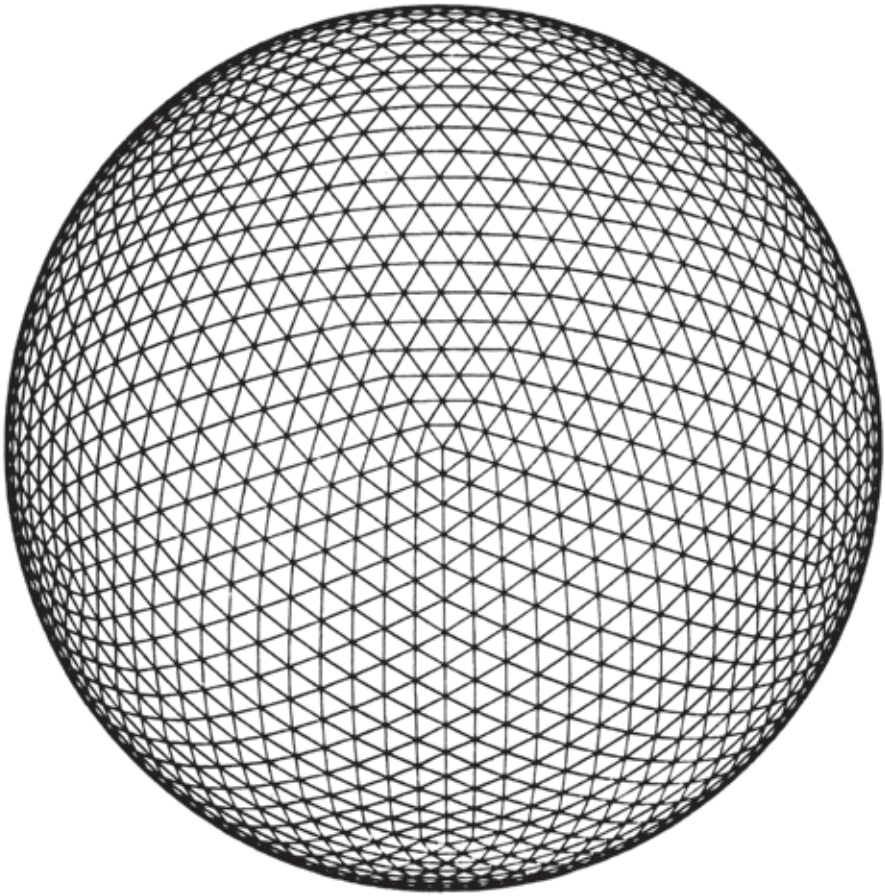

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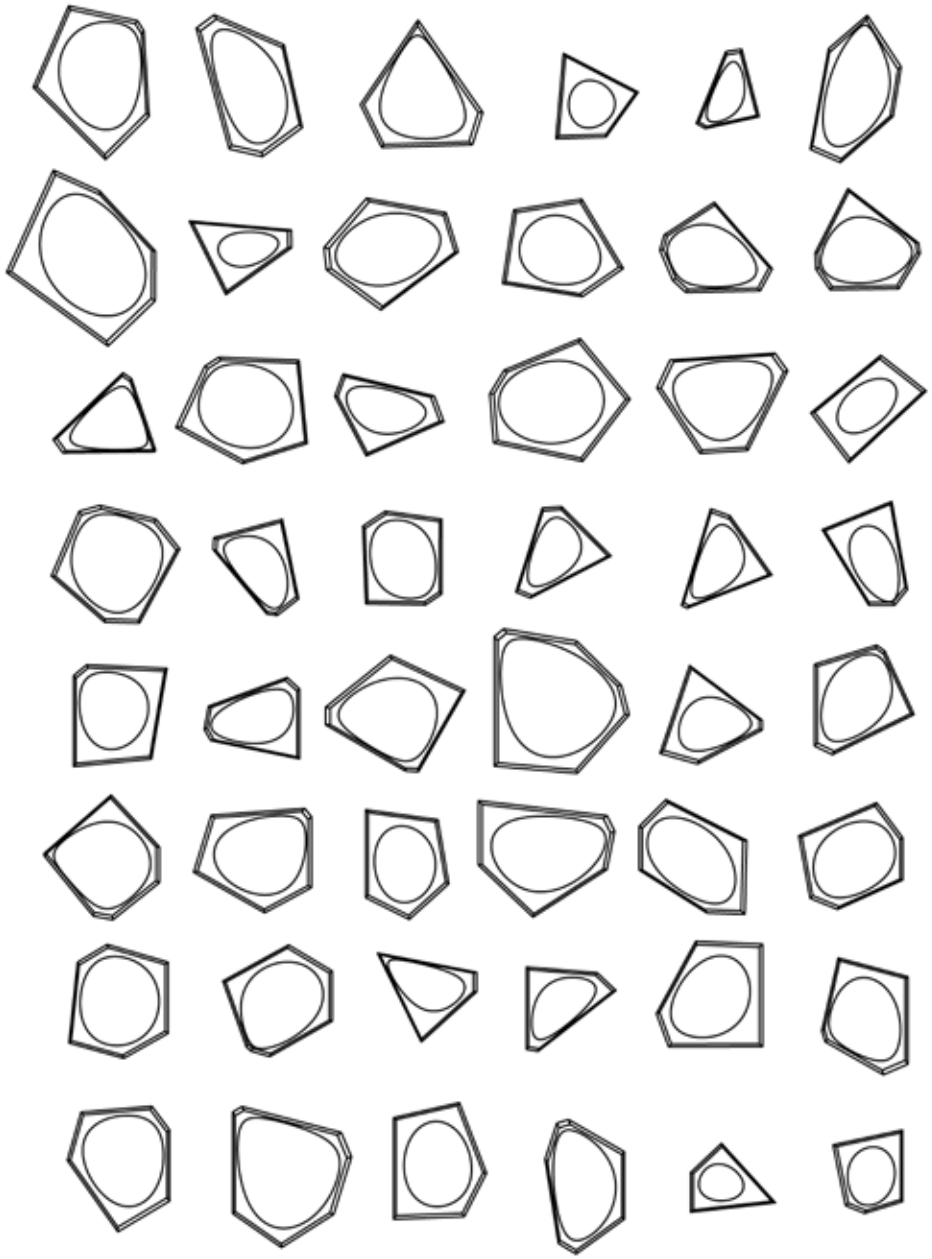

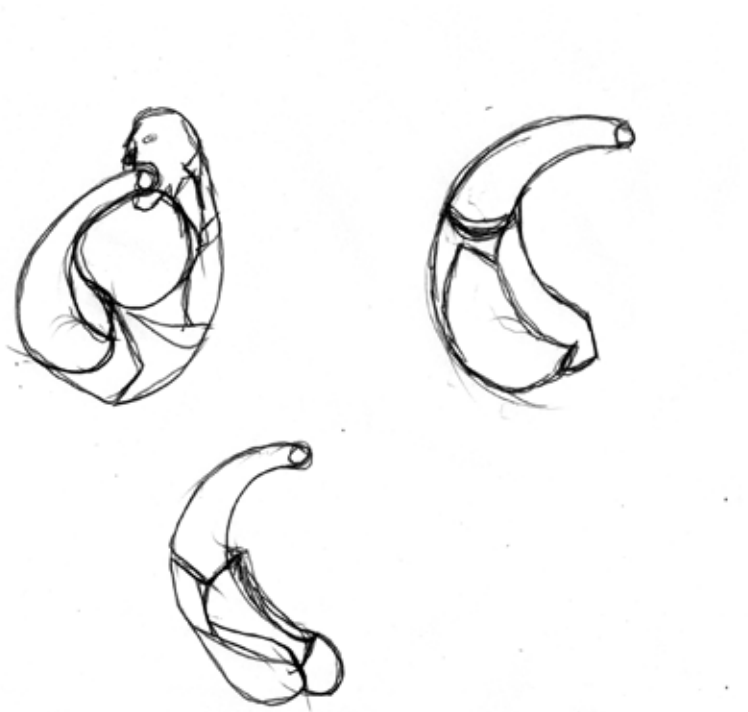

"Well, that's fine, let's talk about the moon, now."[1]

Conceived as a feuilleton – an autonomous addendum – this publication acts as a spherical launching pad for proposals produced by a loose-knit group of Berlin-based practitioners, brought together by Luis Berríos-Negrón to wade in the territory of the term "prop." The divergent works included in the publication have emerged from ongoing discussions surrounding the term (as object; as sign, signifier, signified; as gesture; as tool; as support). Additionally, there are contributions to the feuilleton that were produced by those outside the core collaborators. These auxiliary authors, as well as those in the group, were asked to consider the topic for the first time, applying their knowledge base to this indefinite, amusingly problematic term. These initial probes, like the publication itself, are props – property, propeller, proposition – to be enacted by you, the reader, the seer. So, read, and talk about the moon.

Leah Whitman-Salkin

1 Alfred Döblin, *Berlin Alexanderplatz: The Story Of Franz Biberkopf*, trans. Eugene Jolas (London: Continuum, 2005), 14.

Case 2. Have Balls [Eccentric]
The Anxious Prop, First Edition
July 29, 2010
SPLACE, Alexanderplatz Pavillon
Panoramastraße 1, D-10178 Berlin

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Printer EuroPrint
Online www.theanxiousprop.org

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This publication has been set forth through the generous support of Jeff Berezdivin and the Trápaga-Hacker Family / 3C's Collection of San Juan, Puerto Rico.

Very special thanks to Christiane Paul for her on-going advice, The Product for providing the space and encouragement for this entire effort, to Silk Relations for their technical support, and to Open Design City for providing space for production.

Luis is especially grateful to his family, both in Germany and in Puerto Rico for their indispensable love.

SPLACE (www.splace.blog.de) is organized by Antje Majewski, Magdalena Magiera, Dirk Peuker, and Juliane Solmsdorf.

Front and back cover: *16 frequency alternate spheres computer graphics from program by Joe Clinton* from *Domebook 2* (Bolinas: Pacific Domes, 1971)

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* The program employed to develop the Voronoi surface optimization was a creation of Barbara Cutler during the Sinthome Workshop directed by Mark Goulthorpe at MIT, 2005.

Luis Berríos-Negrón (1971, Puerto Rico) 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 Archologies" at Program (Berlin), and "Immediate Archeologies Two or the Children's Crusade" (Dresden).

Morgan Belenguer (1976, Ivory Coast) 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. 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 Jahcoozi. His most recent choreographic work, "it becomes visible," premiered at PSM gallery in Berlin.

Jan Bovelet (1980, Germany) is an architect and philosopher; he studied architecture and philosophy in Kassel, Cologne and at the Technical University, Berlin. In 2009 he completed his studies in architecture (Dipl-Ing.) and philosophy (Mag.). Bovelet was a scientific contributor to the Shrinking Cities project and at the Stiftung Bauhaus Dessau. He is currently working with urbikon in Berlin and is thinking about his dissertation.

Mendel Heit (1981, Germany) 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. And 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 FabLabs within the same spirit.

