reflected in a surprising fashion in the prognosis; the constant similitude of eschatological expectation is dissolved by the continued novelty of time running away with itself and prognostic attempts to contain it. In terms of temporal structure, then, prognosis can be seen to be the integrating factor of the state that transgresses the limited future of the world to which it has been entrusted.[3]

In short, the state enters a period of "open historicity," of indefinite permanence in which it has neither origin, nor end. Instead, it exists by the necessity and urgency of a future with no particular hope, in which the state exists to perpetually save itself. *Raison d'État,*[4] that most tautological of self-manifestations, comes to drive the apparatus of absolutist governments to permanent self-awareness in relation to the threat of external competition and the burden of unlimited peace. Against this ominous horizon, the state will arm a vast new apparatus with the political technique of "statistics," charging itself with the task of the perpetual collection and monitoring of state knowledge.

Foucault's work in *Security, Territory, Population* presents a genealogy of the modern state emerging from this condition, which reveals a history dominated by the perpetual accumulation of mechanisms and apparatuses of control that corresponds with the ever-increasing uncertainty haunting the state. Just as political prognoses would continuously expose possible futures, they would equally disclose potential threats arising from both outside and from within the state—war and sedition. His discussion of the concept of *Polizeiwissenschaft*, or the science of the police, which emerged in response to this, brings to light a certain crucial advancement in the history of modern state power no longer preoccupied by the heavenly assurances of eschatology. The seventeenth-century German police state would primarily operate by the reciprocal interaction between sovereign authority and police discipline, functioning by measures of brutal repression and prohibition. By the eighteenth century, the increasing importance of the market in the interests of maintaining international peace would bring about a critical set of reforms to the state instigated by the physiocrats. With

1. Carl Schmitt, *Political Theology: Four Chapters on the Concept of Sovereignty* (Chicago: University of Chicago Press, 2005), 48.
2. See Giorgio Agamben, *Il Regno e la Gloria: Per una genealogia teologica dell'economia e del governo. Homo sacer, II, 2* (Milan: Neri Pozza, 2007).

their insistence on a laissez-faire approach to government, the state would concern itself with the management of evermore-earthly matters surrounding the development of capitalism and its requirements of free circulation. These reforms, far from supplanting the presence of the police, saw in fact the augmentation of their disciplinary apparatuses by new set of more sophisticated and diffuse mechanisms of regulation. This new framework of security would operate at a much finer scale, penetrating far deeper into the population—the new *subject-object* of government, whose shifting composition produced endless phenomena to be monitored by the state. Between both disciplinary mechanisms and apparatuses of regulation, a new totality of state control would span from the minute interstices of life to the general conduct of the population in relation to its external forces. However, by the nineteenth century, the state would further expand its interests, shifting its concern from the economic competition between states to that between individuals. With this, the liberal ideal of "civil society" would emerge, which coincided with the multiplication of security apparatuses, intensifying their effect in proportion to the expansion of the increasingly globalized economic space. This new conception of control, because it appealed to contingencies and phenomena of reality, became recognized simply *as nature*, thus rendering it at once pervasive and invisible.

It is clear that the liberal turn arrived not in opposition to the absolutist state, but rather as a reform from within it. It is thus not surprising to note that such an "opening-up" of state practices of monitoring and control coincided with their intensification, which was precisely proportional to the distribution of rights and freedoms promised by liberal politics, and made possible only by the liberation of governments from monarchical administration. As such, the dismantling of police that took place should be seen as more of an institutional displacement of its functions. Now, state knowledge would be provided by a decentralization of police, and their displacement across new forms of institutional administration: economic practice, population management, law, and the elimination of disorder.

With the birth of liberalism in Europe, the state and its growing purchase on civil society increasingly presented itself as a universality capable of knowing and ordering everything within its grasp. It seemed that with the rise of the Third Estate in France and its identity of the nation (bourgeois society) and the state, followed by Napoleon's imperial disposition and the creation of a capitalist-driven European alliance, the immanence of the liberal state had achieved a kind of epistemological zenith.[5] Its perpetual references to nature gave further credence to the state as a sort of secularized kingdom, a realization of what is naturally immanent to mankind. Yet in proportion to the retreat of transcendence within the state, there has consistently been reciprocal intensification and sophistications of state control, colonizing ever finer, microscopic levels of control. With the birth of nineteenth-century biopolitics and its radical developments over the course of the twentieth century, the state's concern has been to render its actions invisible: through the very acts of monitoring, policing, and managing, the state at once must depoliticize its own activities while also providing material evidence of the "naturalness" and completeness of the society it purports to endorse. It is this same politics which aims to represent the entire social order as a closed, universal, "self-propelling machine" with no exterior. Seen in light of its obsessive, yet increasingly diffuse practices of control, contemporary neoliberalism is rather a negatively totalizing politics—a politics that seeks not to exist while simultaneously proffering the claim that it is all that exists.

