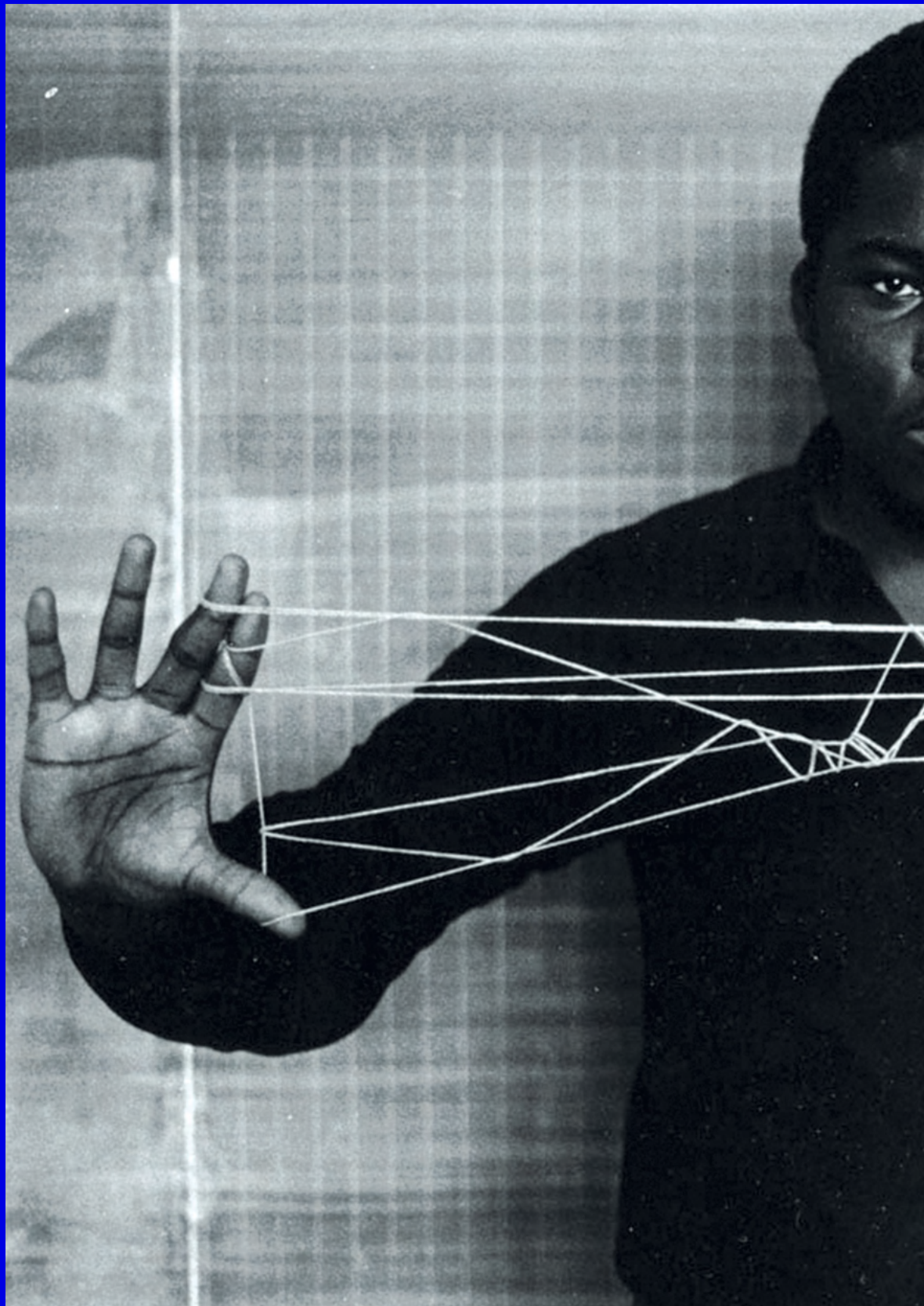
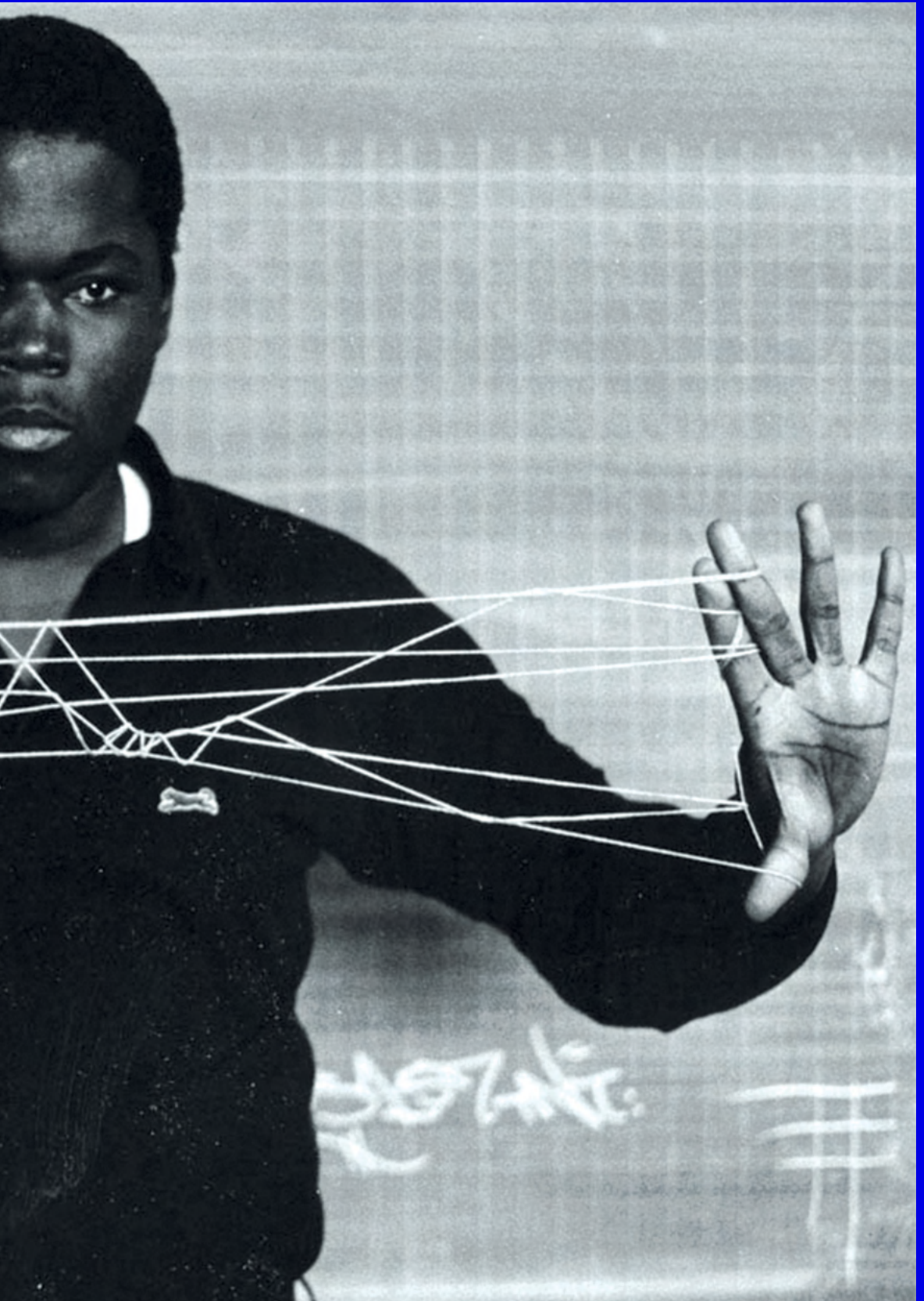


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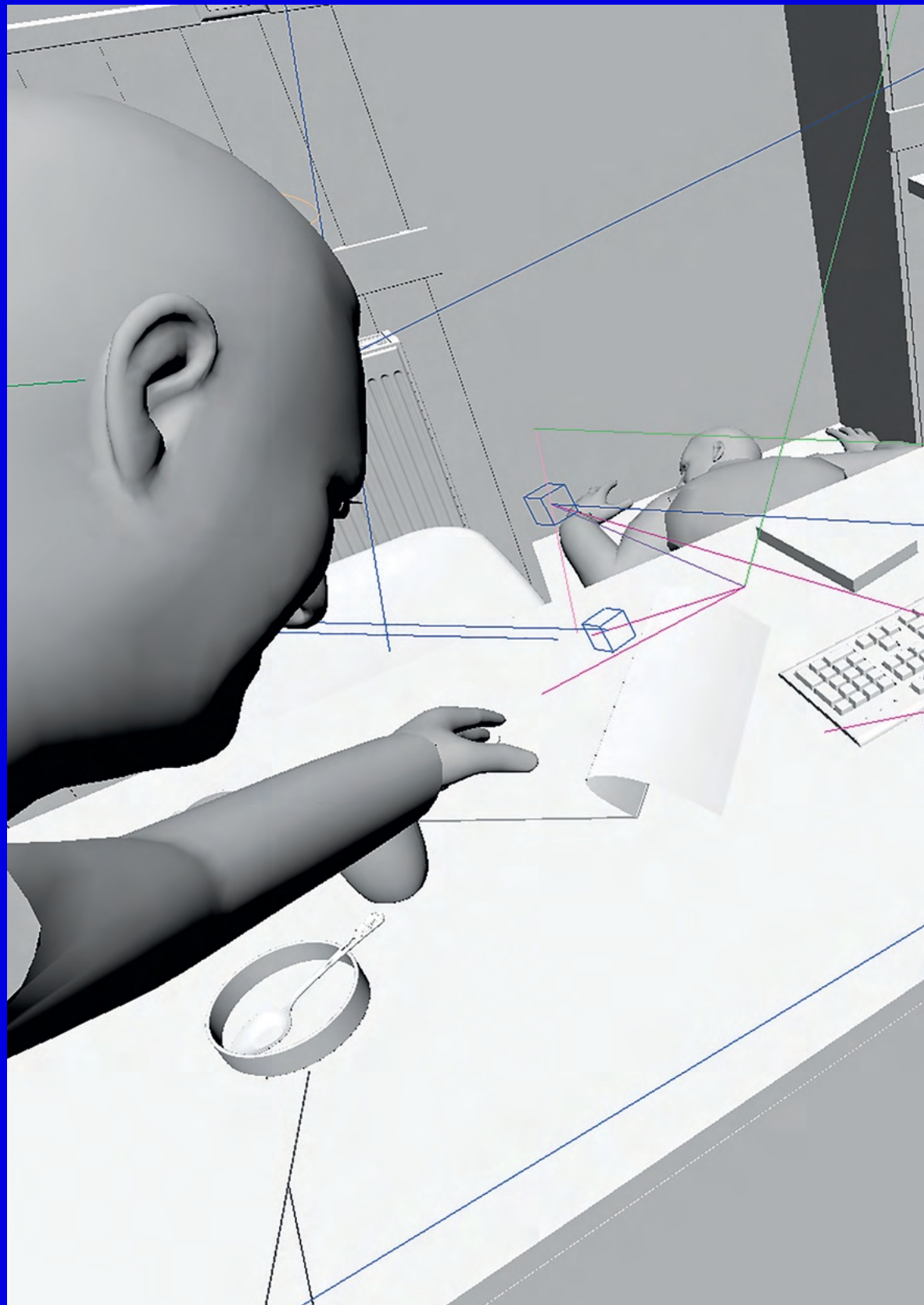


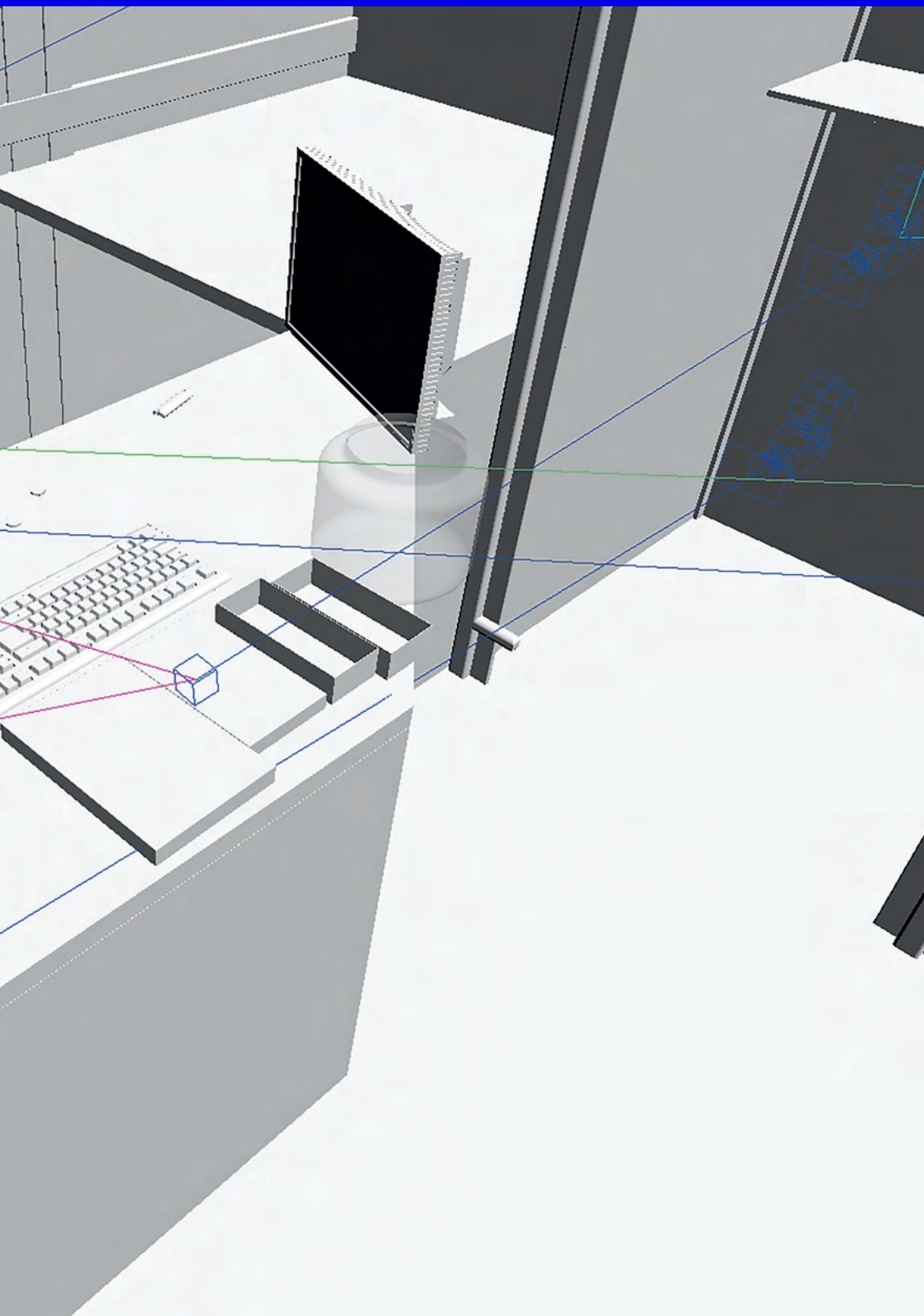


















relearning bearing witness

Natascha Sadr Haghghian

35 INTRODUCTION by Brian Kuan Wood

41 Section one: THE CORNER OF THE EYE

47 THE GEOMETRY OF A CROSS-EYED SUBJECT marked the beginning of my ongoing study of “looking awry,” which applies “not looking straightforwardly” as a technique and research method tracing complications in vision, particularly when bearing witness to unsettling visual events. The text set out to reconstruct a disruption I experienced in my field of vision during a screening of *Henchman Glance*, an unsigned documentary composition edited by Chris Marker that synchronized shots from Leo T. Hurwitz’s filming of the Eichmann trial in Jerusalem with Alain Resnais’s film *Nuit et Brouillard* (*Night and Fog*). “The Geometry of a Cross-Eyed Subject” was commissioned by Chus Martínez and first appeared in issue 0 of *Index*, published by the Museu d’Art Contemporani de Barcelona (MACBA) in 2010. A performative demonstration based on the text was part of Les Laboratoires d’Aubervilliers’s *Edition spéciale #0* in Paris, 2011.