Vladimir Karaleev (1981, Bulgaria) moved to Berlin at the age of nineteen and studied fashion at the University of Applied Sciences (FHTW). In 2005 he founded his own fashion label followed by his conceptual debut collection "CUT 210." His work combines deconstructing clothing with architectural/sculptural elements. Karaleev showed several installation works, mostly using sculpture-transferred fabric.

Miodrag Kuč (1977, Serbia) 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.

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.

Hans-Jörg Rheinberger (1946, Switzerland) is Director of the Max Planck Institute for the History of Science in Berlin. The main focuses of his research lie in the history of biology, medicine and molecular biology. By bridging the gap between the study of history and cutting-edge sciences, such as biomedicine, Rheinberger's work represents a good example of the emerging multidisciplinary knowledge society. The Swiss-born scientist is a guest scientist with the Collegium Helveticum in Zürich. He is also a member of Leopoldina, the German Academy of Natural Scientists, an honorary professor at Technical University of Berlin's Department of the History of Science, and a member of the Berlin-Brandenburg Academy of the Sciences.

Gabriel Shalom (1982, USA) is a hypercubist videomusician living and working in Berlin. He is the co-founder, together with Patrizia Kommerell, of KS12, a creative agency which produces original transmedia narrative projects. He is a regular contributor to opinion-leading blogs on the future of cinema, Quantum Cinema, and augmented reality, The Ars Virtua Foundation. His signature work takes the form of rhythmically edited audiovisual compositions. He has been an artist in residence at the ZKM | Karlsruhe, and a guest speaker on audiovisual trends in London, Berlin, and São Paulo. Since Spring 2009 he has been an adjunct faculty at the Berliner Technische Kunsthochschule where he lectures on analog motion graphics.

TRACKnFIELD was founded 2003 by Christoph and Stephan Hartmann, Lucas Tietjen, and Olaf Nohr. Christoph and Stephan studied German literature and media studies at Freie Universität Berlin. Together, they've realized numerous productions as director and producer for a diverse range of media such as documentary, video installation, animation, advertising, and film. In 2010 they started a cooperation as directors with the animation studio 908video.

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 in order to follow their interests on different scales. Their activities range 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.

Sarah Witt (1982, USA) is a visual artist and graduate student in the Program in Art, Culture and Technology at Massachusetts Institute of Technology, and currently a summer intern with Luis Berríos-Negrón. Witt's current work is a performative investigation of the subtle, conflicted relationship between humans and constructed environments. A physical and theoretical framework, she positions architecture as antagonist, reflexively informing her struggle to exchange with and embody the adversary.

The Anxious Prop. First Edition

Luis Berríos-Negrón

This feuilleton is a sporadic publication, a mouthpiece to a local, loose collective operating under the aegis of The Anxious Prop (La Herramienta Inquieta).[1] That which is common here is the desire to work with two looping, yet sequential parameters: 1. We are not in the business of assigning values and/or meanings to existing objects, ready made. We are into the labor of producing forms, shapes, and figures as method to explore collective knowledge by challenging the discourse of digital fabrication; 2. that these forms, shapes, and figures emerge with the disposition to be activated, meaning that the fabrication prompts a simultaneous dialogue about what action triggers its condition as theatrical object and its consequent instrumental or anthropological role in the world.[2]

Why the prop? These parameters are provoked by the advent of performance and the revision of everyday life that have unequivocally broadened the idea of stage. On one hand, the Happening is a mechanism that possesses an elusive nature, mainly due to its real time, present tense condition, that unless captured and mediated, remains strictly in the world of the artist and that audience.[3] On the other, the analysis of Everyday Life proposes a hidden production that operates in the auspices of doing routines and procedures deliberately enacted to challenge commodification and consumption.[4] By definition, both the elusive and hidden aspects that come together in Performing Life,[5] broaden the scope of human activity through formats that may circumvent the lack of distance between ourselves and capitalism.[6] For some of us, this lack of distance, or rather lack of breathing space, becomes ever more claustrophobic when we set emerging technologies into context and consider the critically unchecked access to digital fabrication. Therefore, as I put forth to the group, we sense that the prop becomes a site for working through an anthropological definition of technology, meaning not as means to an end, but the ends providing a means, the production of a knowledge base with no other purpose than to understand what these technologies mean for art production while enjoying the pleasure of our common curiosity. That our different disciplines are not being employed to optimize a model of practice, but as an ongoing, intimate, as opposed to private, mode of general pedagogy.

What is the prop? At the moment, the definitions that concern the group are those that lend themselves to broad, yet precise interpretations that can occur outside institutional Theater. It is here that we can

1 I refer to my translation of "anxious" to Spanish as "inquietud" as opposed to "ansiedad." The former being more precise to the need to "move" or to "act" as opposed to the latter which suggests "preoccupation" or "desperation." This is because the prompting of my exploration of "the anxious" did not come from readings of Allan Kaprow and subsequently of Harold Rosenberg, but conducting an interview published in January of 2009 with Juan Herreros at his studio in Madrid. Herreros mysteriously referred to "personas inquietas" (anxious people) to describe those of whom where actively looking for affirmative life, protesting, and confronting the cultural blowback in Spain in the immediate years following the fall of the Franco regime.

2 See: Martin Heidegger, *The Question Concerning Technology, and Other Essays*, trans. William Lovitt (New York: Harper & Row, 1982), 109.

3 Allan Kaprow, *Essays on the Blurring of Art and Life*, ed. Jeff Kelley (Berkeley: University of California Press, 1993), 195.

4 Michel de Certeau, *The Practice of Everyday Life* (Berkeley: University of California Press, 2002).

5 Allan Kaprow, *Essays on the Blurring of Art and Life*, 3.

6 Roger M. Buergel, "How to Look at Capitalism," *Verksted* 2/3, ed. Ute Meta Bauer and Jonas Mekaberg (Oslo: Office for Contemporary Art, 2004), 60.

only surmise the depth of the "ocean of signs limned by theater semiotics."[7] But, there is also no desire to "rescue the material object from others on stage" as we are in no position, nor do we really care to play such heroic role.[8] We simply feel that the theatrical object has a specific, well documented, deeply considered life inside and outside of Theater and Opera. And, we want to engage that outside world, the theatrical event, not in an analysis of that which has been thoroughly exposed, or vis-à-vis "'not to' play with dead things," but to proactively embrace fabrication of such objects as a selfishly selfless act of purposeless, yet informed creativity.[9]

Today, we believe that the moment the broad agent that is the artist-actor sets off the environment of a performance, the phenomenon of "ostension," or the "de-realizing a given object in order to make it stand for an entire class" takes place, and that this phenomenon often expands on through to the audience.[10] This broad, boundless deployment has been described as "semiotic bootstrapping" where "the principle of semiotization seems an unavoidable corollary of any theatrical event."[11] This amplification has resulted in an ontological terrain-vague, an unfettered reprocessing of meaning leaving behind a wasteland ever waiting to be revived. And, unafraid of its potential lack of purity, it is the "fluid-continuum" between the object and subject that can only and genuinely occur through the "action-force" exerted by an actor.[12] In this broader context, it therefore can provide fruitful self-examination in cultural practice. This temporary, fluid deployment is of concern to the group for it can foment an unsteady field of self-inquiry, and even open possibilities for destabilizing the fetish of both art and neoliberal modes of production.

The destabilizing, unsteady notion is the anxiety. It projects a search to amplify the delectable world of the artist-actor, the one that lives in the anxiety that persists without a sure identity.[13] Let us affirm the status of autonomy beyond loosely co-authored modes of production as this ongoing effort aims to stimulate the prop as device to challenge this fuzzy interstice generated through the long-drawn action, the revisiting of Marx's conception of "Tätigkeit," of making a future delivered through fabrication and performance.[14] This anxiety continues to take shape ever more as a technical system in the processing of

7 Andrew Sofer, *The Stage Life of Props* (Ann Arbor: University of Michigan Press, 2003), 11.

8 Ibid.

9 Eric Mangion and Marie de Brugerolle, *Not to Play with Dead Things* (Nice: La Villa Arson, 2008), 29. The authors compounded "not to" to Mike Kelley's text "Play with Dead Things."

10 Umberto Eco, "Semiotics of Theatrical Performance," *The Drama Review* 21 (1977).

11 Tadeusz Kowzan, "The Sign in the Theater: An Introduction to the Semiology of the Art of the Spectacle," trans. Simon Pleasance, *Diogenes* 61 (1968): 68–69.

12 Jiri Veltrusky, "Man and Object in the Theater," in *A Prague School Reader on Esthetics, Literary Structure, and Style*, ed. and trans. Paul L. Garvin (Washington, DC: Georgetown University Press, 1964), 88.

13 Harold Rosenberg, *The Anxious Object* (New York: MacMillan Publishing Company, 1973), 19–21 and 205–207.

14 Karl Marx, *Ökonomisch-philosophische Manuskripte* (Hamburg: Meiner Verlag, 2005), xxiii. The translation of the excerpt on "Tätigkeit" reads: "We have considered the act of estranging practical human activity, labor, in two of its aspects. (1) The relation of the worker to the product of labor as an alien object exercising power over him. This relation is at the same time the relation to the sensuous external world, to the objects of nature, as an alien world inimically opposed to him. (2) The relation of labor to the act of production within the labor process. This relation is the relation of the worker to his own activity as an alien activity not belonging to him; it is activity as suffering, strength as weakness, begetting as emasculating, the worker's own physical and mental energy, his personal life – for what is life but activity? – as an activity which is turned against him, independent of him and not belonging to him. Here we have self-estrangement, as previously we had the estrangement of the thing."

the theatrical object, of a type of non-commercial contrivance, especially in its experimental and reluctant forms, those which might result in the nurturing of fringe, emerging labor, and material economies.

The position-taking of the anxious prop attempts to instigate the aforementioned tension. Therefore, we act upon this alibi – from model, to prototype, to environment – in order to seek, not the materialization of finished products, but the materiality of mental relations between disciplines, of "contracts of citizenship" to raise questions about the general, strategic, tactical, physical, ecological, and phenomenological scales of the commodified, institutional quietism in contemporary cultural production.[15]

This loving, albeit limited decentralization, or eccentric search for our postcapitalist selves is indeed shunning away from the finished work or nostalgia for democratic constructs and the illusion of justice ebbing from fruition.[16] Our production aims to elucidate entries into "the kibbutz of desire,"[17] those which continue to require evaluation in contrast to "oceanic feelings" that the belief structures of religion and technology tend to unwittingly fetishize, not to mention the seldom accomplished resolution of the semiotic object of art outside the market economy.[18]

Thus the proliferating, customizable reality, as an opposition to its virtual counterpart, provides the point of entry for this loose collective into the expansive realities of fringe labor societies, practices, media, communication, and more accessible digital fabrication technologies, that not only transform the output and scale of city, but de facto question traditional values of what production is. In an effort to further revise the contested definition of the prop, the exploration continues to push beyond its assumed role outside the institution, taking on the identities of site, property, tool, and support.