3. Reinhardt Koselleck, *Futures Past* (New York: Columbia University Press, 2004), 19.
4. *Raison d'État*, or "state reason," is both the essence of the state itself as well as the art of knowledge of its affairs. See Michel Foucault, *Security, Territory, Population* (Basingstoke: Palgrave Macmillan, 2007). In particular, lectures from March 8, 1978; March 15, 1978; and March 22, 1978.
5. This claim of course acknowledges that even if European states would officially remain administered by one form of monarchy or another until late in the nineteenth century, this particular period marked a certain qualitative triumph for liberal society.

PLUTO IN CAPRICORN JANUARY 25, 2008 to MARCH 23, 2023

Walter Mercado

Streamlining the economics of big business will be a very strong issue for the next twenty years.

The last time Pluto transited Capricorn was in 1762–1777 when the Great American Nation was born. The United States rebelled against English occupation. We will see strikes and demonstrations against the established authority and politically obsolete patterns.

Aries
Pluto, in your professional sector, enhances your reputation's summit. You'll have more determination and courage.

Taurus
In your sector of good luck Pluto will bring peace and happiness.

Gemini
Total transformation of your life.

Cancer
Few but good people will join you in love or business.

Leo
You'll be king on the labor front.

Virgo
Creative energy in abundance. Children, love, and romance embellish your life.

Libra
Seek and find security in your life.

Scorpio
Pluto gives authority to your communication.

Sagittarius
You will know and intuit how to earn and invest your money.

Capricorn
Pluto will visit you, educate you, and change the course of your life.

Aquarius
You will dive into the spiritual.

Pisces
You will be among the rich and famous.

Photo by Ramón Feliciano

Radix-Horoskop (Datenblatt)

Tine Zuckermann	Uhrzeit	19:00
geboren am Mo, 4. Okt. 2010	Weltzeit	17:00
in Berlin (Berlin), D, 13e21, 52n29	Sternzeit	18:46:31