54 Image captions and credits for section one: THE CORNER OF THE EYE

57 Section two: DOUBLE VISION

73 PARALLAX was written in response to *On Direct Vision*, an eleventh-century text by polymath Ibn al-Haytham in his *Optics*, an extensive study of how light, vision, and the eye work together. I wanted to trace the propagation and diffusion of rays of light over the vast distances bridged by video-conferencing technology. Intimacy and alienation meet in the diversions produced in the process of trying to lock eyes online. “Parallax” was commissioned by Ashkan Sepahvand and first appeared together with al-Haytham’s *On Direct Vision* in *Textures of the Anthropocene: Grain Vapor Ray*, edited by Katrin Klingan, Christoph Rosol, Bernd Scherer, and Ashkan Sepahvand, and published by Haus der Kulturen der Welt (Berlin, 2014) and MIT Press (Cambridge/Mass., 2015).

89 **SOLO SHOW** originated from a two-year collaboration with Uwe Schwarzer and his artwork-production company, mixedmedia berlin. We invented an artist named Robbie Williams in order to show and discuss the otherwise “invisible” labor companies such as Uwe’s carry out for artists. The project was commissioned by Andrea Viliani, and this interview first appeared in the book *SOLO SHOW*, published by Koenig Books London on the occasion of the exhibition at Museo d’Arte Moderna di Bologna (MAMbo), in 2008. The interview was later published in *IINN PPEERRPEETTUUAALL PPRROODDUUCCTTHOONN* as part of the second and third iterations of the project in New York at e-flux in 2013 and at Social Factory, the 10th Shanghai Biennial, in 2014.

121 **DISCO PARALLAX** follows a ray of light through various layers of technologies, histories, minerals, and bodies to trace its role in the governance of life and nonlife. Actively divesting from the flow of content conveniently brought by the light of my phone’s screen, I wanted to trace the workings of light itself, from insomnia to symbols of empire. “Disco Parallax” was commissioned by Tom Holert and Brian Kuan Wood for “Politics of Shine,” the January 2015 issue of *e-flux journal*.

178 Image captions and credits for section two: **DOUBLE VISION**

185 Section three: **TROUBLED WITNESS**

203 Evelyn Fox Keller is a physicist, author, and feminist who has been looking at the history of microscopy and visualization in the life sciences. I was particularly interested in how she uses the interactions among optical device, retina, and mind’s eye to understand how the image appears for the scientist and how perception and the use of metaphors have shaped scientific knowledge. Our conversation was recorded in Paris in December 2006. The MIT List Visual Arts Center in Cambridge/Mass. commissioned the book **THE MICROSCOPE: NATASCHA SADR HAGHIGHIAN IN CONVERSATION WITH EVELYN FOX KELLER** for their exhibition *Sensorium: Embodied Experience, Technology, and Contemporary Art, Part II* in 2007.

223 The conversation with Thomas Keenan, director of the Human Rights Project at Bard College, took place in a Whole Foods supermarket on the Bowery in New York City. It was documented with a spy camera and wireless microphones and later played back in the New Museum's auditorium. Walking through the aisles of the store we discussed photo opportunities and performative images, and how they challenge the dogma of revelation and exposure as political tools. **SLEEPWALKING IN A DIALECTICAL PICTURE PUZZLE, PART 2: A CONVERSATION WITH THOMAS KEENAN** was commissioned by Anton Vidokle for Night School Public Seminar 9 at the New Museum, New York, in October 2008. It was first published as an edited transcript in the April 2009 issue of *e-flux journal*.

249 **A CROSSING** reviews an uncredited mash-up found online. The mash-up joins two troubled images of contrasting agendas, and in the process renders visible what both images separately tried to obscure. "A Crossing" was commissioned by the Walker Art Center in Minneapolis and published online, in July 2015, as part of the Artist Op-Eds series in the *Walker Reader*, where it is also available as a print-on-demand pamphlet.

262 Image captions and credits for section three: **TROUBLED WITNESS**

265 Section four: **BEYOND IMAGES**

281 **HOW TO SPELL THE FIGHT—FISH AND FIRE** considers the prehistoric practice of string-figure making as polydirectional image creation, as engaging in mathematical ideas, storytelling, and collective memory. The text ponders the potential of reverse engineering computational governance through string figures. It was commissioned by Eric C. H. De Bruyn, Sven Lütticken, and Ana Teixeira Pinto and first published, in 2018, by Sternberg Press (Berlin) and the Tanmia Bookstore (Cairo).

- 301 Oya Pancaroğlu's research focuses on figural arts of the twelfth and thirteenth centuries in Persianate societies. She has written about the human image during this period, as part of cosmographies and literature dedicated to "good conduct." Our conversation took place in 2010 at Boğaziçi University in Istanbul, where Pancaroğlu works as a historian of medieval Islamic art and architecture. **PATHS OF WONDER: CONVERSATION WITH OYA PANCAROĞLU** was first published in the artist book *Seeing Studies* (Ostfildern: Hatje Cantz, 2011).
- 335 Maison d'Art Bernard Anthonioz (MABA), in Nogent-sur-Marne, houses an exhibition space in one wing and a retirement home for artists in another, surrounded by a huge park. Nataša Petrešin-Bachelez invited me to her exhibition project *Tales of Empathy* at MABA (as part of Jeu de Paume's Satellite 7 program). At the time of my first site visit, in August 2013, a gigantic branch fell from a 250-year-old plane tree standing in the middle of the lawn. The "dead" branch became a spur for reflection on empathy as a capacity to move and transform and to be moved and changed. **SIMILAR** was first published in *Ressemblance*, ed. by MABA and Jeu de Paume (2014), on the occasion of the eponymous exhibition.
- 356 Image captions and credits for section four: **BEYOND IMAGES**
- 363 Image captions and credits for **OPENING SECTION**
- 364 **AFTERWORD** by Marius Babias and Anna Lena Seiser
- 370 Greeting by Klaus Lederer
- 372 Colophon

a signal from a hole
Brian Kuan Wood

*The senses maintain an uncivilized and uncivilizable trace,
a core of resistance to cultural domestication.*
Susan Buck-Morss, "Aesthetics and Anaesthetics"

Last night, I stopped. The light changed, and I did what I was expected to do. But there was no one else in the area to stop for—no one crossing in the other direction, no cops scrutinizing my behavior. I was alone, yet I waited like a good citizen for a frequency of electric light to allow me to pass. Out of conscience, out of vigilance, out of training, I stood still for nothing and for no one. After all, it was dark. Perhaps a person I couldn't initially see would materialize and cross, someone whom I might injure by accident, or who might injure me. Perhaps the cops were indeed watching, through a well-hidden camera, and would subsequently appear in one of their forms, as a police car overtaking me or as a ticket arriving later in the mail demanding money. Presumably, such a traffic light is programmed to give everyone equal time, to evenly distribute the natural irregularities in our movements. Especially at night, its signal is so sharp, clear, and unobstructed as to pierce my mind like a thought sent by God, and the rest of my body instantly answers its call. Had the clarity of this circle of light not dispelled any hesitation, we might wonder about the color. We might study the wiring. We might question the absurdity. Here I am, stopped in my tracks, waiting for a solitary light to allow me to move.

Importantly, this traffic signal is not really an image. Neither is it what Harun Farocki termed an “operational image” (*operative Bild*)—an image created by and for machines. Being made of light, the signal bears a family resemblance to images, yet its function is not to represent a scene, but to switch between the different flows of a larger geometrical apparatus (and in this sense it is operational). Beyond the clarity of these geometries and regulatory controls lie the monsters and absolute outsiders who cannot read our signs—animals, weather, plants, accidents, all contingencies and externalities with incompatible rhythms and geometries. They send competing signals and warnings of their own, from the barbaric lands beyond the mountains, yet our civil and civilizing regimes only draw them nearer, into our own decaying infrastructure, into ourselves when we become the barbarians who fail at becoming machines. Being attentive to a wider spectrum of signals is no easy matter. Such signals may present themselves in the language of madness, of trees in a forest forming letters, and those letters forming words, and those words forming sentences. Yet, like clouds forming shapes, when these signs become legible, we encounter a perforated world, with holes transmitting signals that can be decoded. These, too, might stop us in our tracks. They might arrest our ability to immediately read what is written. It could be as simple as a small circle of light, positioned to anticipate contingencies, suddenly opening onto other domains of sensing and sense making.

An early work by Natascha Sadr Haghghian describes John Dee (1527–1608), an advisor to Queen Elizabeth I, as the direct prototype of the fictional British spy James Bond. Dee was revered for the range of his scientific knowledge, which encompassed the fields of mathematics, navigation, geography, alchemy/chemistry, medicine, and optics, and his involvement in occult sciences made him widely regarded as a sorcerer. Queen Elizabeth called Dee her “eyes,” and he signed his letters to her with two circles guarded by what might have been a square root sign or an elongated seven (a sacred, cabalistic, and lucky number), a 007 indicating that he was the “secret eyes” of the Queen, her “noble Intelligencer.”¹ Sadr Haghghian points out that, like Dee, Ian Fleming’s famous 007 spy also played with fire, and his hand gestures holding a gun even resemble those of Dee as portrayed in a Victorian-era painting by Henry Gillard Glindoni.² Sadr Haghghian seems to suggest that espionage and the figure of the spy have directly inherited practices of the occult—seeking what lies hidden beneath appearances, trafficking in arcane information and coded messages, and traveling unseen,

for instance. Consider Bond's abilities to providentially escape death, gratify any desire, conjure loyalty through boyish charm, and secure state sponsorship for his unruliness, vanity, and brutality as the state's necessarily absolute outsider. Such a figure must always work in the spaces in between and see through the holes in the story, all the while putting holes in other people with his elegant gun. For the spy, like the occultist, vision is only a small part of a much larger technology or apparatus that uses seeing as a diversion, as a way to hide what cannot be disclosed, but also as a reference point for improvising other forms and methods of navigating what cannot be known visually.

This book compiles a number of Natascha Sadr Haghghian's many essays and interviews, and threads them through constellations of images that range from Sadr Haghghian's own artworks to broader documentation and research that inform the works and writing. Though the collection is not comprehensive—there are important writings and works that are not included—it somewhat exhaustively presents certain lines of continuous inquiry central to her work and thinking. However, this book—especially its visual language—can only make strong assertions about Sadr Haghghian's work by engaging with a central paradox, which is that much of her work is not actually very visual in the first place. Most often, the subject of the work is not even seen as such, even when it is materially present, or even omnipresent. In many cases it cannot be seen at all, due to laws of the state or laws of physics. This makes the modes of visual disclosure or multisensory mapping extremely important components of Sadr Haghghian's work, which this book's visual language and design—thanks especially to Zoff Kollektiv—try to extend. Each of its four sections identifies a line of inquiry common to its grouping of essays and images. However, the illustrations may appear to point elsewhere or misdirect the reader, or exert unusual gravitational pulls on neighboring text and image. Hopefully, they reflect our decision in this book to indulge in the perverse power of visibility in overdetermining otherwise abstract or nonrepresentational lines of inquiry.

While this method has elements of an elaborate puzzle, Sadr Haghghian's writing, like her work, is also disarmingly honest and direct, consistently searching and sensitive to contradictions. But her writing, though an extremely important component of her artistic practice, is rarely positioned in close proximity to her works in a way that would simply reveal a hidden object. The missing element is always more phantasmatic than that.

This is why the artist and I felt that this book needed to stage an intrusive encounter between her worlds of thinking and seeing, with the hope that the experience of reading her essays alongside her works might synthesize for the reader what is often hilarious or whimsical in the way she handles the ambient obviousness and omnipresence of what cannot be seen. After all, there is a certain absurdity to needing so many layers of abstraction to identify what is filling the ground under your own two feet, surrounding you in an organic supermarket aisle, made possible by a colossal weapons industry, or simply fundamental to physics. It is by virtue of the material immanence and paradoxical self-evidence of much of her subject matter that Sadr Haghghian's writing is absolutely direct.

In "The Geometry of a Cross-Eyed Subject," the opening essay here, Sadr Haghghian describes a moment in which the center of her field of vision is perforated while viewing a film—more precisely, a film experiment by Chris Marker called *Henchman Glance*, which intercuts Alain Resnais's short 1956 film *Nuit et Brouillard* (*Night and Fog*), about Nazi concentration and extermination camps, with recordings of the Nazi officer Adolf Eichmann's trial. Eichmann was apparently shown Resnais's film during the trial, and Marker attempted to reconstruct that scene through montage. But why did this simple experiment short-circuit Sadr Haghghian's vision? And how does this short circuit serve as a central thread for this book?

"The Geometry of a Cross-Eyed Subject" includes a discussion of Slavoj Žižek's account of Michael Mann's 1986 film *Manhunter*, where a policeman hunts a serial killer through a highly brutal form of remote sensing, by watching films and inhabiting the vision of the killer, sensing his desires as his own and opening himself to the same desires as the killer.³ In the film, it is clear that while the policeman's method is highly effective, its violence is also immense, since he must in some sense become the serial killer in order to hunt him, to predict his next victim and prevent another death. Sadr Haghghian suggests that the passage the policeman creates is not a one-way street but an opening to feedback, where the object also gazes back through this hole or perforation to penetrate the subject, and "the principle of pain within this relationship turns into a suffering that, to be sure, differs from an emphatic compassion." Such a process of extreme identification also opens up something as benign as compassion to techniques of cross-contamination. The policeman may stop the killer, but the cost will be high if the killer's desires have become embedded in the policeman. When such

a powerful reversal or transference takes place, we are no longer in the domain of the visual alone. We are talking about images and recordings that do things beyond mechanically witnessing or freezing events in space and time for documentary evidence. Westerners often mock superstitious fears that photography or some other mode of image capture could “steal one’s soul,” presuming that any civilized technology can only dutifully serve its masters. How, then, to account for the immense powers and vulnerabilities generated not only by technologies but also by the depravity of their masters?

Sadr Haghghighian’s short circuit, though it was experienced visually, cannot be explained through vision alone, and may have more to do with the narrative power of images to destroy what they reveal. Writing, on the other hand, is far less evidentiary. Perhaps this is why Sadr Haghghighian’s writing freely confronts its object head-on, building and exploring broader lines of sensing that may enter and exit the visual domain, but can never be governed by it. This book, *Natascha and I* hope, complicates that relationship by a further step, by summoning the wild power of images, even when they might be misleading or encourage misreading, to reflect back onto the texts that inspired them, the artworks they prompted, or onto one another. We hope that the effect is weird. We hope it might deliver energy and clarity to domains of sensing that *Natascha* has consistently inhabited and explored for some time. Like many others, we are sometimes flabbergasted, dumbfounded, shocked, and stuck, to the point of being arrested in our tracks. And yet, stopped at a traffic light, faced with an awesome power that only grows in strength and intricacy, one might find oneself suddenly reaching out in unforeseen ways. One might shut down momentarily to regain sense. One might lose the form. One might search for its contour, only to discover something else at work. One might feel other holes in the surrounding area delivering other messages that will only be decoded by cognitive, political, or sensory tentacles no one knew existed, and that actually didn’t exist until they could be put to use.

1 Richard Deacon, *John Dee: Scientist, Geographer, Astrologer, and Secret Agent to Elizabeth I*, London: Frederick Muller, 1968, p. 4.

2 Natascha Sadr Haghghighian, *unternehmen:bermuda* (2000). The first part of the video quotes from the brochure of the Wellcome Collection in London on the

Glindoni painting, while the second part of the video quotes from Deacon’s *John Dee*.

3 Slavoj Žižek, “Pornography, Nostalgia, Montage: A Triad of the Gaze,” in *Looking Awry: An Introduction to Lacan through Popular Culture*, Cambridge/Mass.: MIT Press, 1991.

the corner of the eye



Ὁρθολογία Ἀπλῆ;

363.