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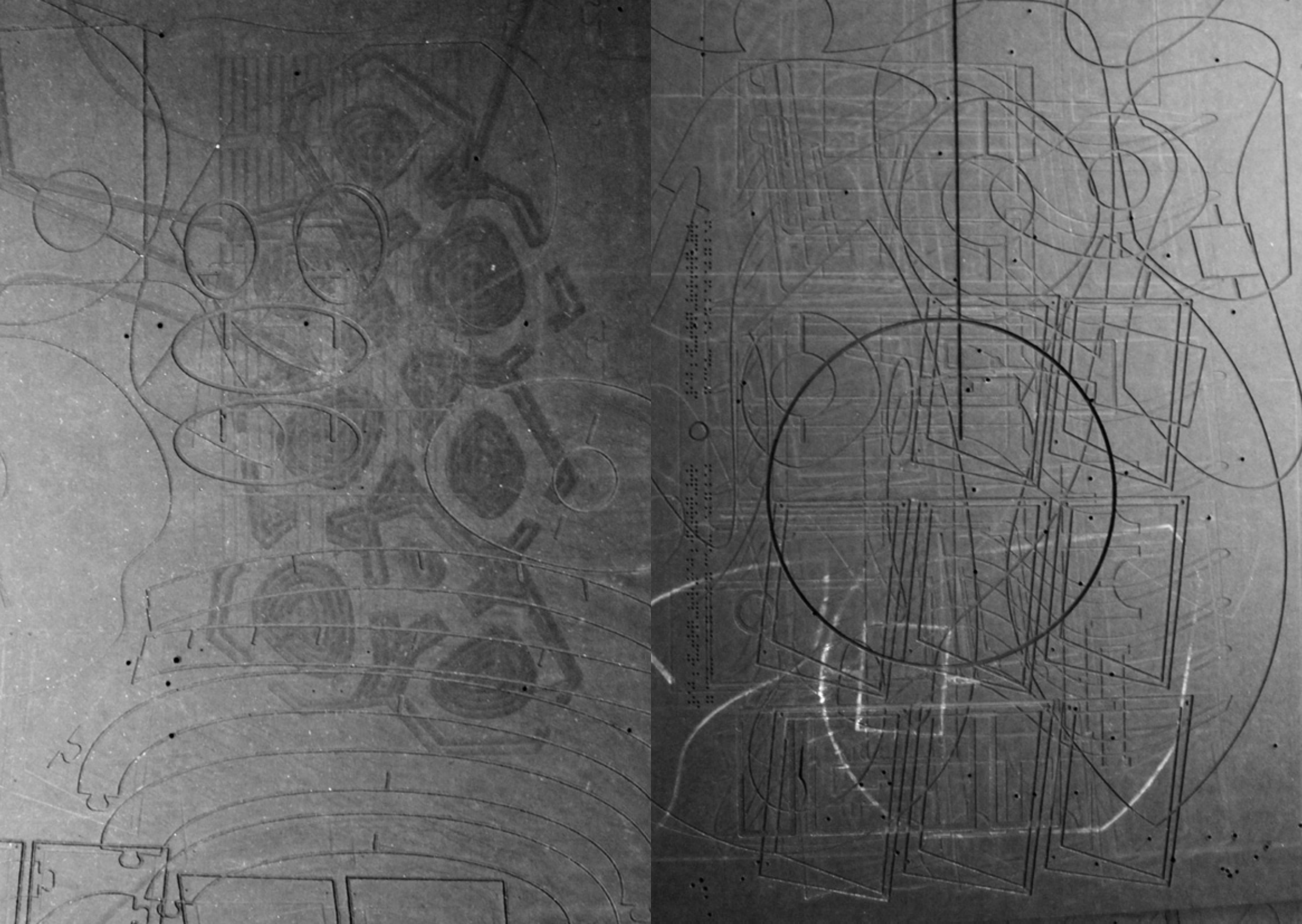
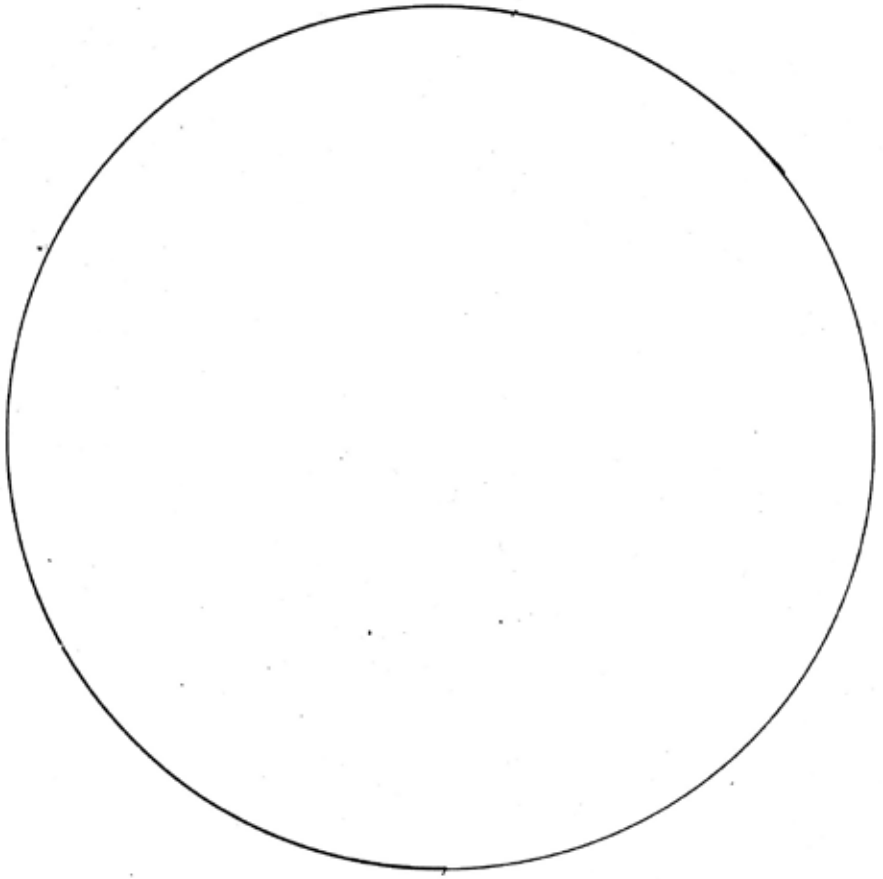
15 Felix Guatarri, "The Three Ecologies," trans. Chris Turner, *New Formations* 8 (1989): 135.
16 Marion von Osten, "In Search of the Postcapitalist Self," *e-flux Journal* 17 (2010).
17 Julio Cortazar, "Interview with Andrés Amorós," in *Rayuela* (Buenos Aires: Ediciones Cátedra, 1984), 37. The "kibbutz of desire" appears in the following context: "I believe this book to be profoundly optimistic because Oliveira, despite his rough antagonistic [broncoso] character, like we Argentineans say, his angst, his mental mediocrity, his inability to go beyond certain limits, he is a man that slams his head against the wall, the wall of love, the wall of everyday life, against the wall of philosophical systems, against the wall of politics. He slams his head against all these things because he, deep down, is an optimist, because he believes that one day, not for himself but for others, someday that wall will fall and on the other side there will be the kibbutz of desire, the millenary reign, there is the real man, that human project that he imagines that will not be realized until that moment. The search is not born out of the conscience of plenitude, but from the yearning for that which is missing, the mutilation. The poets have expressed: la vraie vie est absente... je suis autre [True life is absent... I am an other | La verdadera vida está ausente... yo soy otro]."
18 Felicity D. Scott, "Acid Visions," *Grey Room* 23 (2006): 16.





CNC (or Control/No/Control)

Sarah Witt

I loathe interactions with technology. Because sometimes it's right, and I'm not. It's usually faster, more efficient and has better manners. In adamant opposition to all things overtly technological in terms of advocating convenience, I immediately label them as unnecessary and extraneous devices that desensitize humans from the process of interaction and navigation within their environments. But they exist, and to create the harmony that is so vital to mental health, these situations necessitate my understanding of how to best utilize these advancements without exploiting them and rendering humans as incompetent.

Recently I was introduced to a specialized fabrication machine, the CNC router. Immediate and involuntary thoughts, slave to my intrinsic impatience chiming in concert with claims of independence, are predictably suspicious. But if I study the history of my behavior, the equation of impatience and independence sometimes elicits irritation – and feelings of ignorance. So with cautious and deliberate attention, I will not violently dismiss the usage of this computerized fabrication machine.

Traditionally if I want to build something I will take a stack of paper and a handful of pencils. I'll render the drawings from vague sketches to semi-precise mechanical drawings with numerical annotations. To guide and nurture a fabrication project from its infantile state to its completion, witnessing and inventing the nascent form as it approaches maturity, is something I find pleasant. To handle a project through all the stages, in complete control and understanding of how it's produced, is a valuable asset to the creator. And if I fear machines in this context, it's not only because they have dangerous blades and other sharp surfaces, it's because I am wary of loosing the complete comprehension of how form takes shape from concept – of how this machine can produce an object without itself being intelligent and without full knowledge by its user.

Directly analyzing my distaste towards technology, I see that it is defined by vulnerability. The fear of loosing control and the instinctual protection of pride mark my apprehension. If I am to project these anxieties in reverse as I approach the unfathomable network of cables and chips, I will not be susceptible to the threats of inferiority and diminished ego. Because the machine cannot perceive my intimidated demeanor and alter its own behavior as an emotional reaction, which is where the sense of wrongness blossoms. In fact, it can only work in tandem with the deliberate commands I deliver. By consciously interacting with this technology, I remind myself that it is just this – awareness – that allows me to maintain a degree of authority. To remain confident of my mastery prevents the complete removal of the human from the procedure of mechanical operations. By hesitating with these precepts, cognition is activated and the machine will perform.

Smooth, consistent, organic, geometric, imaginative, replicated. As I examine the forms and shapes that the CNC birthed, I can't help but marvel at their perfection. Because as a fallible species, we cannot possibly reproduce a perfectly rendered surface or object. And machines as autonomous units without procedural commands are incapable of doing anything. But they exist, the ancient evolution of a dialogue between product and process, failure and error. With this in mind, I'll put on my shop goggles and plug my ears, surrendering my independence as payment for entrance, for participation in the spectacle of my species.

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<object type="obscure" name="desire"></object>

Gabriel Shalom

The object as product. The time of the product as merely the output of industrial production is over. Today individuals are re-entering into the discourse of products using the same physical language of fabrication and prototyping as industrial manufacturing. Our facility with techniques such as laser cutting, CNC milling, 3D printing and vacuum forming – processes which used to be the elite language of twentieth century industrial manufacturing – are now starting to become the common vernacular of craft.

This physical literacy of products is an emergent tendency which is changing communication. We can communicate ideas physically; for instance, as visions for future products in the form of functional prototypes. The individual can express a greater degree of his or her own vision. See also the capacity to use a laptop computer to independently produce, edit, distribute, and market video content all via the same device. The DIY and FabLab movements – and what they represent for manufacturing – is a parallel process; the implosion of that which was formerly stratified across the hierarchy of industrial production into one workshop.

The object as commodity. While we are now conversant in this industrial product language, we simultaneously experience the compulsion to commodify (objectify) our work. This happens most clearly at the level of branding, insofar as the contemporary creative producer is painfully aware that the standard practice for gaining recognition in the product discourse is through brand narrative. Yet the auric peculiarity of the handmade or limited edition clashes with the anonymity and standardization implied by the dogma of industrial branding.