Astrodienst AG
Dammstr. 23, CH-8702 Zollikon
Internet www.astro.com

Typ D2AT, Auftrag 0.0-1
Methode: Astrodienst

Planetenpositionen

Jul.Tag 2455474.209103 TDT, ΔT 66.5 sec

Planet	Länge	Haus	tgl. Bew.	Breite	Deklination
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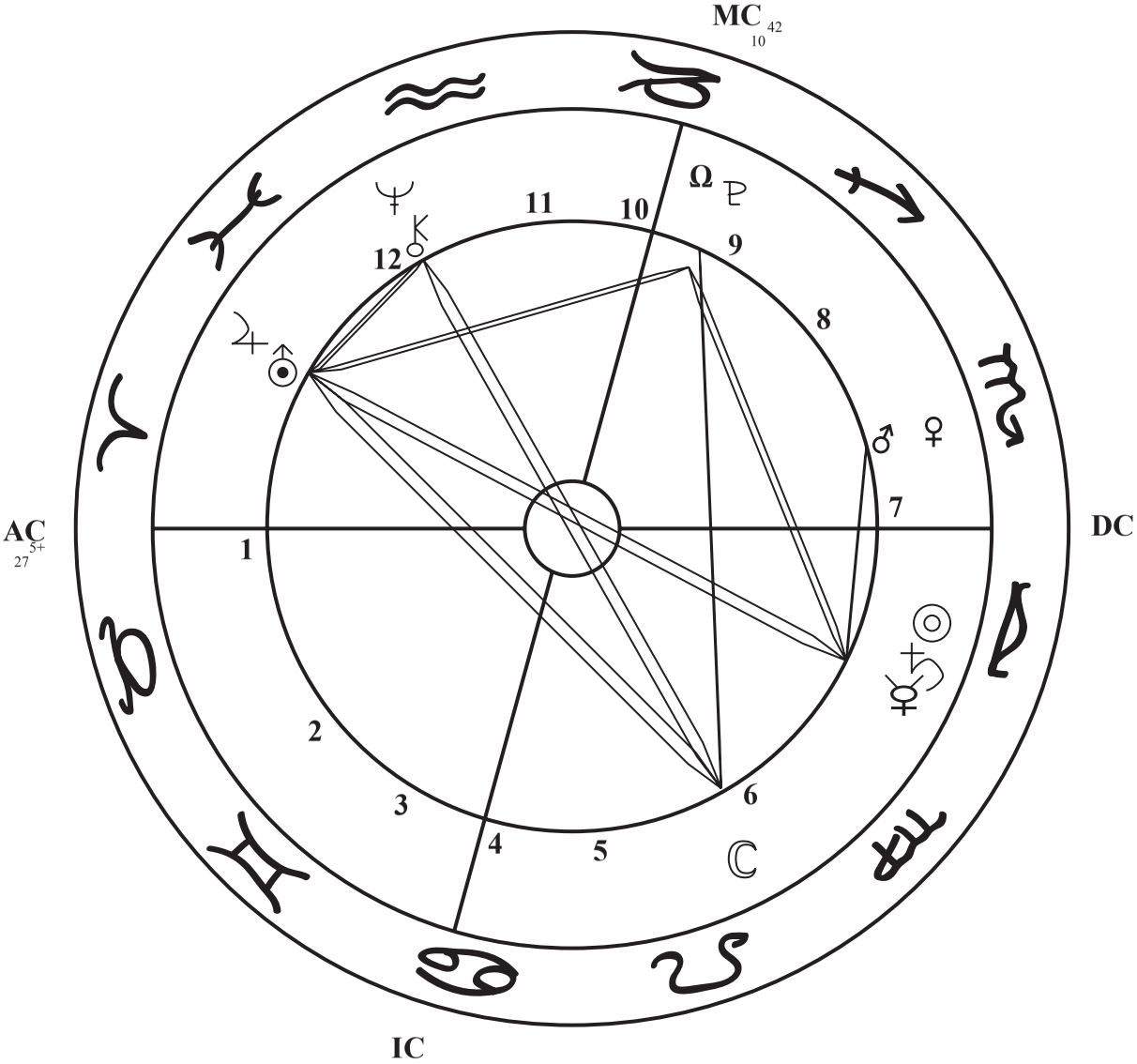
☽ Mond	♋ 28° 8'50"	5	14°48'53"	3°54'28" S	8°26'50" N
☿ Merkur	♎ 1°55'38"	6	1°47' 8"	1°50' 4" N	0°55' 1" N
♀ Venus	♏ 12°59'17"	7	8' 5"	6°53'58" S	22°18' 2" S
♂ Mars	♏ 13°25' 2"	7	41'24"	0°18'18" S	16° 9'24" S
♃ Jupiter	♓ 26°39'41"℞	12	-7'29"	1°35'33" S	2°47'19" S
♄ Saturn	♎ 8°11'53"	6	7'23"	2° 9'58" N	1°15'38" S
♅ Uranus	♓ 28° 5'31"℞	12	-2'19"	0°47' 7" S	1°28'45" S
♆ Neptun	♒ 26°13' 0"℞	11	-1' 2"	0°29'21" S	13°14'18" S
♇ Pluto	♌ 2°53'57"	9	38"	4°46'24" N	18°38' 3" S
☊ Mondk/m	♌ 6°58'58"	9	-3'10"	0° 0' 0" N	23°15'15" S
☊ Mondk/w	♌ 7° 3'57"	9	-6'41"	0° 0' 0" N	23°15' 0" S
⚷ Chiron	♒ 26°34'49"℞	11	-1'50"	6°18'46" N	6°42'40" S
⚸ Lilith	♓ 10°59'40"	12	6'42"	4°37'39" N	3° 9'29" S

Häuser (Plac.)		Deklination
Asz.	♈ 27°54'23"	10°43'44" N
2	♊ 3°28'28"	20°50'53" N
3	♊ 23°33'50"	23°16'55" N
IC	♋ 10°41'32"	23° 0'28" N
5	♋ 29°55'32"	20° 9'55" N
6	♌ 28°55'12"	11°50'57" N
Desz.	♎ 27°54'23"	10°43'44" N
8	♐ 3°28'28"	20°50'53" N
9	♐ 23°33'50"	23°16'55" N
MC	♑ 10°41'32"	23° 0'28" N
11	♑ 29°55'32"	20° 9'55" N
12	♒ 28°55'12"	11°50'57" N