OR

The single Eye,
Entituled the Vision
OF
G O D

Wherein is infolded the
Mystery of Divine presence,
So to be in one place finitely in
apperance, as yet in every place no lesse
present, and whilst Hee is here, Hee
is universally every where infinitely
himselſe. Penned by that Learned
Dr. CVSANVS, and pub-
lished for the good of the
Saints.

By *GILES RANDALL*. K. P.

PSAL. 139. 7.

*Whither shall I flie from thy Spirit,
Whither shall I go from thy presence.*

LONDON, Printed for *John Streater*,
at the Signe of the Bible in
Budge-Row. 1646.





the geometry of a cross-eyed subject

My deliberations over the incident described below have brought me to the edge of my mathematical capabilities, which are not, admittedly, especially developed. Still, to me it seemed vital to reconstruct the situation geometrically in order to understand what was happening to my eyesight. Basically, I started going cross-eyed in a strange sort of way. Not that I was seeing double; instead, a hole developed exactly in the middle of my field of vision—meaning straight ahead, when looking from *my* seat in the cinema in the Haus der Kulturen der Welt (House of the Cultures of the World)—and it permitted me to look only at the left and right sides flanking the projection screen.

The incident occurred during the program *Documentary Moments* at the Documentary Forum in Berlin. The filmmaker Eyal Sivan announced the previously unscreened film *Henchman Glance*, which Chris Marker had passed on to him, and which is based on Alain Resnais's 1956 short documentary film about Nazi concentration and extermination camps, *Nuit et Brouillard* (*Night and Fog*). However, the film explicitly does not originate from Marker himself. As became evident, *Henchman Glance* is composed of simple edits (shot/countershot) of two plot threads that get synchronized through the editing. *Night and Fog* was cut together with the recordings of the trial of the State of Israel vs. the Nazi officer Adolf Eichmann.

One sees Eichmann from above, a slightly slanted frontal shot. He sits in a glass booth, his gaze directed ahead, and apparently, or in fact, watches a screening of the film *Night and Fog*, which can be seen alternating with the images of Eichmann himself. The sound of *Night and Fog* runs continuously through all the film's images. According to Sivan, *Night and Fog* was in fact shown to Eichmann during the trial. Marker reconstructed this occurrence through editing.

I was already unprepared for what was about to unfold on the screen, because I had never seen *Night and Fog*. But as early as the first minutes of the film, I was predominantly preoccupied with my optic apparatus, which had gone completely haywire. I simply could not look at the screen. But I was also unable to exit the cinema. It was one of those events that one attends out of respect, above all if one has grown up in Germany. So for thirty-three minutes my eyes wandered aimlessly along the dark edges of the projection. In the corner of my eye I hazily chased the screen in hopes that something would change and enable me to look at it again. Like when I was a child, secretly watching scary movies that I actually could not endure. I had always said to myself, now that you have begun, you have to "see" how it turns out.

In his book *Looking Awry: An Introduction to Lacan through Popular Culture* (1991), Slavoj Žižek describes a scene from the film *Manhunter* (1986) in which the policeman watches Super 8 films belonging to murdered families over and over again in order to learn something about the murderer's motive. He discovers the thing that connects the families: they all had their film developed in the same laboratory. And ultimately that is where the murderer is found. As Žižek says, the irony of the film lies in how the policeman's method, on a formal level, creates a perversion. The perversion consists of the overlapping, or even coincidence, between his gaze and that of the murderer. His method requires that he view the Super 8 films with the eyes of the murderer. In the course of this operation, the subject splits and his gaze becomes perverse. The perverse gaze onto the victim takes place in faithful service to none other than that victim, in its name, and in its interests. Žižek places this overlapping of

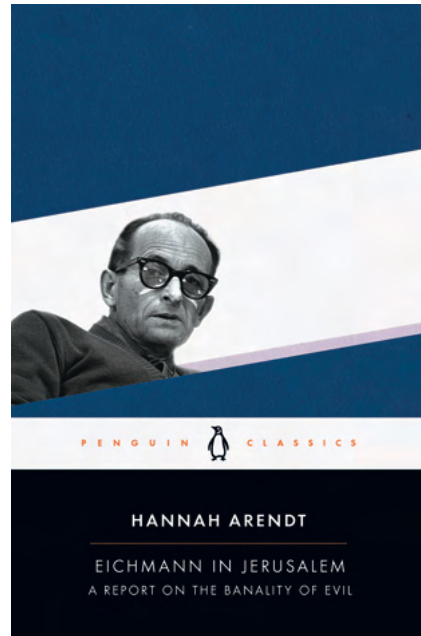
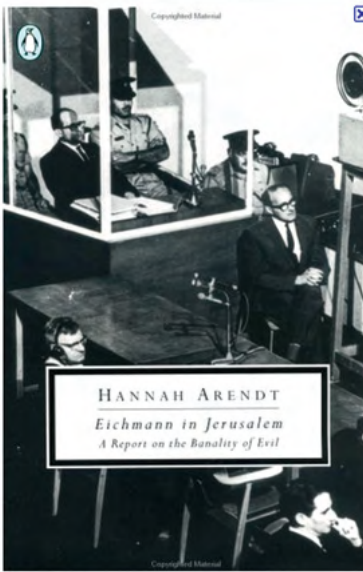
gazes into a correlation with pornography, which I have yet to fully grasp. Here, pornography is the genre that shows all there is to show, hiding nothing from view, while in a radical way bringing about the loss of the side view. But maybe the feedback that emerges from the short-circuiting of complex fields of vision helps to reconstruct the hole that occurred during the screening of *Henchman Glance*. Neither the subject-object relation, nor the associated lines of sight arising while showing images, are *unidirectional*. The object gazes back, and depending on what the intention of the production of that relation is, this gaze, owing to circumstances, gets reflected back. If I understand the concept of *jouissance* correctly, it is to be found precisely here. The subject is penetrated by the object's gaze and vice versa, and the principle of pain within this relationship turns into a suffering that, to be sure, differs from an emphatic compassion.

In my contemplation of Eichmann, of how he contemplates the horrible crimes he helped commit, I attempt, on the one hand, to see the pictures with his eyes. This means that I take on his gaze, placing my gaze parallel to his, and I try to see what he sees in the images of the concentration camp. I do this in the name of the victim, as does the policeman in *Manhunter*. On the other hand, I try to read his face. This means that I watch from the opposite direction, from *Night and Fog* toward Eichmann's face, and I try to recognize where and how his face is stimulated by the images. Thus, on the one hand, Eichmann in his glass booth seems like a wild animal in the zoo; on the other hand, he sits next to me, so to speak, and passes me his popcorn. It is probably clear that something perverse, maybe pornographic, occurs here; but, as it seems to me, the question of what part I play in this is only answerable geometrically. On which axis is the eye of the subject located, and from which cut-set does the object gaze back; and, above all, which coordinates are subject and object here?

When two sets intersect, a cut-set comes into existence. In my case, at the moment of the screening of *Henchman Glance*, intersections emerged that created a hole in the projection screen instead of a cut-set. Like an endless feedback loop that happens when one pivots

the axis of the camera and holds it toward the screen. A feedback that needed me as a coordinate in order to pivot the axis. The emergence of a hole during this event may lie in my coordinate's inability to develop a direction or a radius of action within the array of *Henchman Glance*, making my coordinate begin to rotate. The murderer, the evil, is already well-known and, yes, already put to death, and therewith the motivation for my complicity draws a blank. The already-well-known axis with the coordinates murderer/police-man-witness/victim, which uses the policeman-witness in order to rectify the murderer/victim axis (and therefore has a clear direction) turns around on itself, becomes locked into a zombified loop of the resurrection of evil. In the process, a blindness-causing monster emerges from the screen, whose motive we will surely never be able to resolve; for here it is the idea of evil-in-itself, in its totalitarian monumentality, that is being animated.

The cover of my 1994 edition of Hannah Arendt's book *Eichmann in Jerusalem: A Report on the Banality of Evil* also shows the courtroom of Eichmann's trial. One sees Eichmann in the glass booth, from above, a slightly slanted frontal shot; before him, set up with the same line of sight as Eichmann, stands a 16 mm projector that gets truncated at the edge of the picture. One does not see what Eichmann sees. The other people in the image—three police officers guarding, one person who sits behind the projector, and another person wearing headphones—look with Eichmann in the direction of the projection. Our gaze stays on the side axis, and something in this graph stays incomplete, exits the picture, so to speak. It is the gaze-axis of Eichmann that we unavoidably incorporate, that directs us, however, not onto the 16 mm projection, but into the inside of the book and therewith into Arendt's deliberations over the banality of evil. Here too the incorporation of the axis of the gaze enables the monster's exit from the glass booth, though not in the sense of him taking our gaze hostage, but, rather, in the sense of his gaze being taken apart, being dismantled into everyday-seeming decisions that are met, decisions that are capable of creating the monstrous. Something becomes apperceptible, allowing for a process of cognition.







Captions for section one: THE CORNER OF THE EYE



Portrait of Christ known as *Vera Icon*, or “true image.” Jan van Eyck is known to have painted a version of this depiction of Christ, which is now lost. This copy was painted in his workshop around 1438. It shows a face that seems to behold everything around it. The eyes are not properly aligned with each other, resembling a condition of strabismus. The resulting omnivoyant effect was described by renaissance philosopher, theologian, jurist, and astronomer Nicholas of Cusa in his treatise *De visione Dei* (*The Vision of God*) as an example of uncontracted divine vision. ♦ Jan van Eyck (workshop), *Portrait of Christ*, ca. 1438. Photo: Collection of the Gemäldegalerie, Berlin, Germany, via Wikimedia Commons (public domain)



“Ophthalmos aplois or the single eye: Entitled the vision of God wherein is infolded the mystery of divine presence, so to be in one place finitely in appearance, as yet in every place no lesse present, and whilst Hee is here, Hee is universally every where infinitely himselfe. Penned by that learned Dr Cusanus, and published for the good of the saints. By Giles Randall.” ♦ Nicolas de Cusa, *The Vision of God*, London: Printed for John Streater, at the signe of the Bible in Budge-Row, 1646, frontispiece.

The Vision of God, London: Printed for John Streater, at the signe of the Bible in Budge-Row, 1646, frontispiece.



Bowl with a Gorgon's head, Greek, Archaic period, ca. 625–600 BC. In his book *Remnants of Auschwitz*, the philosopher Giorgio Agamben analyzes the figure of the Gorgon and its representation in ancient Greek literature, vase painting, and sculpture. His analysis focuses on the relationship between seeing and death: “First of all, the Gorgon does not have a face in the sense expressed by the Greek term *prosopon*, which etymologically signifies ‘what stands before the eyes, what gives itself to be seen.’ The prohibited face, which cannot be seen because it produces death, is for the Greeks a non-face and as such is never designated by the term *prosopon*. Yet for the Greeks this impossible vision is at the same time absolutely inevitable. Not only is the Gorgon's non-face represented innumerable times in sculpture and vase painting; the most curious fact concerns the mode of the Gorgon's presentation ... Breaking with the iconographic tradition by which the human figure is drawn in vase painting only in profile, the Gorgon does not have a profile; she is always presented as a flat plate, without a third dimension—that is, not as a real face but as an absolute image, as something that can only be seen and presented.” ♦ Giorgio Agamben, *Remnants of Auschwitz*, trans. Daniel Heller-Roazen, New York: Zone Books, 1999, pp. 53–54.



The cover image of Hannah Arendt's book *Eichmann in Jerusalem: A Report on the Banality of Evil* (New York: Penguin Books, 1994) shows the courtroom in Jerusalem in 1961, with Nazi officer Adolf Eichmann seated in a glass booth guarded by officers.



In the 2006 edition of Hannah Arendt's *Eichmann in Jerusalem: A Report on the Banality of Evil*, Penguin Books decided to replace the image on the cover. It now shows, instead of the courtroom, a slanted image of Eichmann, looking from above into the camera. With his eyes magnified by thick spectacles and pointing at the camera, he seems to scrutinize the viewer. A slanted white stripe forms the background behind his cut-out head and chest, framed above and below by blue spaces—a figure out of context.



A demonstration based on the text *The Geometry of a Cross-Eyed Subject*. It reconstructs a visual disruption that occurred in Natascha Sadr Haghghighian's field of vision during a screening of *Henchman Glance*, a disturbing historical visual document compiled by Chris Marker, where he combined Alain Resnais's Film *Nuit et Brouillard* (*Night and Fog*, 1956) with footage showing Adolf Eichmann during the trial in Jerusalem. The demonstration takes the shape of a geometrical reconstruction of the screening of *Henchman Glance*. It traces the axes of the gazes that occur between the viewer, the projector, the camera, and the mass murderer on the screen. *Looking awry* is proposed as an enabling technique for looking at and bearing witness to troubling visual events. ♦ Natascha Sadr Haghghighian, *looking awry – geometry of a cross-eyed subject*, 2011, demonstration at Edition Special #0 Laboratoire d'Aubervilliers, Paris. Photo: Ouidade Soussi Chiadmi / Les Laboratoires d'Aubervilliers



Natascha Sadr Haghghighian, *looking awry – geometry of a cross-eyed subject*, 2011, demonstration at Edition Special #0 Laboratoire d'Aubervilliers, Paris ♦ Photo: Ouidade Soussi Chiadmi / Les Laboratoires d'Aubervilliers



The photograph depicts the courtroom of the Eichmann trial in Jerusalem in 1961, with Nazi officer Adolf Eichmann seated in a glass booth guarded by officers. All attendees including Eichmann look in the direction where a 16 mm projector is pointing, possibly to a screen. The Israeli attorney general had chosen to show to the defendant and the court Alain Resnais's short documentary film *Nuit et Brouillard*, which includes footage filmed by the Allied forces during the liberation of the Nazi concentration and death camps. ♦ Photo: Israel Government Press Office