This commodification (objectification) extends beyond consumerism to sexuality, politics, and public space. User-generated amateur pornography objectifies sexuality to such an extent that it alters our sexual identity as our objectified flesh is reflected back to us in the Internet. Political figures are commodified and become brands, giving us the Obamafication of an election, the Merkelization of an economy, or the Bushification of a war. In the face of this political impotency comes the privitization of public space, with entire new urban ecosystems coming into existence under corporate stewardship.[1]

The object as node. The semantic <object></object>. The object as the ideal modular component of a total system, defined unambiguously and therefore allowing portability across platforms via open standards. This model, originated in software, is having greater and greater relevance in the physical world; especially as we continue along a path towards interacting with the physical world using a digital interface.

This language of objects from the world of programming has a value system. Which is to say that many of today's programming languages are "object-oriented." The value of an object is its ability to have a unique ID. In the physical world this value is reflected in the case of biometric identification embedded in passports. Each person becomes an object in a database; an aggregate of personal data. Tags in the cloud.

Trends in augmented reality suggest that every product, every place, every person, every context may

1 Wikipedia, "Songdo International Business District," Wikipedia, http://en.wikipedia.org/wiki/Songdo_International_Business_District.

eventually be a semantic object, which is to say it may be a discrete node in a system with a unique ID, and therefore something which can be digitally identified, located, and manipulated. The vision of an Internet of things is contingent on each particle of physical existence having a unique digital identity or aura. The exploration of these digital auras using some sort of aura recognition interface poses a design challenge that will determine quite a bit of what it is like to be a human in a twenty-first-century urban space.[2]

The architecture of space becomes subjugated to the architecture of information. Certain architectural spaces which made sense in the twentieth century will make no sense in the twenty-first century. Witness the office building as a relic; as something which could transform into a coworking space, hinted at by the trend of Internet cafes becoming hubs for freelance knowledge workers. Work has become nomadic and therefore object-oriented through its connection to the mobile Internet workstation.[3] The entire concept of "going to work" as per the industrial era is open to redefinition. The physical world of work begins to reflect the logic of the database instead of the cubicle.

The object as sprite. Our contemporary moving image media of video games, computer interfaces, and the Internet proposes an aesthetics completely contingent on an object-oriented image field. Graphic illusions of depth or four dimensionality point to a future volumetric moving image medium. The aesthetics of these media pre-figure the larger aesthetics of the built and virtual worlds we're likely to see in the future.

The objects in video games become increasingly important culturally and economically. We witness the industrial appropriation of virtual object production with Chinese World of Warcraft gold farming sweatshops.[4] Meanwhile we see the behavioral modification of an entire generation of children and young adults who've spent countless hours playing video games, interfacing with an object-oriented environment that programs both our behavioral and also aesthetic expectations.

My generation of artists was raised on video games yet trained to work in classical digital media such as video. We are faced with a dilemma: as many of us are non-programmers, how do we represent an object-oriented moving image world in a flat, frame-based medium? The answer to this question begets hypercubist aesthetics, as the illusion of multiple timelines in the same frame reflects our struggle to reconcile an aesthetic ontology of 4D objects within a flat medium.[5]

The object as prop. The prop as that which is neither character nor set piece. The prop as a property of a story, somewhere along a continuum between a functionally interchangeable McGuffin and an irreplaceable touchstone of dramatic symbolism.[6] As the boundaries blur between the physical and virtual we experience the first tremors of a wave of future shock that is capable of overwhelming our senses, attention spans and – yes – perhaps even our sanity.

Yet despite the novelty of the technologically-driven evolutionary delta which humanity faces, it will be

2 Gabriel Shalom, "AR Aura Recognition," 1st Augmented Reality European Business Conference, http://vimeo.com/11227531.

3 Wildcat, "Knowmads as Aesthetic Curators of Information (Hybrid Futures & Knowmads pt 4)," Space Collective, http://spacecollective.org/Wildcat/5900/Knowmads-as-Aesthetic-Curators-of-information-Hybrid-Futures-Knowmads-pt-4.

4 Louisa Lim, "China's 'Gold Farmers' Play a Grim Game," National Public Radio, http://www.npr.org/templates/story/story.php?storyId=10165824.

5 I am currently co-authoring a hypercubist manifesto and looking for collaborators.

6 Wikipedia, "McGuffin," Wikipedia, http://en.wikipedia.org/wiki/Mcguffin.

with one of our oldest and most sacred human traditions that we will survive this information inundation: namely, by engaging in storytelling. Stories are our time-tested cultural defense to cope with that which overwhelms the rational mind. We engage the arbitrary structures of narrative to serve as a needed filter, parsing the dataflow into digestible chains of meaning.

Whatever narratives we choose, those narratives will need characters, sets, and props. The more that the digital and the physical merge, the more that every object in our lives will function not only for its physical properties, but also for its social properties and therefore its narrative value.

We've always been in a narrative space. The transcendence of the prop out of the frame and into the world reinforces our role as actors in the lived hyperreal space of urban narrative. As actors – and as nodes in a network – we will increasingly find ourselves confronted with our lack of uniqueness; we may find ourselves (arche)type-cast, and at times struggle with the cheapness of the roles that have been written for us. We may long for a more heroic disposition or a more epic journey. And as a result of those obscure desires we may embrace a cosmopolitan tribalism with its own urban mythology.

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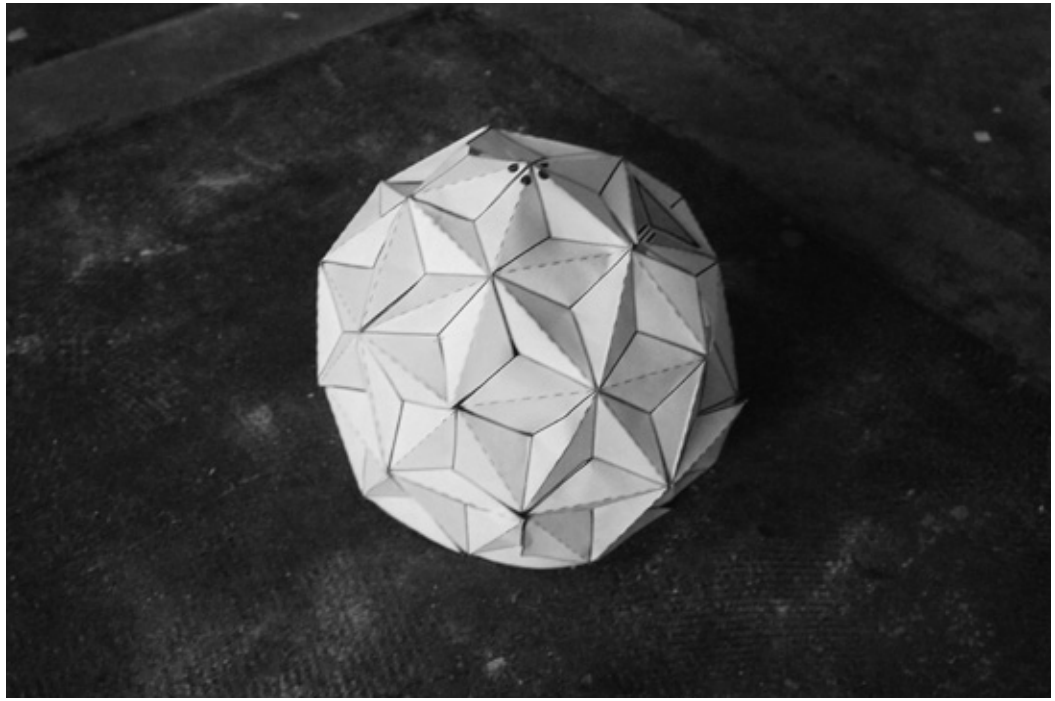

Epistemic Objects/Technical Objects

Hans-Jörg Rheinberger

My perspective on epistemic objects or epistemic things – as I prefer to call them for reasons I will lay out in a minute – is intimately connected with an approach to the nineteenth- and twentieth-century empirical sciences that can, for reasons of brevity, be called the experimental-systems approach to science as research. What does that mean? To answer this preliminary question, let me start with a few words on the experimental-systems approach. After this brief introductory exposition that includes a first positioning of what I mean by epistemic objects, I would like, in the second part of this presentation, to talk about a few more things that appear to me to be characteristic of epistemic objects.

Experimental Systems

As I have argued in much more detail elsewhere,[1] four basic features distinguish experimental systems. First, they can be regarded as the smallest, most compact integral working units of contemporary empirical research. Within such systems, a particular constellation of scientific and technical objects – that is, the technical conditions of the production of scientific objects – is set in place. Both entities mutually depend on each other. They are inextricably linked insofar as one does not exist without the other. This is the reason why I actually prefer to talk about *epistemic* objects instead of simply *scientific* objects, "epistemic" pointing to the fact that these objects are not independent of the technical means with which they are being shaped. This is the reason why Gaston Bachelard coined the notion of "phenomenotechnique" for the process in question.[2] The first of these two entities, the epistemic object, is that badly defined something that is the very target of a particular experimental research endeavor. Paradoxically speaking, it embodies – but in a way that can be experimentally handled – what one does not yet exactly know. The scientific object is therefore necessarily underdetermined; it is, one could say, under-defined by definition. They are "vague" objects, to pick up a characterization of the French nineteenth century physiologist Claude Bernard.[3] This is actually the reason for another linguistic preference, namely to talk about epistemic things in this context rather than epistemic *objects*, although I have used both terms more or less interchangeably and continue to do so for the purposes of this paper.

The technical objects that constitute an experimental system, in contrast, are characteristically determined. They are the instruments, apparatus, and other devices enabling and at the same time bounding and confining the assessment of the epistemic things under investigation. Their rigidity and specificity is necessary to keep the vagueness of the epistemic objects limited and to confine their criticality. Without such specificity of the technical objects, the epistemic things would not become shaped, but would rather dissipate in the hands of the researcher. Within a particular research process, however, epistemic things can eventually become specified and turned into technical objects. As such they can become part of the technical conditions of the system. And conversely, parts of the technical system can also acquire epistemic status and thus turn into research objects. Such an ongoing dialectic between epistemicity and technicity, it appears to me, is at the core of a productive experimental system; it is its driving force. Thus, an experimental system is a kind of dynamic research body that conveys material shape to the epistemic objects formed within it, and at the same time, also determines the boundaries of their conceptual apprehension.

1 Hans-Jörg Rheinberger, *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube* (Palo Alto: Stanford University Press, 1997).

2 Gaston Bachelard, "Noumène et microphysique [1931–32]," in *Etudes* (Paris: Vrin, 1970), 11–24.

3 Claude Bernard, *Philosophie*, ed. by Jacques Chevalier (Paris: Editions Hatier-Boivin, 1954), 26.

There are three more characteristics of experimental systems that need briefly to be addressed. Experimental systems must be able, this is the second point, to undergo what I have called differential reproduction if they are to remain arrangements in which new knowledge is generated that lies beyond what one has been able to imagine and anticipate. Only in this way can they act, as the molecular biologist Mahlon Hoagland once put it, as "research generators,"[4] or, to speak with another molecular biologist, the Pasteurian François Jacob, as "machines for making the future."[5] Difference and reproduction are the two inseparable faces of a coin. Their interplay and interaction determine both the delays as well as the precipitations in the course of a research process. To summarize and put it pointedly, we can say that in order to remain productive, experimental systems must be organized in such a way that the generation of differences becomes the reproductive driving force of the whole machinery. Differential reproduction conveys a special kind of historicity to experimental systems, and accordingly, to the epistemic objects shaped and reshaped in them. Accordingly, experimentation can acquire, to use a famous formula of Ian Hacking, "a life of its own."[6] Experimental systems are thus historical bodies extending in time: they emerge, grow, and eventually also disappear again.