Aspekte

	☉	☽	☿	♀	♂	♃	♄	♅	♆	♇	☊	⚷	⚸	AC	MC
☽	∠ -1°47s														
☿	☌ 9°26a														
♀	⚺ 1°37a														
♂					☌ 0°26s	☍									
♃		⚻ 1°29s	☍ -5°16s	☐ -1°20s	☐ -1°45s										
♄	☌ 3°10s		☌ 6°16a												
♅		⚻ 0°03s	☍ -3°50s	☐ 0°06a	☐ -0°20s	☌ 1°26s									
♆	☐ -0°09s	☍ -1°56s	⚼ 0°17a			⚺ 0°27a		⚺ 1°53a							
♇	□ -8°28s	△ 4°45a	□ 0°58a			□ -6°14s	□ -5°18s	□ -4°48s							
☊	□ -4°23s						□ -1°13s			☌ 4°05a	☊				
⚷	☐ 0°13a	☍ -1°34s	⚼ 0°39a			⚺ 0°05a		⚺ 1°31a	☌ 0°22a			⚷			
⚸	⚻ -0°22s			△ -2°00s	△ -2°25s								⚸		
AC		△ 0°14a				⚺ 1°15s		⚺ -0°11a	✶ 1°41s	△ -5°00a		✶ 1°20s		AC	
MC	□ -0°40a		□ 8°46s	✶ -2°18a	✶ -2°43a		□ 2°30s		∠ 0°31a	☌ 7°48s	☌ 3°43s	∠ 0°53a	✶ 0°18a		MC

THE ANXIOUS POP

ON THE BLACKNESS OF SCIENTIFIC AND OTHER SWANS (excerpt)

Jan Bovelet, Kai Dolata (urbikon.com)

“AB + Ab + aB + ab + 2ABb + 2aBb + 2AaB + 2Aab + 4AaBb”[1]

Science herds its own sorting of swans; Science Swans are discoverable, object-based things. If a swan is a member of a scientific herd, its color is either white or black. The color, or the gradation of Design Swans, in contrast, is nothing a designer discovers, rather something he invents in a process.

One black swan is all it takes to make the scientific all-swans-are-white theory history. Science is invested in corralling herds of white swans, prioritizing the size of the herd, and denying interaction with black swans. In design, you find swans in every grayscale between black and white. Additionally, Design Swans’ gradation very often changes within the black-white spectrum over the course of history.

In design, the familiar relationships between all swans within a herd determine whether a newly hatched swan is black or gray. It’s rather unlikely that a swan hatches as white, but not impossible, as some Design Swans know the art of identical reproduction, and thus design their own progeny.

An ideal exemplar of a Design Swan is one that hatches in black and immediately turns white after it has been released into the wild—a phenomenon that is generally uncommon. In design, swans very often hatch in gray and stay gray for a lifetime. They may turn slightly lighter, but they never become completely white. Gray swans comprise the majority of the Design Swan population.

The second largest contingent of the Design Swan herd is white. In brushing their plumage and observing a healthy diet, they follow a more stable way of life and are thus the easiest to corral.

If a Design Swan ever turns white, it stays white; it’s petrified white unless society changes, unless fashion changes. There is no way for a Design Swan to become darker again, unless the whole breed is roused or moved into a different environment.

The smallest part of a Design Swan herd, however, is black, the most ephemeral color of all. Already nearly impossible to invent or breed a pure black swan, it is veritably impossible for such an exemplar to conserve its blackness. As soon as it enters its herd of swans, it starts to bleach. Bringing it into contact with others affects its brightness; it either immediately turns white or it turns grayer and grayer until it eventually turns white. But the more shades of gray a Design Swan assumes, the more unlikely it is that it will turn white at all.

Science Swans and Design Swans are not common in nature, even in light of recent crossbreeding. Science Swans are either white or black, often changing from one to the other but never remaining indeterminate, never gray. If a white swan mates with a black swan, their offspring is either white or black. If a Science Swan is born black or becomes black, it is excluded from the herd, as it challenges the canonical forms and conventions of the herd. In contrast, Design Swans only reveal their color when confronting other swans of their herd; they are valued as black precisely because they bear the potential to challenge the forms and conventions of the herd. The only agency a designer has is his freedom to arrange Design Swans, but only within a linear spectrum, from black to white, which is only possible by taking the relation of every arbitrary pair of swans into consideration. This can lead to a potentially infinite task and thus calls for an active, creative solution. If the designer separates one Design Swan from the herd, two strange things occur: first, the swan he selects turns out to be colorless, and second, all the swans in the herd become darker or lighter, as the herd—which determines the color of each single swan—transforms its identity.

1. Development scheme for hybrids with two varying attributes: Gregor Mendel, *Versuche über Pflanzen-Hybriden* (Brünn, 1866), 28.

Video Stills from François Bucher's La Nuit de L'homme, *HDV, 90 minutes (approx.), 2011*

Video Stills from François Bucher's La Nuit de L'homme, *HDV, 90 minutes (approx.), 2011*

THE ANXIOUS PROP

MUTATION, RUPTURE, AND NEW POSSIBILITIES

Morgan Belenguer

The new text does not hold up a mirror to the old; rather, it presents a window onto its future.