double vision











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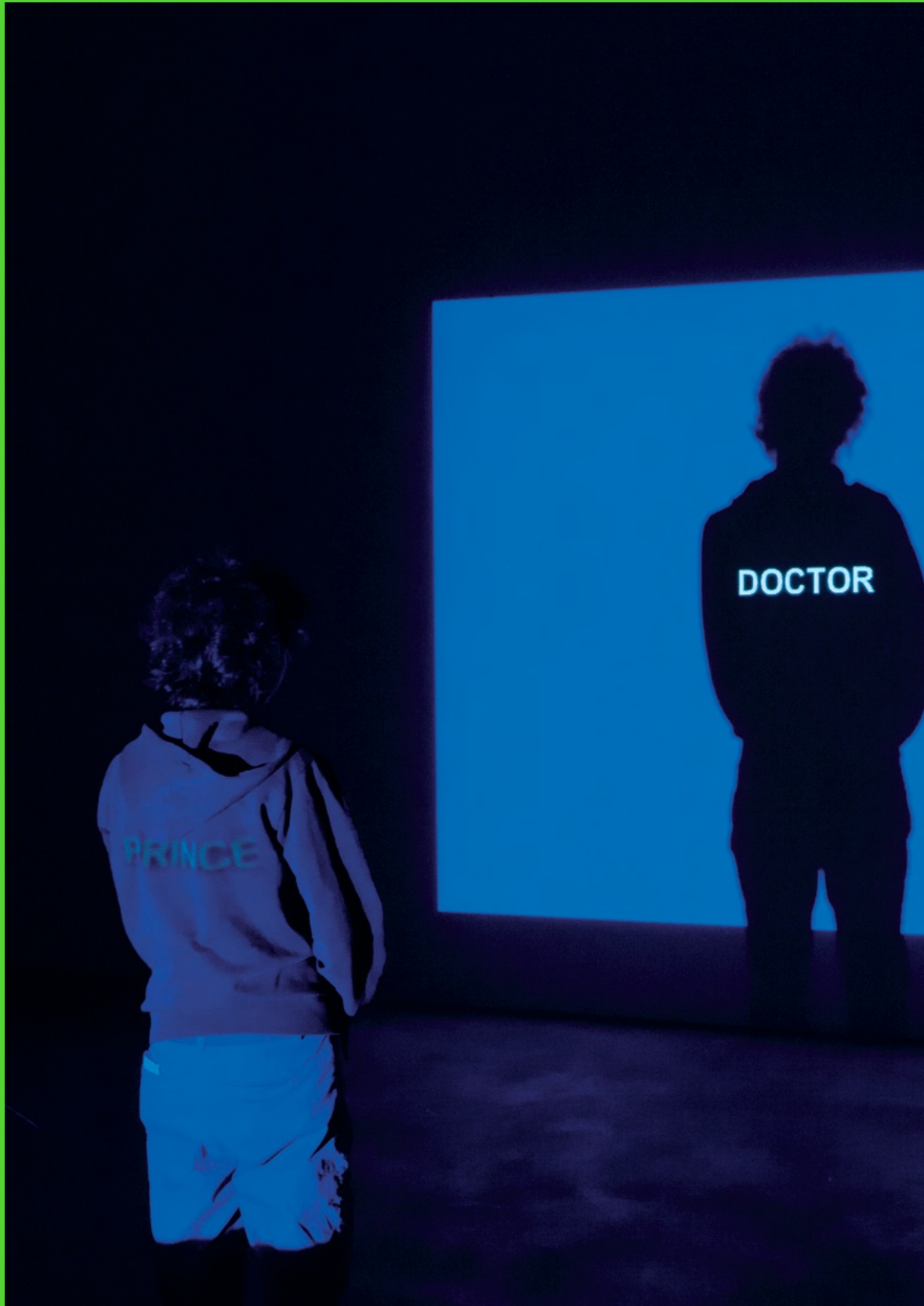
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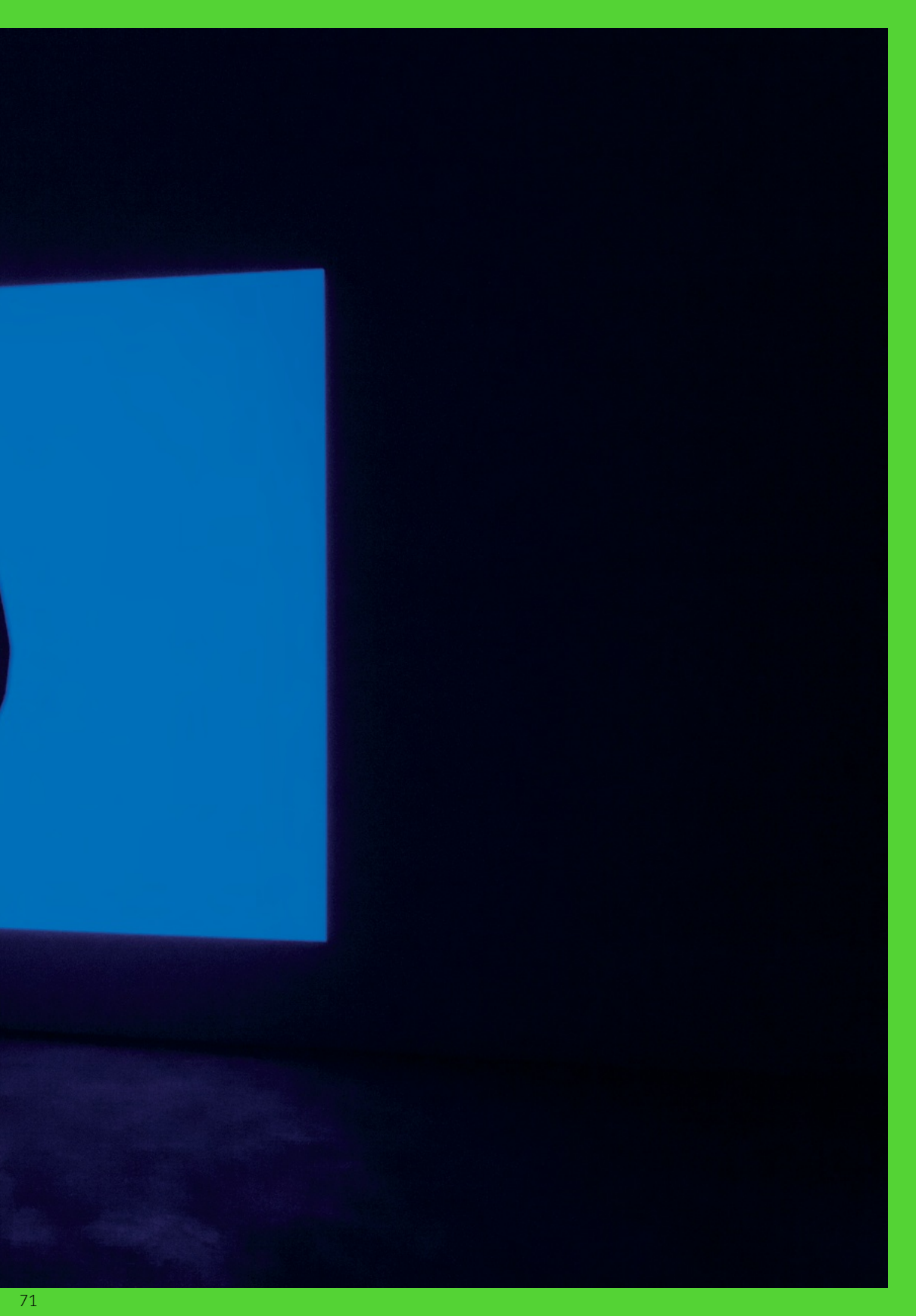












parallax

I am in a random, generic hotel room in Minneapolis, in Boston, in Dubai. You are in Tehran, in Cairo, in Ramallah, in Taipei. The AC is killing me and I don't know how to turn it off. I need to talk to you, I need to see your face. I look for you on Skype.

> *are you there?*

[5 minutes later]

< *yes*

> *can we talk?*

< *give me 5 min*

Most of the time, some of the people that I feel close to are far away. Distance becomes a mode of my physical experience and its expression, as thoughts, desires, needs, and energies radiate out into space, sometimes conveniently along existing trajectories. How can I measure the distance between me and you? How can I measure distance at all?

The hotel room does not provide any point of reference. Climatized air, minibar carrying the usual brands, stock photography on the walls, satellite television on a plasma screen, the view, usually a wall or another generic building. It looks the same as all the other

hotel rooms, and I suspect that this generic sameness is, in fact, intentional, intended to overcome distance, to melt down the distinctions and discrepancies between places into a “Not Other.” It suggests that the only thing that can’t be leveled is the time zone you’ve arrived in; everything else is either delocalized or taken care of by your GPS.

After some minutes, you call. The hotel room turns from alienating to ludicrously funny. I show you around. We make jokes about the cheesy artwork on my wall; you tell me about the elections. Your face on the display of my tablet is a known coordinate, a familiar reference to my eyes. I even seem to see details that the camera is unable to display. My location becomes more tangible as you become part of it. It is night here, day there.

> *I miss you.*

< *I miss you, too.*

I notice that the rays of light emanating from the window behind your face light up my face and the wall behind me. The immediacy of the impact makes distance convolute and collapse in front of my eyes.

Consumer telecommunication devices are part of the sameness project. The devices include those applications we use to see, to visualize, to communicate our location, our view and views, our desires and needs. The devices we use to stay in touch with friends, family, work, and the world are standardized, tuning into the same sameness of the hotel room, or other things that populate this project, like the paper coffee cup or the cabin luggage. Funnily enough, we use telecommunication devices excessively even if we’re in the same city, in the same neighborhood, even in the same bar. The distance becomes relative, a parameter that we can choose to hide in most (geo)social networking applications. I sit on the bed, leaning against the wall, my legs pulled toward me. We speak, we look, we tell. I hold the tablet in one hand, backed by my legs; the streamed image of your face fills the screen now,

with a little window in the lower right-hand corner that displays my own face. The connection is good. Almost no delay, no scrambled pixels. Yet while I listen to you, I notice that my eyes keep skipping from your face to my picture in the lower corner. I'm distracted by the changing intensities of light on my face when the daylight behind you bursts through along the contours of your face. The rays hit the camera in your tablet, shoot up to the satellite, shoot down into the router of my hotel and onto my display, striking my face seemingly in a straight line. It almost feels like a touch. But what distracts me even more is that, while you are talking to me, you aren't looking at me but slightly to the left, as if you are looking at incoming emails, or other chats on Skype. Did I interrupt you in something when I asked you to call? Trying to evaluate the situation, I scan your face, your voice, and your body movements for signs of distraction or inattention. It's hard to tell. I discover that my face in the lower corner has the same skewed gaze. I start tracing our gazes to understand what I am looking at, what you are looking at. It is challenging, if not confusing, because of the many eyes involved: my eyes, your eyes, your tablet's camera eye, my tablet's camera eye, my eyes on the screen, your eyes on the screen, my eyes on your screen, your eyes on your screen. Palpating the lines between all those eyes, I first of all detect the divergence of position of each eye, especially the discrepancy between the position of the camera and the window displaying both our faces. I look into the camera of my tablet to check whether my gaze would now straighten, but I fail to stretch or divide my vision between the two differing coordinates, so I can't check unless I make a screenshot of my screen while focusing on the camera. You interrupt my experiment:

< what are you doing? are you reading your email?

> no, I'm sorry dear, I just tried to figure something out. go on.

Consumer telecommunication devices commonly have built-in cameras. The position of the camera is either above, on the side, or in the corner of the screen, which results in a parallax. Viewpoint A looks at the image of viewpoint B and viewpoint B looks at the

image of viewpoint A, but both seem to be looking to the side, seemingly avoiding eye contact.

This parallax results in an impalpable sensation of absence or confusion as to where the other person is actually looking and whether they are paying attention or reading their email on the side.

I'm an eye. A mechanical eye. I, the machine, show you a world the way only I can see it. I free myself for today and forever from human immobility. I'm in constant movement. I approach and pull away from objects. I creep under them. I move alongside a running horse's mouth. I fall and rise with the falling and rising bodies. This is I, the machine, manoeuvring in the chaotic movements, recording one movement after another in the most complex combinations.

Freed from the boundaries of time and space, I co-ordinate any and all points of the universe, wherever I want them to be. My way leads towards the creation of a fresh perception of the world. Thus I explain in a new way the world unknown to you.¹

John Berger's voice quoting Dziga Vertov resounds in my head like a scratchy old tune. There it is, the mechanical eye that seems to coordinate any and all points of the universe, free from the boundaries of time and space. It prosthetically helps me to see you at a far distance and (almost) in real time, yet it wondrously creates new and disorientating spaces in between your eyes and my eyes.

Once I discover that the diversion of your gaze is due to the parallax, I self-consciously try to correct my own gaze by looking at the camera instead of at the image of your face. I can't help trying to check my own image in the lower right-hand corner constantly, in a desire to somehow bundle these lines of vision. As if I could outsmart the system and catch my own gaze if I just switched fast enough, or looked out of the corner of my eye. Obviously, this results in dizzying and conflicting eye movements. But the wish to converge these lines goes even further: if only we could look each other in the eye, make actual eye contact. But if you look into the camera to look at me, you will turn away from me looking at you. It's technically impossible to lock eyes. In the attempt to lock eyes,

you go crossed-eyed. One aspect of the seeing process will always happen in the corner of the eye, dispersing our gaze, and making us look awry.

My attempt to synthesize the gap that occurs in my vision when I try to overcome the distance between me and you fails for technological reasons that are known. Eye contact or “mutual gaze awareness” in video conferencing is seen as vital for effective communication between two parties. The known problem of disparity between the locations of camera and subject in consumer-level setups is one of the priorities in developing new software that generates a real-time gaze correction. One of the approaches is to render a gaze-corrected 3D model of the scene and, with the aid of a face tracker, transfer the corrected facial portion in a seamless manner onto the original image. The resulting assemblage supposedly looks “natural,” as if the person actually made eye contact.² These kinds of prosthetic approaches for providing seamless images of an assembled body are increasingly common in film as well, especially in the complex legal considerations involved in explicit sex scenes. The various body parts—such as the upper body and the genitals—belong to different individuals and are filmed separately. Later, they are (re)assembled in postproduction; when they appear on the screen, the montage is untraceable. Interestingly, the production of such scenes is vividly discussed in the media,³ yet viewing the film and its “making of” discussion are viewed from two different viewpoints. The paradox in knowing that a famous actor did not expose her vagina to the audience, while nevertheless seeing a seamless body perform the act on screen, constitutes a parallax in one’s vision, an irreducible gap that is a pivotal aspect of contemporary seeing.

The parallax dimension in the explicit sex scene creates a gap, separating two simultaneous positions from where one looks, or two coinciding viewpoints. The same gap seems to occur in my Skype experience. According to Kojin Karatani, quoted in Slavoj Žižek’s “Parallax View,”⁴ this parallax gap occurs in antinomies, like that of production and consumption. It should be asserted as being irreducible.

All attempts to reduce one aspect of it to the other should be renounced. Karatani suggests that this interstice—the parallax gap—is the point of radical viewing and reflection, where one does not see things from one’s own viewpoint, or from the viewpoint of another, but instead faces the realities that become visible in the parallax. It is the radical position of not viewing one determinate position in opposition to another, rather of thinking and acting from the structural interstice in between.

From the vantage point of radical viewing, I start to appreciate the conflict in my vision when I try to see you and see what makes me see you. Not leveling distance, but reinstating a capacity for strangeness that allows a tangible experience of the distance between bodies. A distance that can constitute an irreducible gap of its own. After all, we communicate from and between coordinates that are not only set apart in terms of time zones, but often constitute highly complex political, economic, and social contextual gaps. There are times when the Skype connection bridges what would otherwise be insurmountable gaps or borders. Bodies are kept in check and often prevented from crossing borders, depending on which economy they belong to, yet all the while they are allowed to overcome distance through social media and telecommunications. The gap between the bodies involved in a movie’s sex scene is also based on assumed value. The body of the Hollywood actor and the body working in the adult industry are part of different currencies within this value system. The antimonies of production and consumption in the Hollywood movie are instantly rendered intangible when the assembled bodies strike the screen. Yet, my body aches when I experience these gaps and sense the forces that create them.

I agree that the strangeness of not interlocking eyes with you is painful, yet it helps to prevent a conflation or collapse of space and of antimonies. It is promoted as being convenient and more true, as it closes the awkward and unpleasant void that exists between the images of two locations, two bodies, two actualities. The familiarity of the much-longed-for face that I recognize onscreen wants to translate itself into an intimacy, but this same familiarity easily

collapses into too-great closeness, obscuring the irreducible gaps. In fact, the gaze correction software that makes it possible to make eye contact does not allow you to look away.⁵ Your corrected gaze would constantly be switched on, eyeballing me even though you might have turned away. What an awkwardly enforced presence that would be if your body leans over to grab a book while your eyes, still seamlessly affixed, are rendered on a skewed body. The increased sense of trust established through eye contact, what promises to “keep people together” or help make “better business,” is forced onto your face and into the way you make contact. Maybe such visual apparatuses, promising an instant and unrestricted bridging of distance, granting access to the banality of the continuous stream of the everyday, even if we’re far, far away, can in fact be blinding. The parallax, instead, reintroduces the capacity of seeing strangeness, of discovering and experiencing looking as a painfully pleasurable, obscene, and complicated act, moved by forces inhabiting the domain of *jouissance*: the domain of wonder. Here, apparitions appear, figures that demonstrate the forms askew on the margins of perception—not the realm of the visible, but the sense of the visual, in the literal sense, on the margins of our ability to see images.

< *I have to go, honey. I have a meeting at 1.*

> *oh yeah, sure. I forgot it's daytime over there. can I read you something before you go?*

< *sure!*

> *ok. “Each substance of grief hath twenty shadows,
Which show like grief itself, but are not so.
For sorrow’s eye, glazed with blinding tears,
Divides one thing entire to many objects;
Like perspectives, which rightly gaz’d upon
Show nothing but confusion; ey’d awry
Distinguished form: so your sweet majesty,
Looking awry upon your lord’s departure,
Finds shapes of grief more than himself to wail;
Which look’d on as it is, is nought but shadows
Of what is not.”*

< *this is beautiful. who is it?*

> Shakespeare⁶

< ok honey, your lord is now departing. don't watch crappy television for too long.