The third point to be made is that experimental systems are also the units within which the signifiers of knowledge are produced. They usually start as traces, graphematic entities of one sort or another; they can take on the form of data if made durable in some form; and eventually they come to be addressed as facts.[7] Their meaning is tied to the spaces of representation in which the primary traces and inscriptions are recorded, articulated, dislocated, reinforced, marginalized, and substituted. Researchers "think" within the confines of such spaces of representation, within the tinkered and mobile context of the representational machinery at hand that comes with the technical conditions of a given experimental system.

Finally, ramifications and fusions of experimental systems lead to ensembles of such systems, something we could call experimental cultures. Fusions and ramifications themselves are, as a rule, the result of unprecedented events within experimental systems, events that are often connected to the introduction of new technologies of representation. In the last instance it is such experimental cultures that determine the emergence as well as the historical obsolescence of scientific disciplines. The concept of experimental culture as an articulated ensemble of experimental systems should allow historians of science to write the history of research domains free of the burden of disciplinary history. This is, however, not only a matter of historiography. Before our very eyes, we can see today's experimental sciences deriving their dynamics less and less from rigid disciplinary boundaries with their social stability and more and more from the digressions and transgressions of smaller units of research in which knowledge is not yet labeled and classified, and in which new knowledge can take shape at any time.

From this brief characterization of experimental systems as the immediate research environments in which epistemic objects take root, one major conclusion can be drawn with respect to the epistemic objects themselves that take shape and are reshaped there. First and foremost, epistemic objects are by no means the final *products* of research. In their characteristic indeterminacy, they are rather the driving forces, the *educts*, so to speak, of research. As such, they are eminently historical entities whose characterization must include a time axis because their main aspect is their transformation.

4 Mahlon B. Hoagland, *Toward the Habit of Truth: A Life in Science* (New York: W. W. Norton & Company, 1990), xvii.
5 François Jacob, *The Statue Within: An Autobiography* (New York: Basic Books, 1988), 13.
6 Ian Hacking, *Representing and Intervening* (Cambridge: Cambridge University Press, 1983), 150.
7 Hans-Jörg Rheinberger, "Wie werden aus Spuren Daten, und wie verhalten sich Daten zu Fakten?," in *Nach Feierabend. Zürcher Jahrbuch für Wissensgeschichte 3* (Zürich-Berlin: Diaphanes, 2007), 117–125.

Just to give an example, in the biological sciences of the twentieth century, *genes* were a prominent case of epistemic objects.[8] Through their representation, a new experimental culture came into being at the beginning of the century that took very different forms in its course and whose central entities were continuously being reshaped. It was a culture that radiated across all of the life sciences, and not only the sciences. Classical genetics, extending roughly over the first half of the century, employed a gene that could be operationalized as a factor, as something underlying the differences in appearance of certain varieties of organisms and their hybrid offspring. In the context of the experimental regime of classical genetics, that is, breeding, no chemical or physical characterization of these factors was possible and, indeed, no such characterization was necessary.

In the context of molecular biology, genes came to be regarded as macromolecules with specific stereochemical characteristics that would allow them to act as bearers of genetic information. Interestingly enough, at the experimental level, these macromolecules were also able to undergo something called hybridization, a property that became the basis for gene technology and genetic engineering. As a result, in the context of genomics and post-genomics since the 1980s, genes became again re-contextualized, this time as flexible molecular resources – both in developmental processes perceived as more and more complex cascades and as a biotechnology that is now more and more seen as synthetic biology. I could go into much more detail here, in particular with respect to the oscillation between epistemic and technical genes. Take PCR, the polymerase chain reaction, as an example of the latter.[9] As a DNA amplification machine, it can be used to enrich specific genetic materials from, at the limit, one single molecule. These remarks may suffice for the argument that epistemic objects, on the one hand, can give rise to technical objects, and on the other, need to be seen in their historicity, in their epistemic proliferation. They might well be characterized by something that, in the sense of Edgar Wind and in the wake of his *Das Experiment und die Metaphysik*, could be labeled as being subject to and provoking "immanent transcendence."[10] Epistemic objects proliferate, becoming either new epistemic objects or technical objects. As technical objects, however, what they gain in terms of identity and determination, they lose in terms of their quality of transcendence.

Epistemic Objects and Concepts

Let me now, in the second part of my exposition, address two points a little more closely. Both of them have to do with the problem of the relation between concept and object that is implied in the view of epistemic objects just developed. The first can be called a problem of reference. From an experimental-systems perspective, the uniqueness – and also the precariousness – of the relation between concepts and the things we presume they stand for in the process of research is derived precisely from the fact that these things are in a state or condition such that we simply *cannot* yet point to them. If we could point to them, they would already have lost their urgency and their essential epistemic value to us. Thus, epistemically interesting relations between concepts and objects cannot take the simple form of ostension; epistemic objects as described above cannot (yet) be pointed to. They have no reference in the everyday sense of the word. If there is reference, it is always only suppositional; its precise meaning remains elusive. With Hans Blumenberg, we could even say that here we are dealing with the scientific incarnation of what it means to be human, namely of being able to "act at a distance." In research, one "acts on objects that one does not perceive." In this respect, the concepts involved in such action need to "possess enough indeterminacy to be able to capture experiences that are still to be had." The concept

8 Hans-Jörg Rheinberger, *Epistemologie des Konkreten. Studien zur Geschichte der modernen Biologie* (Frankfurt am Main: Suhrkamp, 2006).
9 Paul Rabinow, *Making PCR: A Story of Biotechnology* (Chicago: The University of Chicago Press, 1996).
10 Edgar Wind, *Das Experiment und die Metaphysik (1934)* (Frankfurt am Main: Suhrkamp, 2001).

is thus "in need of a certain leeway for all the particular concretions which are to be classified by it."[11] If according to Blumenberg, the trap, as "reified expectation," is the "first triumph of the concept" in the history of mankind,[12] we could say that experimental systems are one of the late triumphs of scientific reasoning.

There are two possible solutions to this essential tension, and both of them happen again and again in the research process. The first, as already described, is that the epistemic object is transformed into a technical object, that is, into a state in which the relation between concept and object is no longer problematic. This means that within the confines of the accepted standards, the object has become transparent with respect to the concept that refers to it, or as Ian Hacking would say, it has become real because we can spray it.[13] The second resolution is that the presumed solution becomes itself a problem, that is, the presumed reference changes its position: it becomes the starting point for a further search into an epistemic object.

The second point also revolves around the relation between concepts and epistemic objects. David Bloor has criticized the notion of "embodiment" that I have been using when talking about the meaning of epistemic things.[14] Bloor thinks, to put it somewhat colloquially, that mind and matter should be more clearly separated – the one, we could say, belonging to the Cartesian realm of thinking, the other to its counterpart, the extended matter. He therefore favors the notion of an "application" of concepts to things. This is certainly not a peripheral question. Rather, it appears to be central to the differences in understanding scientific activity that these characterizations carry with them.[15]

Epistemic things, according to my conception, are *invested* with meaning, they are not just "named." If I say the concept of "gene" is *applied* to a virus, I remain in the world of naming. If I say it is *embodied* in a virus, I position myself in the world of experimentation, where things such as viruses are handled and treated according to what they are assumed to embody, according to what they are assumed to mean. In the world of experimentation, the handling of epistemic objects can take the form of a modeling activity. As models, epistemic things participate in the game of switching media. The model, as a rule, displays a different form of materiality than the thing it is taken to stand for. And as models, epistemic things thrive from the tension created by the fact that they always leave something to be asked. In German: *Sie lassen etwas zu wünschen übrig*. But models are not the only form epistemic things can take. Preparations are another one.[16] Here, the activity of enhancement is central, and there is no clear change from one regime of materiality to another. A typology of epistemic objects along these lines has not yet been created. The list is far from exhaustive.

The whole thrust of the argument lies in the assumption that the primary way of symbol-making in the realm of scientific activity is itself a material process and not a linguistic one to begin with. The epistemic semiosis is one between traces generated in the experiment and invisible entities that are related to them in one way or another – and not between names and things. Handling a virus as a gene in the test tube, that is, as a model of a gene in an organism, can take for instance the experimental form of trying to mutate the building blocks of its nucleic acids by exposing it to X-rays. Coming back to my previous remarks on the changing fate of genes as epistemic objects and the corresponding concepts in the course of the twentieth century, the point is that the material handling of the virus is itself dependent on what a gene is understood to be at a particular point in time. Handling the virus as a chemical molecule, for instance, may take the form of trying to crystallize it. All these material investments may and, as a rule, do in turn lead to changes in what a virus is understood to be. The concept is nested in the material exploration of the epistemic thing itself; it is an essential part of the experimental engagement.

The example also shows, however, that there is no a priori fixed relation between concept and reference. A nucleic acid, for instance, can be manipulated and investigated as an organic acid; it can also be investigated and manipulated as an instantiation of a poly-anion; or it can be manipulated and investigated as a hereditary molecule, the material carrier of genetic information. Accordingly, very different aspects of the material thing at hand can be brought to the fore: its electrostatic properties, its capacity to form hydrogen bonds, or the sequence of its building blocks; and accordingly, the investigation may lead into quite different directions. Here we have one of the deep reasons for my plea for scientific pluralism and the beneficial aspects of the fragmentation of the world that comes with any set-up of an experimental system. The inherent potential polysemy of epistemic things that is intimately connected with the structure of experimental systems, I claim, is not a deleterious and deplorable Tower of Babylon condition. It is rather a motor of knowledge acquisition. As a consequence, each research path chosen can have, at a particular stage, consequences for another path at some other stage.

My overall argument is thus that the "genesis and development of scientific facts," to use the words of the title of Ludwik Fleck's famous book,[17] is neither a matter of mere convention nor of mere negotiation. Hence, in the end, it is not reducible to a relation between subjects, nor does it result from a relation between subjects and objects; rather, it results from an "action at a distance," to use Blumenberg's words again. In a way difficult to explain and to describe in a lucid fashion, it amounts to a relation between objects themselves: between instruments and bits and pieces of matter, between the resulting traces that are to be taken as the material inceptions of concepts and the elusive objects they are presumed to be traces of. This argument usually provokes the accusation of structuralism, or trying to get rid of the actors, even of idealism. What I am seeking, however, is to replace the adequacy-relation between subject and object, concept and thing, with a kind of fitting-relation that derives its strength from the experimental knowledge game itself, without being self-referential in an idealistic fashion.