Uus tekst ei oota peegli vana, vaid see kujutab aknast oma tulevikku.

Ang mga bagong teksto ay hindi inaasahan ng isang lumang salamin, ngunit nagtatanghal ng isang window ng iyong hinaharap .

Uusi teksti ei odota vanha peili, mutta esittelee ikkunoista tuleva .

Le nouveau texte ne prévoit pas que le miroir ancien, mais présente les fenêtres de l'avenir.

O novo texto non espelha o antigo, pero amosa as fiestras do futuro.

ახალი ტექსტი არ ასახავს ძველი, მაგრამ გამოჩნდება ფანჯარა მომავალი.

Ein neuer Text spiegelt nicht die alten, aber das nächste Fenster erscheint.

Ένα νέο κείμενο δεν αντανακλά το παλιό, αλλά εμφανίζεται το επόμενο παράθυρο.

Yon tèks New pa reflete vye a, men montre fenèt kap vini an.

הטקסט החדש לא משקף זקן, אבל מציג את החלון הבא.

नया पाठ पुराने, नहीं दर्शाता है, लेकिन निम्न विंडो प्रदर्शित करता है.

Új szöveg régebbi, nem mutatja, de a következő ablak jelenik meg.

Nýr texti er gamall, en ekki sýnt, en sjá eftirfarandi gluggi vilja birtast.

teks baru sudah tua, tidak ditampilkan, namun lihat jendela berikut akan muncul.

Tá an téacs nua aois, ní thaispeántar, ach féach beidh an fhuinneog a leanas le feiceáil.

Il testo nuovo secolo, non dimostrato, ma si veda la seguente finestra apparirà.

新世紀のテキスト、表示されませんが、表示される次のウィンドウを参照してください。

신세기의 텍스트 표시되지 않지만 나타나는 다음 창을 참조하십시오.

Neuzrāda tekstu, kas parādās New Century, skatīt šādu logu.

Nerodyti tekstą, kuris pasirodys naujame amžiuje, pamatyti šį langą.

Сокриј го текстот кој што се појавува во новиот век, видете го следниот прозорец.

Sembunyikan teks yang muncul pada abad baru, lihat tetingkap berikut.

Hide it-test li jidher fl-seklu l-ġdid, ara l-tieqa li ġejja.

Skjul teksten som vises i det nye århundret, se følgende vinduet.

مخفی کردن متن است که به نظر می رسد در قرن جدید ، دیدن پنجره زیر است.

Ukrywać się tekst, który pojawia się w nowym wieku, następujące okienko.

Esconder o texto que aparece no novo século, a janela seguinte.

Ascunde textul care apare în noul secol, fereastra următoare.

Скрыть текст в новом столетии, в следующем окне.

Сакриј текст у новом веку, у следећем прозору.

Skryť text v novom storočí, v nasledujúcom okne.

Skrij besedilo v novo stoletje, v spodnje polje.

Ocultar texto en el nuevo siglo, en el campo de abajo.

Kujificha Nakala katika karne ya mwezi, katika uwanja chini.

Dölj text i det nya århundradet, i fältet nedan.

ซ่อนข้อความในศตวรรษใหม่ในช่องด้านล่าง

aşağıdaki kutuya yeni yüzyılda gizle mesaj.

Прибрати повідомлення в полі нижче в новому столітті.

نئی صدی میں نیچے دیئے گئے خانے میں چھپا پیغام.

New Century ẩn tin nhắn vào hộp dưới đây.

Ganrif Newydd neges gudd yn y blwch isod.

נײַ יאָרהונדערט פאַרבאָרגן אָנזאָג אין דעם קעסטל אונטן.

New Century verborge boodskap in die boks hieronder.

Re mesazh shekullin e fshehur në kutinë më poshtë.

الجديد في القرن رسالة مخبأة في المربع أدناه.

Նոր դարում թաքնված հաղորդագրություն ստորեւ.

Yeni əsrin gizli aşağıdakı mesajı.

Ondorengo mendean, berriak ezkutuko mezua.

Наступнага стагоддзя, новыя скрытыя паведамлення.

На следващия век, нови скрити послания.

El proper segle, els nous missatges ocults.

在下一个世纪，新的隐藏讯息。

Idućem stoljeću, nove skrivene poruke.

Příští století, nové skryté zprávy.

Det næste århundrede, nye skjulte beskeder.

De volgende eeuw, nieuwe verborgen boodschappen.

The next century, new hidden messages

Overleaf: Video Still from François Bucher's La Nuit de L'homme*, HDV, 90 minutes (approx.), 2011.*