> I won't

< kiss you

> kiss you more

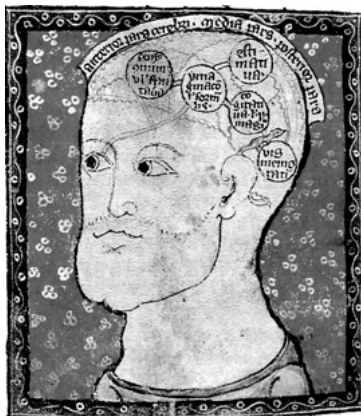
Of course, I ended up watching crappy television until very late, in the hope that I would fall asleep. At some point I gave up and started browsing the Internet. Keywords: ruptured vision, eye contact, propagation of rays, and retina versus mind's eye. I was delighted when I found that Nicholas of Cusa (Nicolaus Cusanus) had written about sight. In his treatise *De visione Dei* (1458–1459), Cusanus uses a painting by his contemporary Rogier van der Weyden as an example for his idea of coincidence between the two categories of vision. The painting depicts an omnivoyant individual Cusanus calls the “Icon of God” (*eiconam Dei*). He suggests gathering around the image with fellow monks, each observing it from his respective position at close range. Astonishingly, to each it will seem that the face is looking at them personally. He describes the marvel of this discovery, especially when one brother changes his position in relation to the image and still finds its gaze moving along with him. This bewildered brother then asks a fellow monk to move while beholding the image; both still find the painting's gaze to proceed simultaneously with them, with equal dedication.

Cusanus describes this experience—using the term “absolute gaze” (*visus absolutus*) to distinguish a gaze that sees everything at once and in particular, all at the same time—as coming close to understanding the gaze of God. God's sight is uncontracted (*incontractus*), knowing no distance or limited angle. All other sights, including human sight, vary in their limitations, as they are contracted to different degrees. I stumble over the term “contracted sight” (*visus contractus*). Checking the German edition, I find this is translated as “*verschränktes Sehen*,” suggesting a sight that is more entangled, folded, or interlaced. The concept of “*Verschränkung*” (entanglement, interlacing, folding) brings me back to my experience of looking awry, of going crossed-eyed in front of Skype.

Unavoidably, it makes me think of the gaze-correction application, and, by extension, of contemporary forms of absolute vision that find their expression in surveillance programs and policing. Donna Haraway associated this unmarked position of a conquering gaze from nowhere, holding within it the power to see and not be seen, entirely with the position of the white male. The ordinary primate eye has the potential to be endlessly enhanced through technological means, feeding into an ideology of direct, devouring, generative, and unrestricted vision that Haraway connects with established conceptions of objectivity. This eye—using the “god-trick”—“fucks the world to make techno monsters.”⁷ In a section of her essay “Situated Knowledges called “The Persistence of Vision,” Haraway advocates partial perspective, an embodied objectivity that originates from situated knowledge—modes of seeing that vary, change, adapt, respond, and fold into one another. What is “seen” is a composition, partially from me, partially from you, but also from the computer, the materials that make it, or the objects in the hotel room. People and things, ideas and clouds, participate in observations, destabilizing and complicating the objective view, or unrestricted vision. It comes close to what I associate with the term “*Verschränkung*.”

I write to you:

After we talked I found this. It looks exactly like you when we Skype! :))



And I found out more about why, which is the reason why I'm still awake. There is a lunar crater named after Ernst Mach. It's on the far side of the moon, which is why we never get to see it. It makes me think of curved vision, or other means for looking around the corner. I know that you're not that far away, but I'm also really not sure how far you actually are. I noticed you can't see when I strike your face on the screen, but when I told you, you said you could feel it. Anyway, I think I need to do some experiments next time we Skype.

The Shakespeare quote I read to you earlier is about diverted vision. The queen cries because her king had left, and in her tears she sees twenty shadows of his departure. It's quite amazing, because her tears work like crystals that multiply what she can see. I bet it includes several visions of the future, where she worries about what could happen to him out there, but also past memories, of sweet intimacy or of a fight they had once. It's as if she can see all of this at once without merging the different visions taking place in each crystal. Her friend wants to comfort her and he tells her to wipe away her tears, for they are compromising her vision, and preventing her from seeing departure for what it is. But she insists on the twenty shadows, on her distorted vision.

Goodnight, honey.

- 1 Dziga Vertov, 1923, quoted in John Berger, *Ways of Seeing*, London: BBC and Penguin Modern Classics, 2008, p. 17
- 2 Claudia Kuster et al., "Gaze Correction for Home Video Conferencing," in: *ACM Transactions on Graphics*, vol. 31, no. 6, 2012, article no. 174, pp. 1–6, graphics.ethz.ch/publications/papers/paperKus12.php.
- 3 Emine Saner, "From Nymphomaniac to Stranger by the Lake, Is Sex in Cinema Getting Too Real?," in: *The Guardian* (International edition), February 21, 2014, www.theguardian.com/film/2014/feb/21/nymphomaniac-stranger-by-the-lake-sex-cinema.
- 4 See Slavoj Žižek, "The Parallax View," in: *New Left Review*, no. 25, January–February 2004, newleftreview.org/II/25/slavoj-zizek-the-parallax-view.
- 5 The software developers for this application come from the Technion–Israeli Institute of Technology, which has strong ties with the military and focuses on developing technology for military purposes. One wonders how such gaze correction could be applied in such a context.
- 6 William Shakespeare, *Richard II*, act 2, scene 2.
- 7 Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," in: *Simians, Cyborgs, and Women: The Reinvention of Nature*, New York: Routledge, 1991, pp. 183–202, here p. 189.



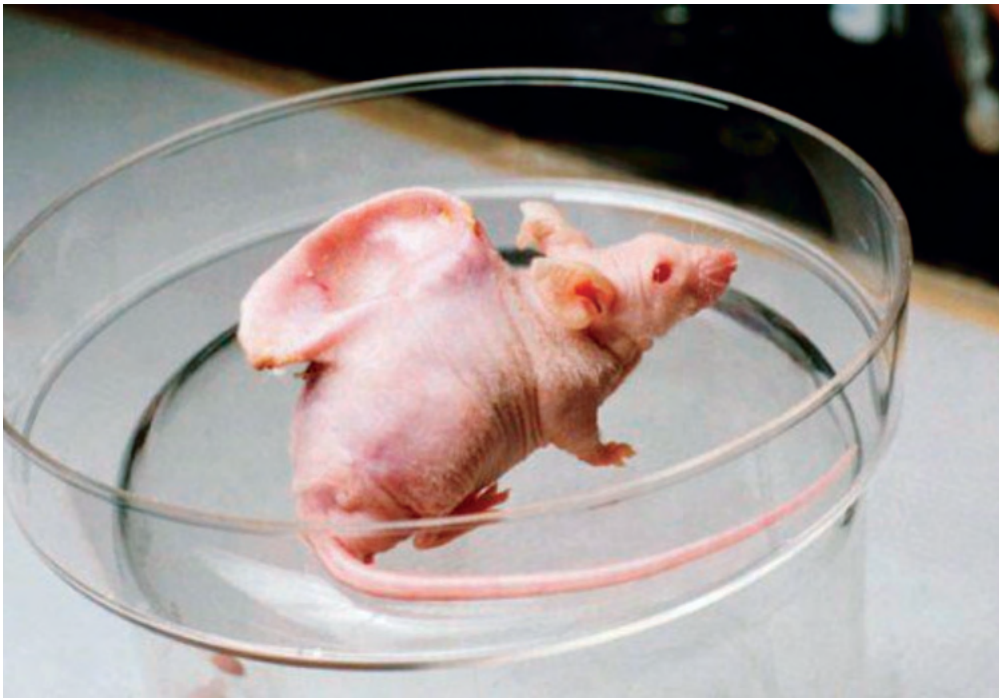
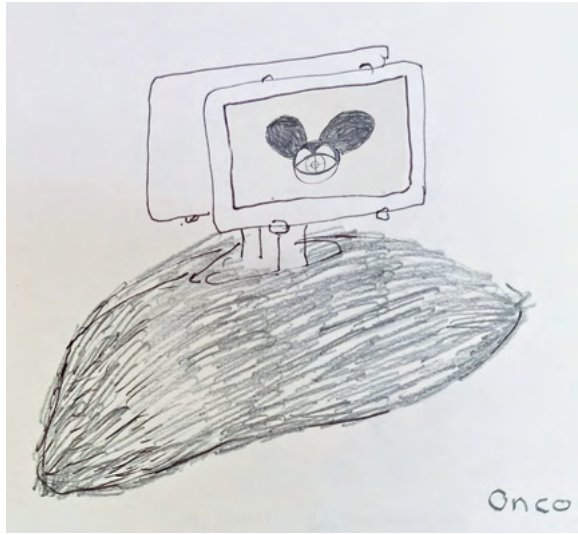
Shangri-La Hotel

Luxury Hotel in Dubai | Shangri-La Hotel, Dubai

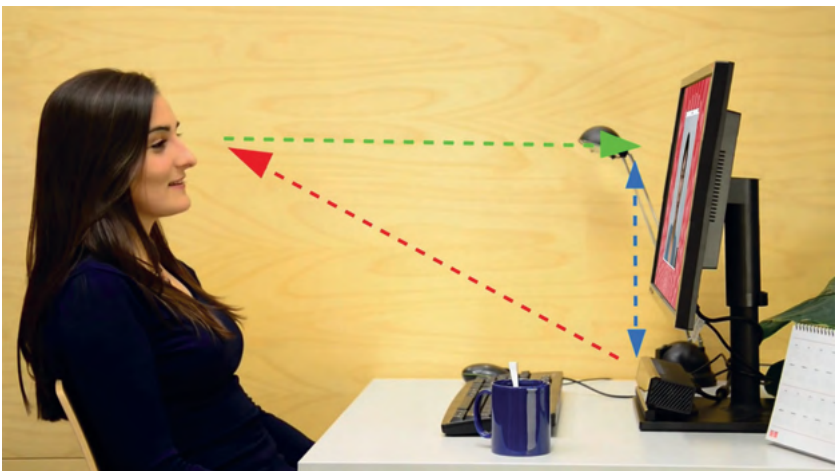
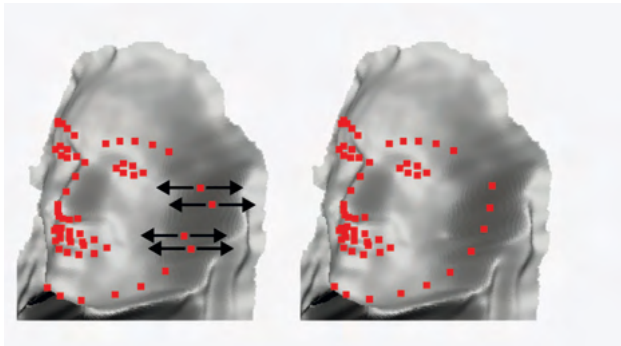
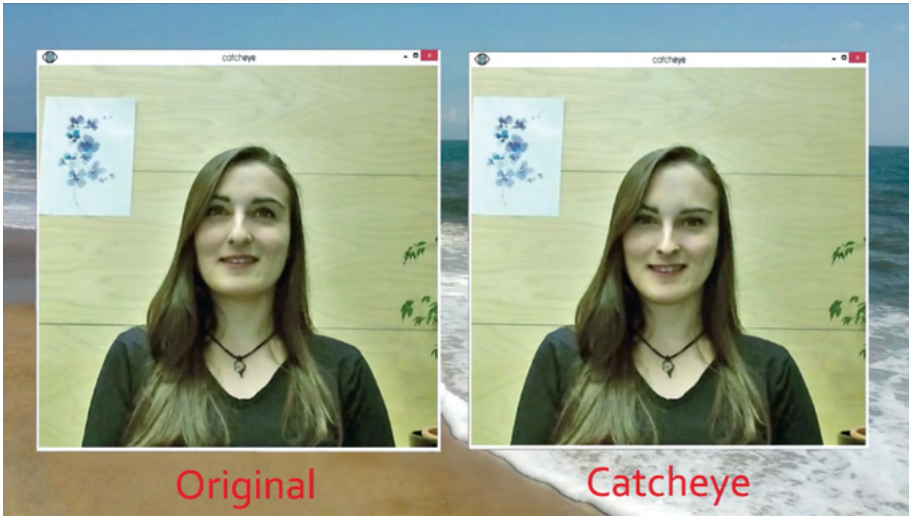
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solo show

NATASCHA SADR HAGHIGHIAN > What sort of education did you undergo, and how did your present activities get started?

< **UWE SCHWARZER** In art school I studied free arts with John Armleder, and as part of our studies we did adjacent projects where we invited friends of John to describe, to draw, or to give us schemas for their artworks. Then we carried out their plans and made an exhibit out of the end products. That was the first moment when I made works happen for other artists, seventy artists in all, including works by Haim Steinbach or Olivier Mosset, pretty much all of John's friends—so very well-known artists were involved. I also made a large catalog that went with it. That was quite an experience. I also tried to stretch out my feelers during my studies, seeing as I was highly occupied with my relationship to other artists, so I did an internship with Rolf Ricke. I was part of an exhibition there with Fred Sandback,

who I still get excited about. He traveled all over the world with a suitcase containing a little bit of wool thread and made room-size installations or sculptures out of it. The contact with Rolf Ricke was quite fruitful for me. Chatting with him was totally fantastic. Do you know Rolf Ricke?

NSH > No, not personally.

< US When I first came to Ricke, there was a Donald Judd piece lying in the bathtub on blankets. Up to then, I had known art through the museum only, hung on the white wall with pretty lighting, and suddenly there was this Judd piece parked there, wrapped in furniture blankets. That's one experience that actually never let go of me. I love Judd, and for me his artworks are almost proverbial. In that moment I saw his artwork for the first time materially, meaning I saw it only as material, a form lying in the bathtub. It somehow brought it down to earth, but in the end, it also didn't. Seeing this was so much more than seeing just a Judd on the wall; it was really important for me. After that I worked in Massimo De Carlo's gallery in Milan. For the most part I did the organization and got to know a lot concerning art production and so on.

NSH > All of this was still during your studies?

< US No, De Carlo was afterwards. What I did while still studying was a job delivering vegetables. One of the customers was the art museum in Wolfsburg, where at that time a giant sculpture by Mario Merz was standing, one that had fruit and vegetables on it. There was an order on my list to supply this sculpture: an apple, two pears, three heads of lettuce—something like that. These fruits and vegetables got replaced by fresh goods approximately every ten days, but they were ordered by

the kitchen. In other words, there was the order placed by the kitchen—quite simply, three crates of salad, two crates of tomatoes, five bags of potatoes—and on top of that, two more apples, three bananas, and two heads of lettuce that were needed for the installations, for example. That was quite odd for me, of course. I put a sign reading “Art Transport” in my delivery vehicle window each time I drove there, chuckling to myself, knowing that I had the stuff for Merz’s sculpture in the back of my van.

I worked a while at *Flash Art* and wrote a short profile of the city of Milan. I got to know various collectors, artists, and gallerists during the interviews. After my time in Italy and with Massimo De Carlo, I came to Berlin. I was excitedly wanting to work directly for an artist. Through the contacts I already had as well as through Massimo, after just two months I landed a contract to make a piece for Carsten Höller, a very complex piece that nobody could figure out how to make. I managed quite well, and everyone was enthusiastic. I was the one who would make Carsten’s pieces from then on, in addition to those of all of the other artists in Carsten’s gallery, and since then it grew bigger and bigger. Basically, from the outset, I didn’t consider it as a profession, from my point of view. On the contrary; Carsten and other artists needed my help, and I helped them.

NSH > Back then, was that a source from which to finance your own work? You did, in fact, study art yourself, and you did have an artistic practice. So the things you’re describing probably happened on the side, didn’t they?

< US Yes, in Italy I had quite a lot of exhibitions. I was then part of this momentum of up-and-coming, very young artists. It went very well, and I was totally connected in Italy, but not in Berlin. This contract work that I did existed primarily to earn money, and on the side I

realized my own works. But as I said, it was fun for me to help. That's how it really was. Since I constantly had to write out invoices, I was at some point sent to a tax advisor, who told me, "You've got a company here."