I think instead that epistemicity is one of the privileged modes by which we humans enter into a particular relationship with the material world around us. This relationship is precisely of a kind in which the act of calling, or construction for that matter, is delegated to parts of the material world itself. An epistemic relation is thus a relation, as I have tried to explain, between two kinds of objects, namely, technical objects and epistemic objects. Technical objects are, so to speak, the sedimented products of former epistemic activity. They can even, at least for a time, become and act as "historical *aprioris*"[18] to use the language of Edmund Husserl. In the end, epistemicity in all its materiality is thus also profoundly social. It is social in the sense of being an attitude toward the world that leads to the deposition and sedimentation of knowledge in a form upon which others can draw. At the same time, it is a very spe-

11 Hans Blumenberg, *Theorie der Unbegrifflichkeit* (Frankfurt am Main: Suhrkamp, 2007), 11–12.
12 Blumenberg, *Theorie der Unbegrifflichkeit*, 14.
13 Ian Hacking, *Representing and Intervening: Introductory Topics in the Philosophy of Natural Science* (Cambridge: Cambridge University Press, 1983), 23.
14 David Bloor, "Toward a Sociology of Epistemic Things," *Perspectives on Science* 13 (2005): 285–312.
15 The following remarks rest on my answer to David Bloor. See: Hans-Jörg Rheinberger, "A Reply to David Bloor: 'Toward a Sociology of Epistemic Things'," *Perspectives on Science* 13 (2005): 406–410.
16 See Hans-Jörg Rheinberger, *Epistemologie des Konkreten* (Frankfurt am Main: Suhrkamp, 2006), esp. Chapter 12.
17 Ludwik Fleck, *Genesis and Development of a Scientific Fact* (Chicago: The University of Chicago Press, 1979).
18 Edmund Husserl, "Der Ursprung der Geometrie," in *Die Krisis der europäischen Wissenschaften und die transzendentale Phänomenologie: Husserliana Vol. 6*, ed. Walter Biemel (The Hague: Nijhoff, 1976), 365–386.

cial social relation that makes it distinct from other modes of relating to the world around us, although it can, in the last instance, be related back to the kind of taking distance described by Blumenberg.

This text was originally published by the Max Planck Institute for the History of Science, Berlin, as part of the Research Colloquium "Epistemic Objects" at the Technical University Berlin on May 16–17, 2008.

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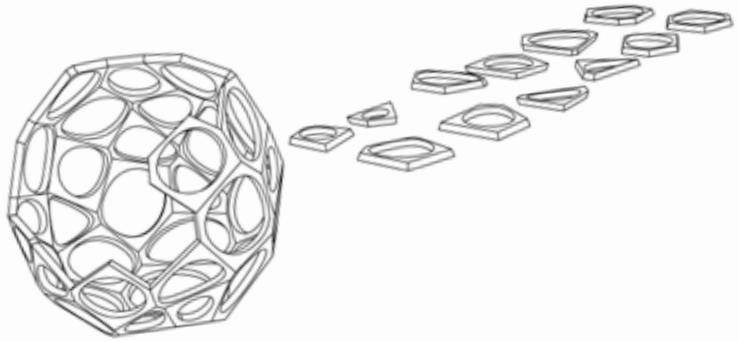

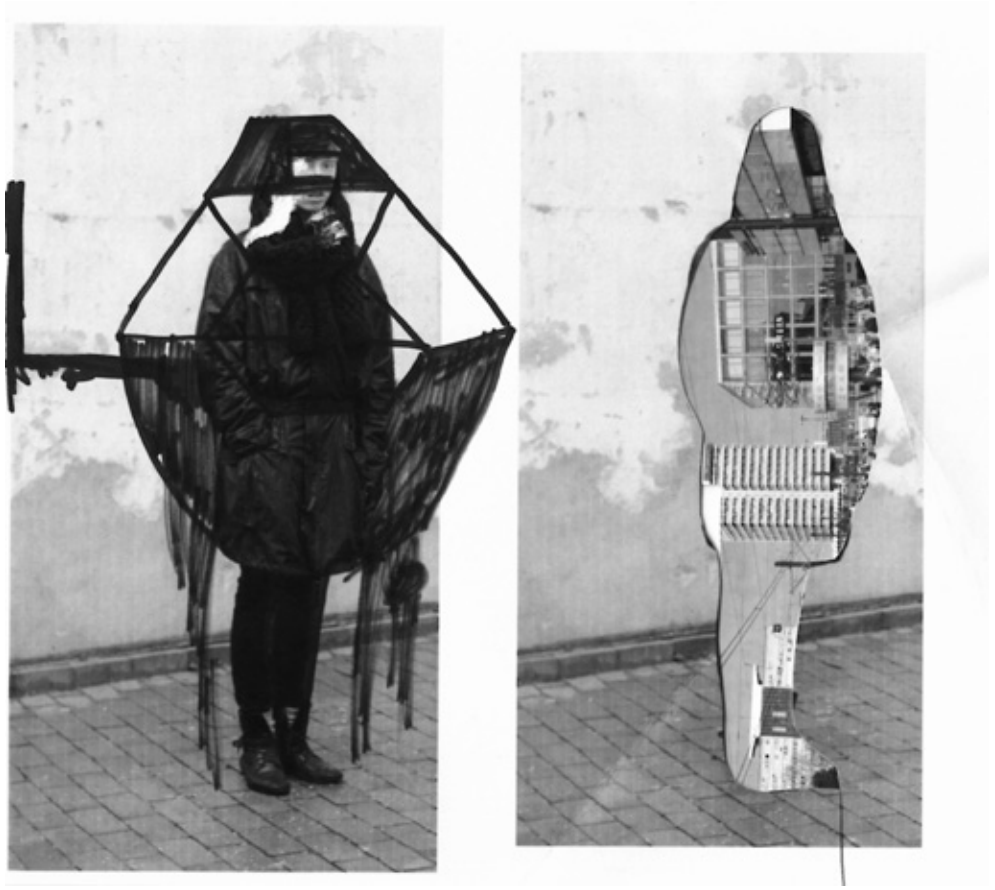

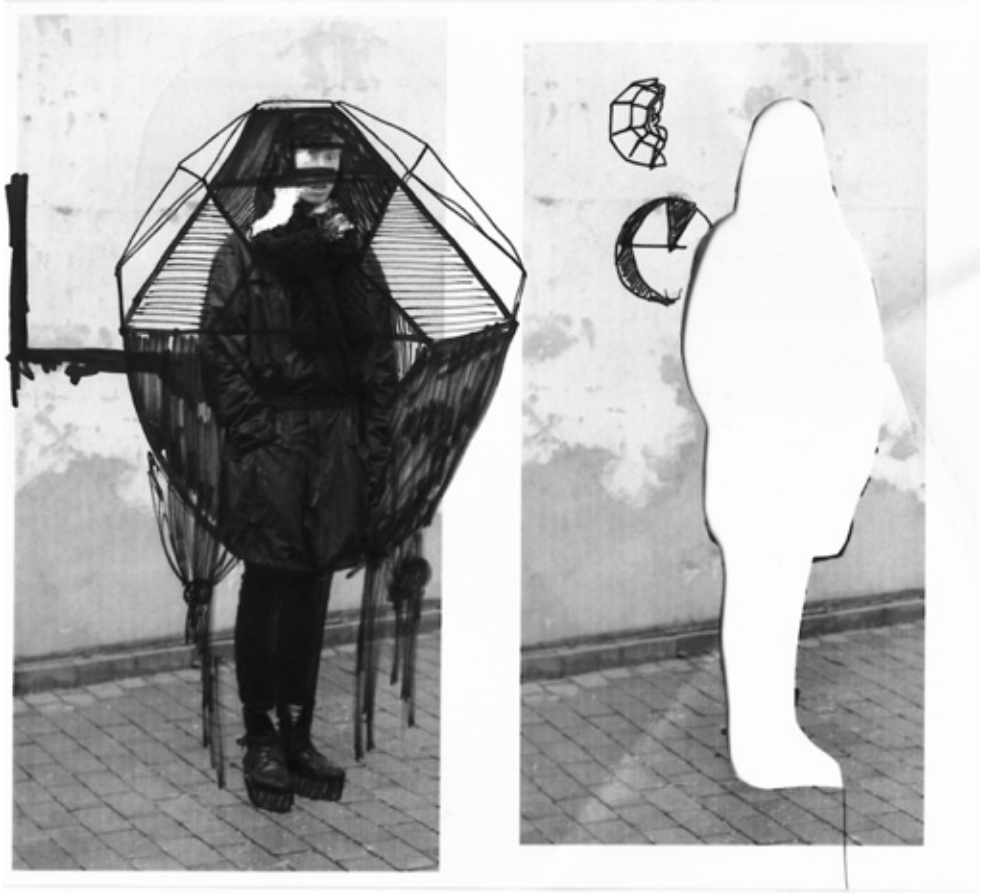

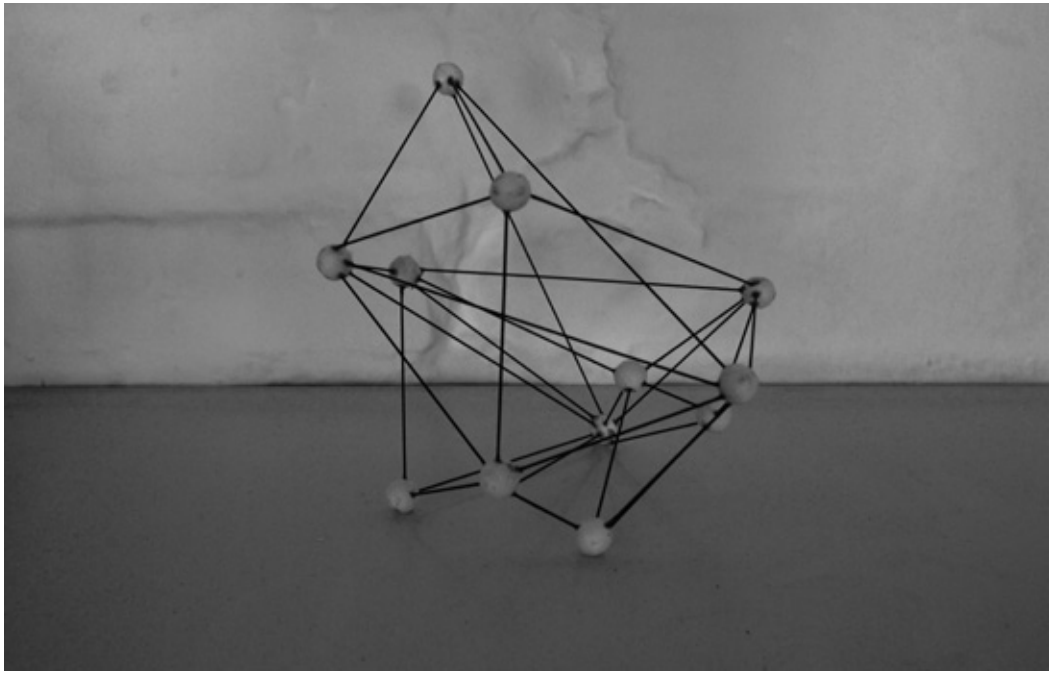

Exposé: Home of Protection
TRACKnFIELD

This exposé neither explains what the character wants, nor what he needs. Our protagonist has no conflicts to deal with, so we can renounce the main thread, the range of the story, and the conclusion. Likewise, it is not regarded as worthy of protection in copyright matters, as it doesn't exceed the threshold of originality.