NSH > [laughs]

< US So, [laughs] on top of that, I had never wanted to be self-employed, because I had known this from my father and wasn't so keen on it. Suddenly, though, I was self-employed with my own company. That's just what happened.

NSH > The fact that you carried out works for other people according to their satisfaction, that you delivered something great—that definitely means that you accumulated certain abilities or that you already had certain abilities at your disposal. Can you specify your abilities and how you acquired them?

< US I'm absolutely certain that my strengths lie somewhere far from any ability to work with my hands. Sure, I did mount the works and make the installations, but it isn't the case that I can deal with wood particularly well or weld with great proficiency. I believe that my proficiency lies in understanding well what the artist would most like to have, and I know how to direct a project. I know how to explain to other people, my employees, for example, what they have to do in terms of crafting something, how the piece should look in the end, how it is made, and so on. I know that for an artist, only a certain material is worth considering, only a certain kind of surfacing, paint, or treatment, because another kind of treatment would leave traces behind that don't comply with the artist's idea or sense. This saves the artist from asking a lot of questions. Some artists don't know what the edge of a laser cut looks

like in plexiglass or how this edge changes when it is sandblasted or filed by hand. They leave it to me to propose the right solutions, to filter through possible methods and materials—for them, in terms of their sense—meaning I can exclude the ones which couldn't possibly come into play.

NSH > You take over particular decisions for the artists, so to speak.

< US First, he or she would simply have to gain all of the production experience, spend time researching, considering, and deciding, not to mention following the whole production; it's possible to skip over this whole procedure, because I understand what the artist wants, not only in terms of questions concerning material or treatment, but also in terms of all other possible aspects, other decisions which might be required later on. When an artist comes in with an idea, and he or she made a sketch, then I understand how he or she imagines it—and I have at my disposal the practical knowledge needed to make continuing decisions for potential future questions. One must be able to fit a work through a door, transport it, pack it, leave it to others to install. It has to last, through many an installation and more. I always have these kinds of pragmatic, practical questions in the back of my mind. Project management means briefing people, producing a plan, thinking about how to make something, and distributing tasks. I speak with those who are going to carry these tasks out. I also do the quality control. This means that I constantly attend to the production, making sure that it gets done the way it should.

NSH > Do you have the feeling that you learned these skills during your time in art school, during your studies with John Armleder? Or do you think that you

were anyway already carrying them with you, that you simply elaborated these skills out of an interest? To put the question another way, do you think that your art studies have helped you in this regard?

< US I came into contact with several artists and their production methods through John. He explained a lot, but I think that I was also influenced by working with other artists, including during my studies, through museum visits and catalogs. I immersed myself deeply into artists' concepts and thereby acquired my abilities. By the way—and this is the best part—I already had an interest in many artists during my studies for whom I work today. One of them was Liam Gillick, for example; and Mona Hatoum, whom I had already admired then, called quite recently and wants to have a work made. It's wonderful.

NSH > And was it just an effect of the process that your own artistic work moved increasingly into the background? Did you simply have less and less time, therefore automatically producing less of your own work, or were there specific motivations? In short, did the one interest you more than the other?

< US My last works were actually intertwined with the works of other artists. I did a lot of works in which I once again invited other artists to do something, from my declaring a bicycle as an exhibition space and inviting other artists to do something on it, to an airplane, which really did fly—art flight, loopings, and flying off your head—I, too, was always a passenger. I figured out that my own artwork had a strong involvement with other artists' works, and I tried to initiate this involvement by way of my own artistic work. But it was a detour, as I preferred to engage directly with them. Suddenly there was my job,

unmediated involvement with the artists, speaking about the artworks, and this was very constructive. I saw then that fulfillment for me lies more in direct involvement—rather than with making sculptures or executing happenings, even though happenings have always been fun for me. I must say as well that I feel more at home producing work like this. Now I work together with a great number of people and have a much more intense exchange than if I were to work alone. It is, indeed, difficult as an artist to work together with other artists so closely. At the end of the day, my job is much easier, and so much comes out of it.

NSH > And you always have the advantage—the pleasure—of seeing the artworks in the bathtub rather than seeing them later in the exhibition space.

< US Unfortunately, I see far too few of our works in exhibition spaces, because I often see them here in the workshop for the last time before they go somewhere else. There is another aspect of my present work which I find better: you get a contract or a project, you work for it, and when it's over, you get paid for your work. Work and payment exist in direct relation to one another. The role of the artist within the art world somehow disturbs me; some artists almost do the job of a service-industry worker, filling up the museums' spaces and maybe getting the production costs paid for, if they're lucky. This means you don't build up expenses, and you somehow earn money later through the sale of the work. You earn it from an object instead of being paid for your work. I have to say that this didn't really float my boat.

NSH > So that is what you didn't like while continuing your own art career?



< US I discovered that real production was more beautiful for me than anything else.

NSH > And now you can concentrate on really producing.

< US Exactly.

NSH > ... and on that which is actual, so to speak.

< US I find it somehow more direct.

NSH > Can you describe in more detail how your work proceeds. You mentioned that you work together with a lot of people. What happens when you get a contract, and how does it happen? What does the day-to-day look like during such a production?

< US I talk with an artist who has an idea or a project, or someone sends me sketches or other materials which describe the project. Then I sit down and ponder, either together with the artist, alone, or here with my colleagues: how could one realize it? Is it doable in the way it's described, or does something have to be changed to enable its realization? Along with this comes the planning of the budget. Then I talk it through again with the artist. I present him or her with my best proposal for making it, along with whatever other thoughts I may have, and then I make an offer. This offer is forwarded to the museum or the gallery and is confirmed from there, or not. If yes, then it all starts, often under time pressure, of course.

NSH > This means that the artists come to you with an already-concrete idea?

< US Yes, actually, quite often, mostly Sometimes there are also unknown aspects: Could we do this? How

would this be? Have you already thought of this? I would say that ninety-eight percent of the time, it's clear what the artist wants, at least in his or her imagination. In some cases, there has already been research. However, sometimes the project is not quite so developed; then we talk and think of what to propose to the artist.

NSH > Who is we?

< US We are Thomas, Achim, and myself. We run the business, more or less, and employ a group of several people. There's also Viola in the office, who submits inquiries, does a lot of research, and orders material, all in close cooperation with myself, of course. Viola is pretty much my right hand. She also draws many projects on the computer in 2D or 3D, so that we can translate the sketches that we receive into their real measurements and be surprised that it looks totally different afterwards [*laughs*]. Or she constructs data for laser cuts and similar things. Then there are several people who are good in working with wood, metal, plastics, painting—people who can form something with their hands.

NSH > Who have a specialized knowledge in a specific field.

< US Exactly. Well, I believe there is only one trained carpenter ... no, our welder also learned the blacksmith trade. But all the others had no formal training. Except ... wait, that's not true either. We also have an informatics and electronics engineer who builds all of our circuitry, switches, controllers, and so on. He actually did study informatics and electrical engineering. There are a few that began studying their craft at an early age. So then the work gets distributed and planned here. When the deliveries arrive, my colleagues and I have to check that the material is in order and that it has the

right measurements. Throughout the production process I check up on the projects again and again. Sometimes I have to correct things, because they haven't been done well enough. Or I notice something: hmm, that doesn't look very good, not at all like I or the artist probably imagined it. Then I take a quick photograph and send it to him or her or call him or her to come by. Then the project enters the next phase. The smaller parts are constructed, assembled, and the work is photographed and packed. If necessary, with the help of photos, an instruction manual is made. Most of the time, we organize the transport and sometimes, here and there, the installation.

NSH > So you have various workshops here: a wood shop, a metal shop and so on. What happens when you are confronted with a task that you have never fulfilled before or that demands skills which none of you have? Do you manage anyway, or do you outsource it?

< US There are things where someone says, "I'd like to do that. I'd like to find out how." We got a contract, for example, for Tiffany glass. Achim was eager to try it out and ended up doing it himself. We also have a huge base of people whom we can ask. Over time, we've covered relatively many fields, but there are naturally always new things. In this case we just ask around. There is the possibility to find people who can do this or that in our workshop. We hire them on a freelance basis. Or we outsource it and hire another company. For example, we don't have a laser machine. It's not worth it for us to add such a thing to our workshop. Every laser machine is different, and we know that it's better to do this cut with this company and another cut with the other company. This is a typical case when we say, "That has to be done with these or those guys." We finish the data here to the extent that it simply has

to be fed into the machine, and then we have the cuts delivered back to us.

NSH > We spoke shortly about the theme, skills, but we only touched on your own skills. In your opinion, what skills do artists possess these days? Or what do you expect from an artist? What should he or she contribute to the production of an artwork?

< US To start with, I don't expect anything from an artist—in a positive sense. I don't think he or she necessarily has to bring any handy skills with him or her. It's difficult to say anything general about this; one has to look at each individual artist. Many have visual ideas in their head and think about the external form of the work, leaving us to propose its realization. For example, some artists have aversions to certain materials, even if they aren't visible. One artist is against polyurethane foam, which is sometimes very useful stuff, and the other has problems with certain numbers. We make three supports behind an object, and the artist doesn't like the number three. Then we have to build four supports, even if they aren't visible. But to return to skills—most of the artists we work for don't have any handy skills. They just plan their projects. Their skills consist in conceptualizing their artworks, and sometimes it borders on the doable or even surpasses the limits of the possible. Some are stimulated by testing these borders. Sometimes we get slight heart palpitations, because we have to do things that we actually don't want to do at all, not to mention aren't allowed to do. But some are interested in this aspect. But here, the production process plays as little a role as does materiality. The visual is the thing. Meanwhile, some artists have started making computer drawings instead of hand-drawn sketches, in order to represent the work more spatially or comprehend its proportions more

precisely. Or there's Olafur Eliasson or Jorge Pardo, who even construct 3D models for us.

NSH > Why do you think that so many artists give the realization of their work over to people in your position? There are other companies in other countries that work like you. Do you think it's merely a question of time, since almost everyone has such an unbelievably large amount of things to do? Is this why they prefer to give production over to someone else? Or does it also have something to do with this question of skills?

< US Well, there are several reasons. In principle, no person exists who can simultaneously be a super welder and work with wood, glass, textiles, leather, and whatever else, meaning, therefore, that the artist inevitably lacks the skills needed for a complex project—because no one can do everything. Hypothetically, he or she could go to a cabinetmaker and a locksmith and have all of the smaller pieces made separately, but we've collected all of these skills under one roof. If artists were to have to organize all of this individually, they would have much higher quantities of things to do—really. Added to that, there are the existing risk factors when the work is passed along from hand to hand. If someone messes up, doesn't think clearly, or doesn't know what the other one is doing, then the whole process can break down—and finally, something doesn't fit together. Or the work requires that the locksmith does something first, then the cabinetmaker, and then, once again, the locksmith. Here, everything is in one house, and measurements and other details get discussed by everyone. We take over all the planning work, plus the coordination of the different workshops, which saves not only time and money but a lot of thought, too.





NSH > So there has to be an understanding for the idea of the artist. You described this before as a skill. If the artist delegated the work to many different craftsmen, then it's quite possible that they have no idea of the big picture that he or she has in mind. Perhaps they also normally have nothing to do with art, meaning they would react to unusual contracts with indifference.

< US Yes, this can happen very easily.

NSH > Then you also do a kind of translation work, don't you?

< US Exactly. Say an artist wants to make a steel tub, but can't give a precise technical description of what he or she wants. The artist can only describe it visually. When I go to the bender, I explain to him exactly what needs to be done—so he knows exactly what to do. Artists are sometimes not in a position to do this. This is one part of our job. On top of that, I have a long relationship with the external companies that we commission. I know their language, and they know mine. This means that if the bending is supposed to look perfect, I have a vocabulary to help us achieve this. If it's supposed to look trashy, then I have an expression which I know they will understand. We understand how to communicate with each other about the work. For this reason, things move quickly and less mistakes occur than when an artist does this him- or herself, at least when an artist does this for the first time or has little experience going to a metal bender.

NSH > So it simply has a lot to do with experience, being a team that knows how to work together.

< US Yes. Of course, in addition to that, there's the giving of advice, not necessarily as though it were an officially

offered service, but because when I speak with the artists about the project, I end up giving them feedback.

NSH > Perhaps one could describe it like so: an idea comes in, and then there's feedback that comes from thinking about technical possibilities as well as about if and when the idea stands in conflict to that which is possible. And then this information feeds back into the idea.

< US Sometimes there's a clear statement from the artist. "I'd like to have it like this or like that," and then, according to the picture I have in my head, I notice, for example, that it's not right or that this material doesn't correspond with what the artist imagines. Sometimes the final product wouldn't match what the artist usually does—it wouldn't be a real so-and-so. All this goes through my head, most of the time during my trip back home or to the workshop after the meeting. If it occurs to me that something there doesn't match up, then I can bring these thoughts to the table. I see it as my responsibility, also as my challenge, to propose the right thing to the artist, to assist her or him in the making of an exact piece. This is part of the job that I really have fun with, this challenge, this attempt to make every project the right way, to prevent mistakes. If the work is indecisive, imprecise, or if it doesn't really fit into the grand scheme, then the artist will just be disappointed when he or she sees the work in its finished state. Or the gallerist will be disappointed, or whoever else. This squanders energy. I like it better when everyone is happy, happy for the piece.

NSH > This means that you, in a certain sense, do have influence on particular aspects of the content, insofar as they collide with what you are able to predict, how you think the product will look in the end, or what sort of technical problems you think could

arise. In other words, the end product happens within the communication.

< US I would agree with this in terms of aesthetics, not, however, in terms of content. Some projects are simply harmonious; they achieve unity. But with some projects, I notice something that's off, and then I voice this. I think that the artists who come to us appreciate that I, that we think along with them, not only in relation to the production, but also in relation to the final form which the work takes and to the artist's body of work.

NSH > Earlier you mentioned Donald Judd, who engaged quite intensively with industrial production in his work. It hasn't really always been the case that artists have produced beyond their own technical abilities, or, let's say, beyond their own technical language. But precisely this is a clear characteristic of much art that is being produced today. How does this relate to the work that Judd produced then? Or perhaps one would have to travel further back, to the beginning of the industrial revolution and to the readymade. One could also say that conceptual art paved the way for certain aspects regarding the division of labor, as it is practiced by artists today. Do you see a development here? How could one describe this?

< US Any answer would be a theory; in reality one should look at artists' production methods individually. Twentieth-century artists developed several new strategies for producing or realizing ideas. Donald Judd, Andy Warhol, Joseph Beuys, Marcel Duchamp, Rosemarie Trockel. In the field of art, such a development cannot possibly be linear. I think it's more interesting to take it one artist at a time, look and see what they did individually, in whichever context. What I find particularly

thrilling today is how there are so many methods for organizing the production of one's own artworks. One example is Olafur Eliasson, who has a huge studio full of hired people in which the works are planned, built, and given test runs. Quite simply, this is a big company, and Olafur is the boss. This is one economic model among others that artists can adopt. Other artists give the development of their artworks over to other companies. Olaf Nicolai, for example, commissions an architecture firm to design his works, and then they turn around and hire us to build them. In this case, we just do what is required. We could just as well be cabinet-makers. Olaf plays consciously with authorship and production methods.

Or take other artists, like Rirkrit Tiravanija, who attempts to draw creativity from his exhibitgoers. He also allows us a certain amount of creative freedom, in that he gives us instructions in a particular way. An example for this would be a piece of wooden furniture by Enzo Mari that we reconstructed for Rirkrit. Rirkrit just gave us this instruction: please copy, but in polished stainless steel. Of course, you can't make a one-to-one copy of wood with stainless steel. The wood has a thickness of nineteen millimeters, but steel doesn't come in a thickness of nineteen millimeters. So you have to take the twenty-millimeter steel. Then you have to see how it is possible to arrive at a copy that is "correct." I decide together with my people what is right, and in this case with Thomas, who carries out, supervises, and organizes the metal work. This is how we develop the stainless-steel copy that is right for Rirkrit. Or take Sylvie Fleury: she not only works with objects which come from a particular level of the world of shopping, but she also shops for ideas and possibilities for making something. Others use us chiefly as a trustworthy workshop. "I need a table. Here are the measurements." Or Michael Elmgreen and Ingar Dragset value surface finishes that

are very clean and elegant. Lacquers and metal surfaces should be treated in a very neat and clean way. I think the reason they come to us is that they simply trust it will be as super as they wanted.

NSH > One could say that the spectrum of people's motivations for coming to you ranges from the purely practical—"I delegate because someone else will do it better, because I don't have the time to think about it"—to seeking a conceptual contribution to the thought process involved in realizing a piece. For example, one may want to have a craftsman make an artwork for the very purpose of quoting a form of production or conceptually overstepping the idea of the artist's hand or the original.

< US No, I don't think that artists come to us for conceptual reasons. I don't think one would, because what we are isn't at all clear. A real cabinetmaker would be more clearly defined. Tobias Rehberger, for example, has his Porsches produced in Thailand according to his own sketches, or Philippe Cazal asked a graphic-design agency to elaborate his works. Instead, I believe we fill in this gap where the individual needs of the artist are met and completed by our possibilities. On the one hand, it's knowing and trusting that the whole thing will turn out the way the artist wants; on the other hand, it's the negotiations that we take responsibility for. We build boxes ourselves made out of the correct type of wood for transport overseas, assuming this is the sort of transport that comes into question, and then we worry about the transport ourselves. If you order a plexiglass object somewhere, you have to pick it up, pack it yourself, et cetera: you've got a lot of work on your hands. We take care of all of this. I call the museum and say, "We've met the deadline with this project now, and the work can immediately be transported by

this or that mover.” Among other things, it’s important that artists can come to us with their idea, while all of the experiments necessary for the realization of the piece are on our side. They needn’t have anything to do with this experimentation phase. There is an agreement: it’s finished on this day, and it costs this much. The artist mustn’t risk time or money, the gallery or museum either.

NSH > Those would be the practical considerations, it seems. It’s easier logistically and technically for the artist to work like this. In an earlier conversation, you used the example of a door. I’d like to come back to that. An artist wants to have a door in an artwork. Now, he or she could attempt to make a door him- or herself, and he or she would manage as good a door as he or she is capable of—even though he or she is no carpenter. But it will be different from what a door normally looks. This is the service that you can provide: to make a door that looks like a door. If you can’t manage it yourselves, then you hire someone else who can. With this, I’m coming back to the question of industrial production, or the question to what extent artists today relate easier to modes of production which are different from traditionally artistic modes, how this relation has changed over time.

< US When one looks at an industrially produced door from a distance of two meters, then it looks super. But if you look at it from ten centimeters away, it doesn’t look so good anymore. This is what you get from a specialized company that makes doors for apartments or for offices. But more than often, this doesn’t satisfy the artist. It has to look even better than a real door, like an ideal door.

NSH > Hyperreal?

< US Exactly. When we look at a door from Elmgreen and Dragset, it isn't just the standard door that gets used everywhere. It's simply made better. We care for the very last detail. You can't go to just any door maker or carpenter to have this done; there's a bit more to it than that. We made a luggage-conveyor belt for them, for example. When you look at a luggage-conveyor belt in an airport, it looks great from ten meters away, shiny, glittery, fantastically full of little doodads. But when you get closer, you see that shocks don't fit, screw holes have been threaded—things have been adjusted and so on. Even if the conveyor belt is brand new, it isn't perfect. That's why a conventionally prepared luggage-conveyor belt isn't ideal for Elmgreen and Dragset. Sometimes this also depends on the expectations of the gallery or the collector. Sometimes everyone wants it to be perfect, sometimes only one out of three. But this is another question.

NSH > [laughs]

< US We can fulfill these expectations. What I'm saying is that industrial production or an industrial aesthetic is often a theme for our artists, meaning they use objects that are actually constructed in a regular company that specializes in this object or the other rather than in a mass-producing company, but the production in these companies is still often not good enough to fulfill the demands of the artist.

NSH > Basically, you have to produce a hyperreal object, which in terms of this high quality doesn't exist in reality, which looks, however, as though it does correspond with "reality."

< US Exactly—like it comes from fantasy, from the imagination, an image of the actual object.

NSH > Yes.

< **US** ... because one doesn't see these minimal impurities until one gets really close, though they aren't part of the picture one constructs in one's imagination.

NSH > These imprecisions are part of the reality of a production which is as perfect as was necessary for the functioning of the object, as perfectly produced as was possible given the available amount of production time.

< **US** Yes. There are certain levels of tolerance there, and with us, they are pretty low. We like to keep things tight and precise.

NSH > It seems to me that the preparation of the objects does play a large role in the final result, at least on an aesthetic level. But it seems difficult to me to separate the aesthetic level from the level of content. What is your relationship with the finished product? How do you feel, for example, about questions of authorship? Does the final product belong completely to the artist, or is it also a little bit yours?—outside the fact that the whole thing is regulated by the contract. My question is posed more in terms of your feelings.

< **US** No, for me they are jobs I've been contracted to do, and I have no expectations in terms of authorship. It has never been important for me to stand in the foreground. If I really love a work that we made, then I'm excited about the artist, that he or she could think up such a great work, and I am happy that I was allowed to realize it. The idea comes from the artist, and the carrying out of the idea happens through technical, craft-oriented, or other differently oriented aspects which do not justify any sort of authorship regarding the artwork. No, I simply have a lot of fun working together with the artists, and this is sufficient [laughs].

NSH > And it is possible to keep things separate in terms of your feelings?

< **US** Yes, absolutely. We work simultaneously on many different projects, and we've worked for quite a lot of artists. Each project is equally valuable and important. Sure, maybe I like the one artwork more than the other. But it doesn't come from me.

NSH > I think that the question is maybe a bit more abstract, simply because I have the impression that there are two elements. There is the idea and there is the fabrication. How are they related to each other? In the end, doesn't the final object consist of both? Or am I making this too abstract? I think that the general public still has this image of the artist as someone who gets an idea in his or her studio and then sits down and realizes it. Starting with the concept, he or she continues with the realization process, and it all culminates in the presentation—this all bears the handwriting of the artist; and everything is cast in the same mold. Of course, there are people today who still work this way, and I don't want to say that one way is more contemporary than the other. It's not a certain loss of authenticity which concerns me, either, but it does, indeed, seem to be the case that so many artists have given up on this sort of approach, without somehow communicating the change in practice to the outside. Meanwhile, a lot of artists have achieved this separation completely; they've completely removed themselves from production. Their work consists in the conceptualization of their pieces, maybe even along the lines of conceptual art; but their work doesn't enact the rejection of the object, the rejection that conceptual art was calling for in its time. Back then it was said that the object no longer plays a role, that it's really about the idea, and presently this object has returned in a very singular way, only

now it is separated from the actual tasks of the artist. Despite all of this, the traditional image of the artist is still maintained for the outside viewer. For me, this is like a blind spot.

< US When we produce a work, we make sure that it shows the hand of the artist. This is very near and dear to our hearts. We make sure that everything is right, that the screws, the lacquer, the surface, or whatever—that it all represents the hand of the artist, that it's coherent.

NSH > Is it possible to describe this more closely? How would one explain what the hand of the artist is?

< US I think if one looks at the works that are standing in front of us now, one would quickly notice that they are works by Elmgreen and Dragset. If you've seen a few works by them, then I believe they can be recognized. The same with Carsten Höller or Terence Koh. If you're not careful, if you do something wrong, then the big picture of the artist's body of work gets destroyed; all it needs is the wrong screw. It follows that the main concern is the artist and not the fabrication; or in other words, the possibilities for the fabrication are basically limited to the handwriting of the artist. The question is quite metaphorical. If a piece by Dan Flavin were to suddenly have the wrong proportions between his fluorescent tubes—unfortunately, we've never done a Flavin—then it would be noticed, and he would be the responsible one, not the person who made the lamps or arranged them. So in the end the responsibility for the whole thing lies with the artist, and he's the one who stands tall next to it. Or he doesn't stand tall, because he doesn't have to stand tall. He does, however, carry the responsibility.

NSH > ... because he is the surface which appears on the outside, or the one who represents it.

< **US** Exactly, yes.

NSH > In your opinion, why is it that art is always so different than film in this regard? That despite this relatively large team, some of the members of whom work on the artworks, there is always only one name standing there. Can you understand this?

< **US** The artist stands for his work with his vision, with his life, with his entire thinking and acting in relation to his work. Therefore, he stands with the help of, or together with, the sculptures or works. It's the same with architects, the same in film. In film, it's the director who's standing there. In film, the whole list of credits is there only because of pressure from unions. Sometimes I think it's pretty absurd that even the interns are listed; sometimes I like it when even some uninteresting loner from the countryside who made something small gets his name in between all the other important names. In the end, however, the decision to mention all the people is a legal decision and not a content-related decision made by the director. And I also don't really think it makes sense to show all of these names in the art field. Ultimately, if these are people that are unknown to the general public, then they are only names. They would only be worth mentioning if one also told their stories. Of course, that would turn into something completely different. I don't really think that it's necessary.

NSH > You don't think it would change public perception and thereby change the way in which audiences perceive artwork?

< **US** I often have the experience that when I explain my profession to people, they are astounded. "But, I thought the artists ... I hadn't really thought about

it.” Here’s the deal: if you simply were to put an artwork in a museum with only a note under the title that lists everyone who helped produce it, it would really confuse people. If this were described in texts about the work, as part of the work, it could make sense. But each artist has to decide this for her- or himself.

NSH > It would play a role in the market. It is through this clear division of labor that it also becomes clear what is sold there. Admittedly, it is you who does the fabrication, but the authorship rests with the artist. In comparison, it is more difficult to sell a group work than it is to sell the work of a solo artist, even though it is made by a team. But obviously there is a different perception regarding what it is.

< US It’s becoming interesting with the two of us and with our exhibit. It’s definitely a team project. The question is, how will your gallerist be able to sell the final product? The other question is how we deal with the authorship question in our project. You said that you wanted to include me as an author.

NSH > Yes, because when all is said and done, it would be true to the way the project emerged to name you as an author. I didn’t give you a contract to carry out; instead, the form of the project has arisen from our conversations. For this reason, there isn’t this a clear boundary in our project.

< US It’s a situation which doesn’t normally happen with me. Usually, I don’t invent artworks or discuss them, at least not in this way. You and I are playing a game, and it is entertaining to be an artist for a limited time again [*laughs*], even getting paid for my creativity. I think what we’re trying out is interesting.

NSH > [laughs] I think so too—but I'm still confused when you use terms like creativity, for example. What exactly does one need it for, and can you really separate it so clearly? Do you mean that creativity is what the artist brings with him or her, and that what you do has nothing to do with creativity?

< **US** No, of course we're also very creative, but it's not the artistic, inventive creativity of conceptualizing an artwork, at the very least in thought; it's more the creativity of technicians, engineers, and craftsmen. With craftsmen, the creativity is more related to the process than to the final result, because the final result is, indeed, the decision of the artist.

NSH > But this is a slight contradiction of what you described at the beginning, namely about which work it is that you do and where you see your own strengths.

< **US** That's right.

NSH > You're actually not the craftsman.

< **US** No, it's true that I bring myself into it, but I wouldn't now describe this as creativity.

NSH > Then how could one describe it?

< **US** I think that it has to do with my skill in comprehending and perceiving things thoroughly, with analysis, on the one side, and finding solutions, on the other side. I search for solutions for the handwriting or within the handwriting of the artist. Actually, I just try to stay on the path that the artist is on, and if something occurs to me, an idea, then I'm happy to bring it to the table. For example, I may think that the artwork would do better to adopt a different aesthetic proposal

for a form, and it would thereby stay more successfully on the straight and narrow. Or it might be interesting to tread along the edge of the path with a different proposal. I have a certain understanding of an artist and her or his work, and I strive to keep her or him on the path, as long as she or he wants to stay, of course. But with the term, creativity, one immediately enters the sphere of artistic creation and invention, something which I would prefer not to claim credit for.

NSH > Do you mean that there exists a creative moment as a quality within art production? Where can one find this moment today, in your opinion? Does it happen at a particular point in the development of the idea, or where and when does it exactly happen ... ?

< US With the artist?

NSH > Yes, or within art production as a whole. My question was if, according to your view, the creative moment is limited to a specific moment in the development of an idea.

< US Sometimes I come into one of our workshops and someone says, "This won't work. We have to do things another way." Then you have to get creative.

埃及和台湾混血艺术家罗比·威廉姆斯（出生于柏林，在斯德哥尔摩定居和创作）采用了多种媒介开展创作。他的混搭雕塑作品引发人们去审视写实空间之下个体所处的环境条件，同时反思了我们日常生活的影响因素。

《个展》由五件作品组成，都类似于为同一空间下马匹越障表演比赛所设置的障碍。这些物件布置得非常松散，会像马匹跳越时碰到的障碍栏那样倒下。不过，威廉姆斯并未采用经典的木质障碍栏，而是选用了能反映了他生平经历的各种材质，诙谐地借鉴了现代和后现代艺术的历史元素。《个展》是威廉姆斯首次在中国举办的大型个人展。

The work of Stockholm-based Egyptian-Taiwanese artist, Robbie Williams manifests itself across a wide range of materials. Williams' hybrid sculptures evoke questions surrounding the conditions of the individual in representational spaces and reflect on what shapes our daily lives.

On the occasion of *SOLO SHOW*, the artist displays a set of five objects that resemble obstacles for horses arranged in the space as if for a show-jumping contest. The objects are loosely assembled, and would collapse in the same way as a fence when hit by a leaping horse. But instead of using wood, Williams has chosen materials that refer to his own biography and playfully quote from the history of modern and postmodern art. *SOLO SHOW* is Williams' first major solo exhibition in China.

《个展》

SOLO SHOW

Achim Kayser
Alexander Niklasch
Andrea Fourchy
Andrea Schmidt
Andrea Villani
Anne-Pascale Frohn
Anselm Franke
Anthony Yung 翁子健
Anton Vidokle
Bertram Sturm
Brian Kuan Wood
Cajus Pietschmann
Chen Sue 陈肃
Detlef Brall
Elisa Maria Cerra
Elisa Schroer
Erik Wiegand
Frank Kiefel
Freya Chou 周安曼
Gerard McGettrick
Giulia Pezzoli
Hengst
Hu Fang 胡昉
Huang Yi Steven 黄一
Ines Schaber
Jennifer Chert

Jens Queren
Jeremy Carden
Jörg Wambsganss
Johann König
Julieta Aranda
Kaye Cain-Nielsen
Kirska Geiser
La Vina
Laura Barlow
Lan Linfeng 蓝林峰
Lulu Li 李星伯
Magdalena Magiera
Mai Dian 姜姜藤
Mariana Silva
Markus Schmach
Michael Müller
Miguel Ángel Emérico
Mynou Dietrichmeier
Neville Reichman
Natascha Sadr Haghighian
Otto
Peter Anders
Pierre Maite
Pollux
Rachel Ichniowski
Rainer Jordan

Robert Schlicht
Roger
Sandy Kaltenborn
Sebastian Summa
Seda Najumad
Stefan Kessels
Stefan Pente
Steffen Puschke
Stephan Hempel
Stephen Squibb
Tammy Lin
Thomas Huesmann
Thomas Laprade
Thomas Wendler
Tirdad Zolghadr
Ute Waldhausen
Uwe Schwarzer
Vera Tollmann
Viola Eickmeier
Wang Yuwei David 王育伟
William Wheeler
Xu Chenfei 徐辰斐
Xu Yin 徐胤
Yat Chin TANG 邓逸晴
Yuk HUI 许煜
Yu Xiao 于潇

disco parallax

I counted.
Twenty-eight seconds green
Two seconds yellow
Thirty-seven seconds red
One second yellow
And again
Twenty-eight seconds green

Backlight

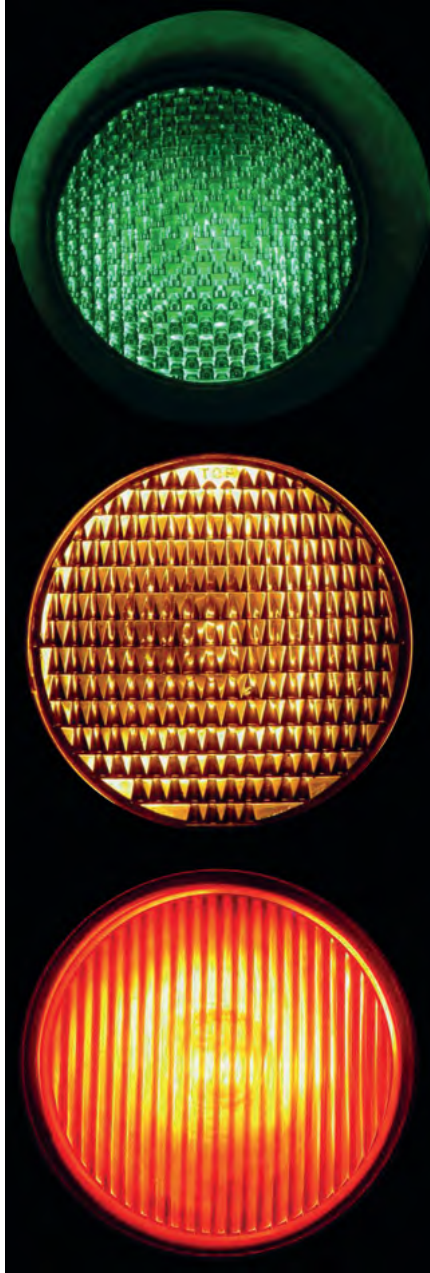
The traffic light turned one hundred this summer, on August 5. I learn this from the “Innovation” section of the Siemens website. Apparently, the first electric traffic light was put in operation in Cleveland, Ohio. Its control signals were operated by a police officer who sat in a little shack at the intersection and rang a bell each time the colors changed. The company installed its first traffic light in Berlin ten years later, in 1924, on Potsdamer Platz.