Character

We have to deal with an unknown protagonist P., who never published a book, film, or artwork. P. is not connected to any style ("Mode") or party. References to his identity are vaguely indicated – he, as protagonist, stays anonymous.

Space

P. lives and works in a room full of books, maps, photos, sketches, and monitors. This material facilitates the production of diverse references: architecture, texts on Alexanderplatz at the time of the 1848 German revolution, scientific publications on barricades, art books, and political writings, as well as material on the pavilion at the television tower on Panoramastrasse. In the center of these collected/assembled documents is an unfinished model of a geodesic sphere – bits and pieces of the sphere lie around the space. Additionally the room is furnished with everyday objects: a chair, a place to write, utensils.

We see traces of different stages of his work, his research, and analyses. We get no explanation of his goals.

Plot

Depending on the consideration and compilation of the references a narration occurs, of which the parameters are so loosely spun around the character P. that his motivations stay blurry but circulate around the terms of paranoia, art, technique, architecture, and protection.

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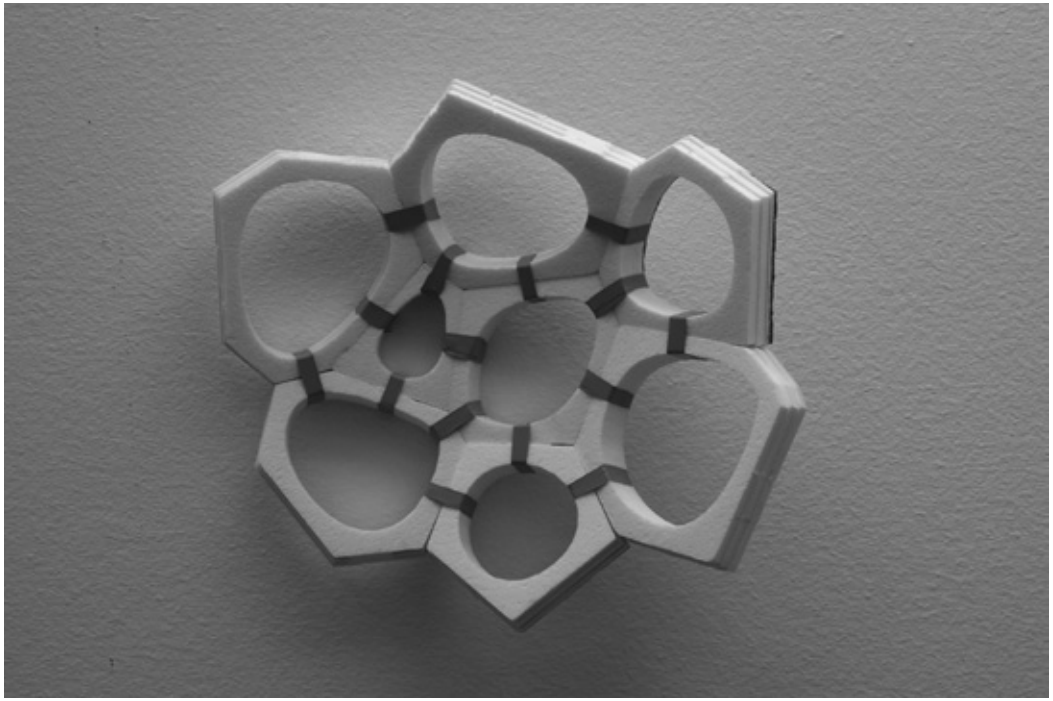

Urban Props

Jan Bovelet (urbikon)

Urban props have the remarkable ability to simultaneously critique and destine the production of new urban design. They orient urban practice on all scales, from the smallest urban furniture to the over-regional master plan. They do so by being essentially open and indeterminate and, at the same time, providing a stable common framework.

In the framework of a "stage model," which can be read both top-down and bottom-up, urban props can be analyzed heuristically through their categorical, conventional and semantic aspects. The categorical aspect enables urban props to organize the "discrimination, individuation, classification and predication of objects and events."[1] The conventional aspect points to the set of culturally and historically stamped instruments, methods, and habits that are established by an urban object. Such a set can roughly be termed *normal science* in a Kuhnian sense.[2] The semantic aspect of urban props is evident in that it is possible to assign them with concrete truth conditions, meaning, and reference, speaking logically.

These three aspects are dynamically integrated and always relate to each other: the semantic properties depend on the underlying categories as the applicability of categories conversely relies on the possibility to be characterized semantically; and in the social/cultural practices within which urban props are in use the categorical and the semantic aspects meet in the correspondingly created and established operational procedures. The ability of urban props to catalyze the formation of new configurations in the urban fabric and thus also provide material for future critique can be addressed epistemologically through four characteristics: (1) perspective flexibility; (2) transgression of terms (German: "Begriffs-Überschreitung"); (3) epistemic indeterminacy; and (4) epistemic underdeterminacy.[3]

From the perspective of the theory of knowledge these four characteristics are central for the orientation of the urban prop towards the new. In the theory of knowledge, objects possessing these characteristics have recently been termed "epistemic objects" as they incorporate epistemic preconceptions, i.e. conceptions that rely on the social, cultural, and historic context of preceding knowledge formation processes.[4]

The fact (1) that urban props always relate to a specific point of view implies that other points of view are always possible (though not necessarily plausible). As urban objects – like epistemic objects – always rely on a conceptual element, and there is no way to establish an unambiguous relation between a term and its content in a natural language, urban props (2) always bear the possibility to deconstruct the

1 Günter Abel, "Epistemische Objekte als Zeichen- und Interpretationskonstrukte," *Epistemic Objects*, MPIWG Preprint 374 (Berlin: MPG, 2009), 49. Translated from the German: "Diskrimination, Individuation, Klassifikation und Prädikation […] [von] Objekten und Ereignissen."

2 See: Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: Chicago University Press, 1962), 10–34.

3 See: Abel, "Epistemische Objekte als Zeichen- und Interpretationskonstrukte," 52–55.

4 See: Uljana Feest, Hans-Jörg Rheinberger, und Günther Abel, ed., *Epistemic Objects*, MPIWG Preprint 374 (Berlin: MPG, 2009).

"thitherto governing concepts."[5] Following Willard v. O. Quine's indeterminacy principles, indeterminacy of translation and inscrutability of reference also hold for urban props: (3) meaning and reference of urban props is always relative to a cultural, historic practice and can never be fixed definitively.[6] This indeterminacy is logical in nature and can thus not be resolved by the collection of empiric data since (4) an urban prop always exceeds "all possible empirical facts"[7] and thus is necessarily "empirically under-determined."[8]

Even so, the processual aspect plays a dominant role in this conception; it is crucial to emphasize the materiality of urban props. As "objects of knowledge are inextricably entangled with the technical conditions of their production,"[9] analyzing urban props' materiality is the best considered via the conventional – contrary to Alberti's conception of categorically distinguishing between creation and production.[10] In the conventional aspect the conflicting impetuses of the categorical and semantic are constantly negotiated, the former centered on the concept of identity, the latter on that of difference.

If we want to better understand the city, we need to focus on the material urban practices and the related objects, institutions, processes – knowing, that our pre-existent theoretical concepts are always already incorporated in them, modified through the resistance of the empirical world, a resistance Gaston Bachelard has properly described as an "obstacle épistémologique."[11] Even so we are confronted with an "epistemological uncertainty principle"[12] in which the conventional aspect of urban props is the plane, where the "externalizing of thinking"[13] enters into public and thus allows for practical and discursive debate in the first place. Making urban props the center of urban design thus emphasizes the fact that objects of urban design are neither natural nor ideal, but public. Thus the suggestion to render

5 Abel, "Epistemische Objekte als Zeichen- und Interpretationskonstrukte," 53. Translated from the German: "bis dato leitenden Begriffe." This observation places the metaphor at the center of natural languages and draws attention to the normative aspects of the use of artificial languages in urban design. From this perspective the use of digital production routines needs to be further explored. Christiane Paul has pleaded in this matter for a careful distinction of mere computer generated art and a medium oriented digital art (Christiane Paul, *Digital Art* (London: Thames & Hudson, 2003). Achim Menges has also pointed to the necessity of distinguishing "digital craftwork" and computational design in order to understand the "new ornament" (at the conference "Digital. Material. Structural. Ornament Today," Free University of Bozen, June 1, 2010).

6 Willard van Orman Quine, "Translation and Meaning," in *Word and Object* (Cambridge: The MIT Press, 1964).

7 Abel, "Epistemische Objekte als Zeichen- und Interpretationskonstrukte," 54. Translated from the German: "alle möglichen empirischen Fakten."

8 Willard van Orman Quine, "On Empirically Equivalent Systems of the World," *Erkenntnis* 9, Nr. 3 (1975): 313.

9 Hans-Jörg Rheinberger, *Experimentalsysteme und epistemische Dinge* (Frankfurt am Main: Suhrkamp, 2006), 9. Translated from the German "Wissensobjekte und die technischen Bedingungen ihrer Hervorbringung [sind] unauflösbar miteinander verknüpft."

10 See: Friedrich Kittler, *Unsterbliche. Nachrufe, Erinnerungen, Geistergespräche* (Stuttgart: Wilhelm Fink Verlag, 2004), 11.

11 Gaston Bachelard, *La formation de l'esprit scientifique* (Paris: Vrin, 1938), 14–19.

12 Hans-Jörg Rheinberger, *Epistemologie des Konkreten* (Frankfurt am Main: Suhrkamp, 2006), 244. Translated from the German: "epistemologische Unschärferelation."

13 Sybille Krämer, "Kalküle als Repräsentation. Zur Genese des operativen Symbolismus der Neuzeit," Räume des Wissens. Repräsentation, Codierung, Spur, ed. Hans-Jörg Rheinberger, Michael Hagner, and Bettina Wahrig-Schmidt (Berlin: Akademie-Verlag, 1997), 115. Translated from the German: "Exteritorisierung des Denkens."

the objects of urban design neither as objects nor as processes, but as props, since the concept of props from the outset sets the being-madeness of urban things at the core of the conception. Urban design neither deals with given objects nor with constructed processes that can be objectified through formalization, but always with historically, socially, culturally, aesthetically, and ethically contingent complexes of objects and processes within a public practice. It is precisely the tension of these complexes, and the embracement of multifarious processes, that demonstrate that the outmoded and inconsequential object designation should rather be termed urban props.

Urban Conceptions and Theory of Knowledge

In the current debate on architecture and urban design the topics of process and performativity have become central fields of interest. What can be seen is a general shift from object directed what-questions to process directed how-questions; i.e. that the epistemological question of *how* the objects of urban design are constituted and maintained becomes dominant over the ontological question of *what* the objects of urban design are. This shift puts traditional urban design in a dilemma, as the focus on the processual nature of the objects of design conflicts with the traditional strategy in urban design to orient and to judge the design process by its objectual outcome. One practical implication is the urgent difficulty to find a proper form to present the results of design that addresses a multiplicity of processes. If the designed object is a process, it is not at all clear how this process can be brought to an adequate form of representation, as the traditional modes of representation stem mostly from an object orientated line of thought.

The emergence of these sorts of questions in urban design is deeply interwoven with the cultural development of the modern age and immediately echoes current approaches in the theory of knowledge to establish the concept of epistemic objects as the centerpiece of the theory of science. The concept of the epistemic object aims at accentuating "the primacy of the status of being in-the-making of scientific experience, in which conceptual indeterminacy is not a deficit but the practice-governing principle, as opposite to its notationally consolidated results. It aims at a rehabilitation of the 'process of discovery'."[14]

A superficial view on the current debate and practice in architecture and urban design suffices to recognize that the old dichotomy between creative art and exact science cannot be right. This artificial distinction placed urban design somewhere "in-between," which is reflected in the struggle between positivistic empiricism and idealistic constructivism and the manifold accompanying dualistic distinctions such as nature and culture, subject and object, theoretical and empirical, material and immaterial, induction and deduction, observation and experiment, analysis and synthesis.[15] These distinctions have recently (within the twentieth century) come under attack in epistemology and have been the subject of wide debate.

The concept of epistemic objects in the theory of knowledge parallels to a stunning degree the debate about the concept of "props" in the realms of theater and film. Connecting these two conceptions discloses the possibility to shed new light on the question of what the objects of urban design are and provokes to ask the old question of the relation of the arts and the sciences anew.

14 Rheinberger, *Experimentalsysteme und epistemische Dinge*, 27. Translated from the German: "das Primat der im Werden begriffenen wissenschaftlichen Erfahrung, bei der begriffliche Unbestimmtheit nicht defizitär, sondern handlungsbestimmend ist, gegenüber ihrem begrifflich verfaßten und verfestigten Resultat zur Geltung […]. Es geht um eine Rehabilitation des »Entdeckungszusammenhangs«."

15 See: Sybille Krämer, "Sinnlichkeit, Denken, Medien: Von der 'Sinnlichkeit als Erkenntnisform' zur 'Sinnlichkeit als Performanz'," in *Der Sinn der Sinne*, ed.. Kunst- und Ausstellungshalle der Bundesrepublik Deutschland (Göttingen: Steidel, 1998), 34.

Analogous to the epistemic objects in science, urban props are the "real objects" of knowledge processes in urban design.[16] They are generated in the conflicting practices of making-experiences, generating-concepts, and creating-facts.[17] Urban props are neither preexisting urban elements in and of themselves nor do they provide an a priori method to modify the urban fabric. Urban props are essentially of an adualistic nature; they need to be regarded as the "inclusion of object and instrument in one and the same stable configuration capable of being subject to evolutionary processes."[18] This initial point, which has long been ignored in the positivistic line of the theory of science and that was also one of the main obstacles in the development of an adequate design theory due to its unreflected orientation towards the paradigm of science – or scientificity, for that matter – , is quite obvious in urban design: design always produces the objects it reflects upon itself. Since the "architect constructs objectual environments" he can be regarded as the "model subject par excellence for the examination of its objectual environment," as Christian Posthofen has recently pointed out.[19] Contrary to the sciences that have classically always intended to establish a neutral theory capable of accounting for all observable contingent phenomena, and also contrary to the arts, where the singularity of an artwork has always been a central topic, urban design is situated between this extremist conceptions of knowledge and creation. Therefore urban design has long been regarded as a hybrid composed out of different disciplines, and therefore being impure, neither a science nor an art. But is this really an adequate conceptualization?

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16 Abel, "Epistemische Objekte als Zeichen- und Interpretationskonstrukte," 37. Translated from the German: "realen Objekte."

17 In German, the term "Tatsache" describes the fact that facts are made and are thus historically contingent. See: Ludwik Fleck, *Entstehung und Entwicklung einer wissenschaftlichen Tatsache* (Frankfurt am Main: Suhrkamp, 1980).

18 Rudolf Stichweh, "Zur Analyse von Experimentalsystemen," in *Objekte, Differenzen, Konjunkturen. Experimentalsysteme im historischen Kontext*, ed. Michael Hagner, Hans-Jörg Rheinberger, and Bettina Wahrig-Schmitt (Berlin: Akademie-Verlag, 1994), 292. Translated from the German: "Inklusion von Gegenstand und Instrument in ein- und dieselbe stabile und evolutionsfähige Konfiguration."

19 Christian Posthofen, *Theorie und Praxis*, ed. Arno Brandelhuber and a42.org / AdbK Nürnberg, Disko 5 (Nürnberg, 2007), 9. Translated from the German: "Der Architekt baut objekthafte Umwelt und ist insofern das Modellsubjekt in Auseinandersetzung mit seiner Objektumwelt schlechthin."

Wrecking Pendulum

Miodrag Kuč

Remember the nasty misbehavior of childhood when you destroy somebody's sandcastle or snowman? Pure pleasure, I would say. Proof that the only certain thing is change itself.

Destruction has been one of the main generators in the multifaceted urban history of Berlin – clearly visible in accumulative figure-ground-plan ("schwarzplan") where destruction is understood not just as a post-war outcome but also as demolition during city's division and replacement of urban fabric in the name of modernization. One of the places that passed through drastic spatial transformation is without a doubt Alexanderplatz. Its turbulent history and myths made this space not just deeply coded in the cultural memory of citizens but also the place that illustrates a totality of urban failures. A place that wants-to-be but is not, a place that constantly rejects given development patterns, a place that was supposed to suck the people in but it is just a transit route.

What is the conceptual problem of this square? One could say, it's just too empty and ugly to be a square in the traditional sense. Others claim that the presence of the ruling system is cankerous. Change in public infrastructure, brutal privatization, and the bizarre social mixture of punks, emos, and Michael Jackson fans above all irritate Berlin natives. Finally, all those tourists with white socks and brown sandals.

Apart from being the most screened image of Berlin and political stage of great importance, Alexanderplatz's urban morphology is simply a patchwork of unfinished processes interrupted by a variety of destructions. The impending one has already been announced under the pathetic name of "City Crown."

Radical spatial change and the constant construction-site feeling proves that here urban software was always in misbalance with hardware. Or simply software was never written properly. Having that in mind we come into a debate about the difference between object and prop. Understanding this square as a political theater or large-scale chessboard, one can clearly say that urban dysfunction comes from a lack of "triggers" that actually produce props from dead forms. Open-source urbanism, somebody said. How has imposed morphology become the city? What are the contemporary triggers? Can we speak about urban props as objects in mass-scale that contain something more than the conventional function-form relation?

Destruction makes Alexanderplatz alive again and again. It is the only process that has shown results. The rest is just fake.

Making urban props is understood as a radical change in visual qualities through a process of fabrication. That process aims to raise critical views on spectacular forms generated by real estate. What if skyscrapers are not the form that will satisfy us in the future? Are we going to destroy them in the name of another progress?

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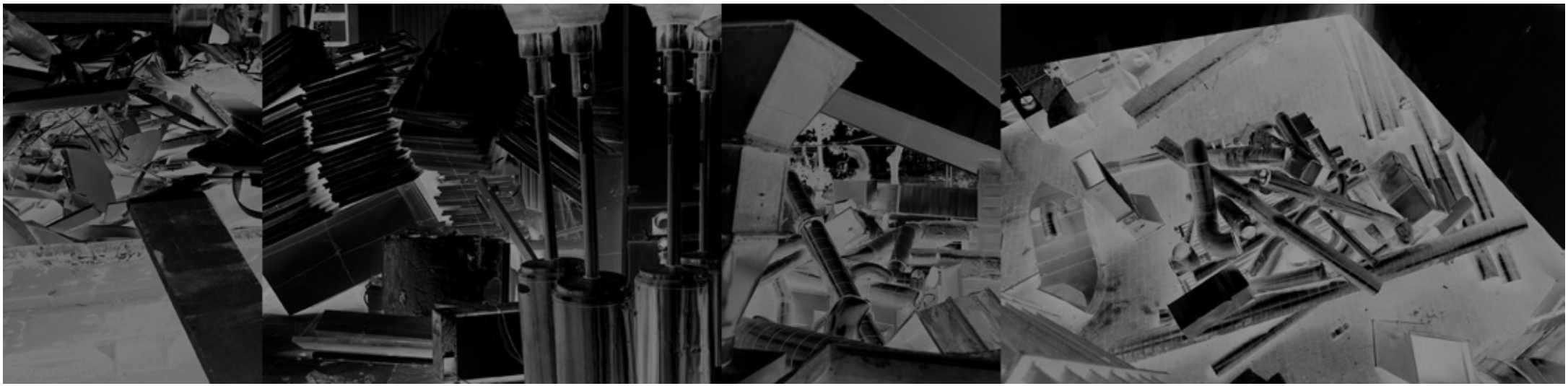






have balls is in reality not the title of this iteration of the anxious prop. And Berlin has plenty of them: the ballsy phallus on Teufelsberg, the Carl Zeiss Planetarium, tiny ones in Templehof, and of course the mother of them all, the Fernsehturm – all state apparatus dating prior to 1989. The title of this exposition is less a testicular, paternalistic notion; rather it is more attune to the dismantling of it. It is a set of situations with a common disposition towards the affirmation of public space, wherever that may be. Instead of turning into the persistent longing for a physical public space, we turn to rely on other models, fictional models of access to that last spherical bastion of publicity, somewhere between the material and mental space. Perhaps it is in that unattainable past-space where Alfred Döblin's Franz Biberkopf found solace in the liberating melancholy and degradation of the street; similarly in that four-dimensional view of present-planet Trafalmadore of Kurt Vonnegut's Billy Pilgrim; or even towards that future-kibbutz of Julio Cortázar's Horacio Oliveira, which he perpetually banged his head against. *Berlin Alexanderplatz*, *Slaughterhouse Five*, and *Hopscotch* depend on these literary, shapeless devices, potentially props, to shake the logic of fate in the trope of "Tätigkeit," in the action-of-doing as an eccentric displacement: the decadent, the absurd, and the playful as access to an outside world. That outside world is bound by the modern fetish of the object, the nearly absolute commercialization of experience that has left us, much like Biberkopf, Pilgrim, and Oliveira, with no recourse other than the aimlessly delectable search for desire. That desire seems only to inhabit worlds outside yet inextricably within the mind of the market. These worlds are accessible in the escapist domains of that which can elude the colonization and instrumentalization of ideas. In that spirit we resort to materialize a typology, the recalcitrant prop, the one that potentially fails to function and/or acknowledge its context. The works that are before you have been formulated over the past three weeks, naive yet made as an earnest attempt to bridge this desire, this unattainable hormone always in the making, yet stubbornly resistant to being enveloped, corralled.

Luis Berríos-Negrón

Cock Ring: The Uroborus Performance at Alexanderplatz
Morgan Belenguer
Exposé: Home of Protection
TRACKnFIELD
Protect Me from What I Don't Want to Become
Vladimir Karaleev
Sweat and Tears
Luis Berríos-Negrón
Wrecking Pendulum
Miodrag Kuč and urbikon

All work developed
and produced
at the studio of
Luis Berríos-Negrón
with
Mendel Heit
and
Sarah Witt

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July 29, 2010