But at this moment I am staring at the traffic light at the intersection of Ohlauer Strasse and Reichenberger Strasse, in Kreuzberg. I have been part of a blockade on this section of Ohlauer Strasse for a couple of hours. Now darkness slowly sets in. The blockade started a few days ago, when a former school that had been occupied by 250 refugee activists was cleared—with the help of 1,700 armed police officers in riot gear. A group of forty activists refused to leave the building on Ohlauer Strasse and withdrew to the rooftop, threatening to jump if the police attempted to evict them by force.

The refugee strike started in 2012, with a march on Berlin protesting the mandatory residence policy. The noncitizens established a tent city on Oranienplatz and later in the school, demanding abolition of deportation and mandatory residency and the reconstitution of the right to asylum in Germany, which has effectively been unavailable since 1993. The strike action was triggered by yet another suicide of a noncitizen, in an asylum camp in Bavaria in January 2012; the man hung himself, out of fear of deportation and desperation over ill treatment in the camp.¹

The refugee strikers' determined and powerful struggle was met by tremendous support from locals and an intransigent technocratic stance from officials, who tend to tighten asylum laws rather than grant people the formerly constitutional right. The right to asylum had been anchored in the German constitution since 1949, as a direct result of the lived experience of fascism in Germany. Over the course of the war, half a million political refugees had fled German National Socialism and were granted asylum by over eighty countries. Article 16 of the German constitution, the unconditional right to asylum, was an acknowledgement of this experience. Yet in 1993 this right was removed from Article 16 and transferred to a new article, 16a, thereby intricately eliminating the right to asylum in Germany.

This discrepancy in response shows itself very clearly at the siege that evolved when 1,700 riot police, some of their weapons carrying live ammunition, surrounded the occupied school to supervise the eviction, while supporters immediately gathered behind the police



lines to try to prevent the eviction. There has now been a deadlock for almost a week, growing layers of immobility like an onion, or a stack. The activists are barricaded on the roof and the police have cordoned off the entire block, only granting passage to people with resident permits. In another layer, locals who support the protest have blocked off the police cordon at all intersections around the clock, to hinder their flow of supplies and prevent eviction. Democratic law has been suspended for five days in this part of Kreuzberg; all sides struggle to define what is inside and what is outside and to flip the order of the stack. The police line defends German interests from the demands of the refugees and effectively declares the besieged school to be “outside.” The supporters declare the siege illegal and stand in solidarity with the people inside the school, averting the state’s proposed exclusion, instead turning around and redefining the cornered police line as being outside. The people inside the school wait in limbo between deportation and captivity, with nothing much to lose and everything to fight for. Nobody can make a move—the government shows no inclination for genuine negotiation that doesn’t involve tricking the activists with empty promises.

So at this moment nothing budes at the intersection of Ohlauer Strasse and Reichenberger Strasse. Supporters sit on the pavement, drinking and chatting. Behind the barrier the men and women in riot gear shift their body weight from left to right while leaning on their shields. Their backs are turned to the school, hardly visible in the dusk. The only things that move perpetually are the traffic lights, diligently turning from red to yellow to green and back as if they were operating invisible traffic, or just stoically insisting on normality.

But now, as night is falling, the red, yellow, and green lights shine on the scene rather like disco lights, changing the mood every thirty seconds or so by illuminating the faces of police and protesters alike, the cordons, the pavement, and the idle police vans behind the police line, immersing all in a detached glow and rhythm. And like disco lights, the colorful flashes suspend, fictionalize, and

breach agendas, dress codes, movement, spatial layout, and power relations. But the vision flickers and other readings recrudescence. The sequential shine appears to signal the algorithmic cluelessness of a system that does not know how to respond to the complexity of a globalized world where the claim over freedom of movement means more than just jaywalking.

The main character in the BBC comedy *Little Britain* is a receptionist named Carol Beer. When asked a question, Ms. Beer types a random line into her computer, only to reply, “Computer says no,” followed by a strong cough in the customer’s face. Similarly, the flashing signal could be read as the response code of an ignorant state that has decided to be indifferent toward the demands of its citizens and noncitizens. The traffic signal’s working/not-working status could also be seen as the apparent contradiction in the act of a democratic state that tries to defend its interests against the refugees by suspending said democracy. If a democratic order can be protected only through highly militarized police operations that suspend civil rights, then whose interests are actually defended? The traffic lights maintain an order that has actually been canceled, because movement has not been flowing according to the convenience of state that claims monopoly over who and what moves.

Another piece of information from the Siemens’ website illuminates recent company goals and innovations in this vein:

Since March 2014, traffic lights have gone online. Thanks to a new control device from Siemens, cities can manage their traffic lights from a private “cloud” and correct problems without turning traffic lights off—and this from any location in the world, via smartphone, tablet, or computer. New technology also allows for remote maintenance. The Siemens Support Center in Munich already assists 255 cities worldwide, from Abu Dhabi to Würzburg, in the event of any problems with traffic computers or traffic lights. In the future, experts working in Munich will be able to fully service traffic light systems remotely, guaranteeing safe and trouble-free operation.²



DID YOU KNOW?

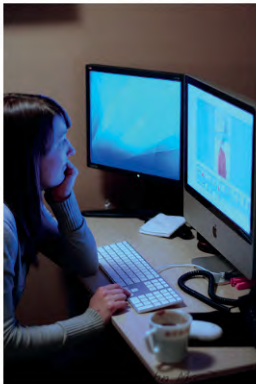
The Color of Your Computer Screen Can Affect Your Sleep

by Meaghan posted September 19, 2010

According to newscasters, this Wednesday is the first day of fall (although my calendar says Thursday). I don't know about you, but I always notice when the days start getting shorter because it's still dark when I get off the subway for work in the morning... Ah, the joys of working in fitness!

Anyway...it's pretty well-known that daylight (the original "blue light") affects our sleep cycles. (And if you didn't know that before, you do now!) But did you also know that man-made light can have the same effect?

Our bodies can't distinguish between blue light from the sky and blue light from a computer screen or TV. (Way back when, blue light *only* meant daylight!) And because it's blue light *specifically* that impacts our sleep patterns, electronics that radiate blue rays can have a major impact on our circadian rhythms.



Blue Light

Back home, I sift through collections of traffic lights and parts of traffic lights that people have put online. Willis Lamm, who runs a Natural Horsemanship Webring, owns a vast collection of different signal lenses, and he has photographed each one against the light—ribbed, crosshatched, beaded, and Marbelite lenses, orange peel, Crouse-Hinds, and spiderweb.³ The lens patterns are the result of different attempts to address problems like phantom light, diffusion, and enhancement and to meet chromatic standards. I remember finding a signal lens on the street years ago, and I kept it in my bag, because I liked looking through it from time to time. This was before the illuminated screens of phone, tablet, and computer inhabited my bag. I remember truly enjoying the sensations I experienced when the refracted light coming through the lens hit my eyes, but I also often just held the lens against any surface to see whether the yellow spiderweb would emit its tinted pattern onto other things, and if so, how that would look. At the time, any refraction caught my attention. It was part of an involuntary study of my own perception. Seeking out refracted and reflected light seemed so much more interesting than looking at pictures.

Most things I look at now are on a screen, including the Twitter feed from the occupied school at Ohlauer Strasse. My backlit devices illuminate my face and my bedroom with a particular cool blue light that shines almost independently of what shows on my screen. The light has a color temperature of 6,500–10,500 kelvin, which correlates with a partially overcast daylight of about 7,000–12,000 kelvin.

Unlike the red and green colors of a traffic light that are part of a symbolic order I have learned to internalize, the devices' blue light is more visceral and talks directly to my melatonin levels. It says ON! GO! OPEN! ACTIVE! DAY!, announcing a perfect eternal day—not unlike being at Kunsthaus Bregenz, a minimalist architectural structure designed by Peter Zumthor that hosts contemporary art. Its impervious facade consists of light panels that form a freestanding, light-diffusing skin. Its unpainted-concrete and polished-terrazzo

interior is illuminated by changing ratios of artificial and incident light that emit consistently from invisible cavities above the glass ceilings, giving the space a uniform luminosity and color temperature. You can't possibly tell the time at Kunsthaus Bregenz via the ambient light, and you're essentially not supposed to. The eternal average 8,000 kelvin of Zumthor's art space and of my smartphone screen equally eliminate cycles, transiencies, limits, stop signs, night, idleness, fatigue. The light doesn't care where I go or what I do—whether I'm productive, procrastinating, editing, chatting, walking, or standing—as long as I keep it turned on.

1, 2, 1, 2, keep it on

Listen to the shit because we kick it until dawn

Listen to the abstract got it going on ...

Gonna get it together, watch it

Gonna get it together Ma Bell

I'm like Ma Bell, I've got the ill communications

Ma Bell, I've got the ill communications

Ma Bell, I've got the ill communications

Ma Bell, I've got the ill communications

Keep it on and on and on

—Beastie Boys, "Get it Together," *Ill Communication*, 1994

When did this particular blue light start to light up my life? Someone must have switched it on at some point. Or is it truly without beginning or end? If I trace it beyond my phone's projections, one streak beckons to the blue apparel of Margaret Thatcher. She started her politics of deregulation, privatization, and flexibilization wearing 15,000 kelvin, the color of a clear blue sky. And as we've learned from Adam Curtis's documentary series *The Century of the Self*, many who had destroyed the policeman inside their heads voted for this new economy of the product-aided, limitless self to explore further what they really, really wanted. Deregulation put the control, the ownership, and even the traffic into private hands. Ronald Reagan, Thatcher's fellow blue rider, followed the same privatization politics, repeatedly announced in his campaign: he vowed to "let the people rule" and to "take government off your backs and turn you loose

to do what you can do so well.” In fact, privatization meant shutting down the idea of a common project, of shared responsibilities, and of a system of accountability and welfare. Now everyone was responsible for their own individual happiness production and management, and had to work 24/7 to express and promote the results. It required special techniques of staying put. A new, reversed type of “American night” filter had to be applied to the scene, one that simulated day in the middle of the night and illuminated our faces with the appropriate white balance. Additionally, due to the refresh rate of our displays, this new light came in the form of a stroboscopic flicker that pulsed the artificial day. Anyone who has experienced strobe at a club probably discovered that it changes the perception of motion profoundly. Movement can come to a standstill in this light.

But with the arrival of ever-more-tailored technologies, devices, and practices, the new freedoms and responsibilities of the self-actualizing individual turned into new social anxieties. To fight symptoms like FOMO and other Pavlovian reflexes that he, like many of us, has developed, a friend asks me how to de-smartphone. He thinks it’s a necessary step in order to withdraw from the never-ending stream and regain some agency over his life, but he wants to do it without being expelled or left out of social interactions and information. He is worried that changing his status from constantly “on” to “off and on” or to “off” altogether—by removing “infinity apps” or simply by throwing his phone in the trash—might turn him into an accursed nocturnal animal. An invisible creature that you’ve heard about but can’t google.

If this particular light has a history, it might as well have a locus. Scanning through the different registers of the blue light, I detect another substantial source: it is the blue glare of the European Union and its borderless Schengen expanse. A light that shines so bright that its representatives mistake dominance for relevance. The European flag that depicts twelve golden stars upon a uniform azure-blue background tones this light. The official commentary by the ministerial committee at the flag’s introduction, in 1955, breaks down its symbolism as follows:

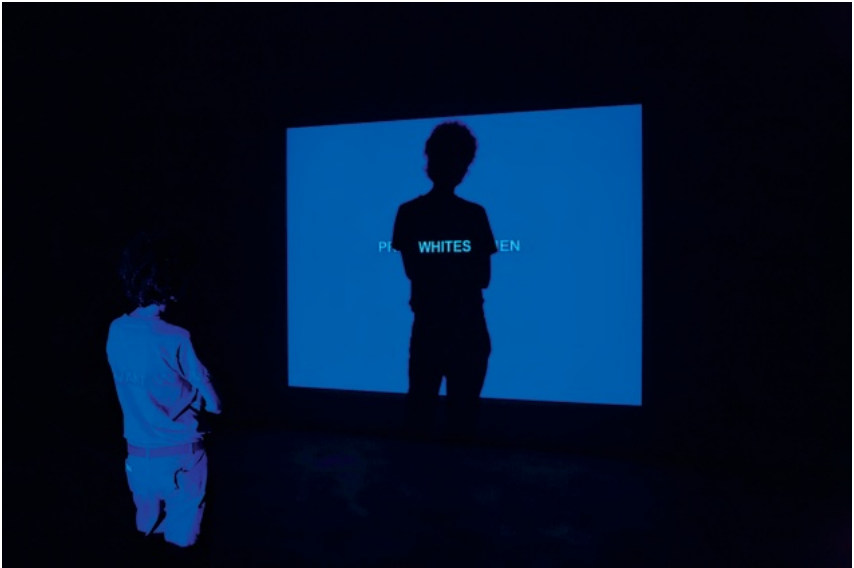
Gegen den blauen Himmel der westlichen Welt stellen die Sterne die Völker Europas in einem Kreis, dem Zeichen der Einheit, dar. Die Zahl der Sterne ist unveränderlich auf zwölf festgesetzt, diese Zahl versinnbildlicht die Vollkommenheit und die Vollständigkeit.

Against the blue sky of the Western world, the stars depict the peoples of Europe in a circle, the sign of unity. The number of stars is invariably twelve, the number being the symbol of perfection and completeness.⁴

Azure as a background color used to be rare in Europe, as the blue pigment “lapis lazuli” was scarce and therefore sublimely expensive. According to my art history teacher, it was Giotto di Bondone who first used the azure color of the sky instead of the traditional gold to paint the background of his frescos. Lapis lazuli had come to Europe during the Crusades and was subsequently imported by traders from its only known source, Badakhshan Province in today’s northeast Afghanistan. Giotto’s particular blue background and string of rhythmic figures in the foreground marked the beginning of a new epoch in Europe that would become known as the Renaissance.

So apparently the blue sky of the Western world was imported and depended on mining in remote regions in Afghanistan, a fact that does not really match the arbitrary symbolism of completeness that Europe defends so vividly at its outer borders and in our neighborhood in Kreuzberg. The circle of twelve stars does not even count all of Europe’s member states, let alone the faraway regions on which Europe’s shine has been feeding for centuries.

The borderless blue of the Schengen interior is suddenly dimmed at its seemingly insurmountable outside border. In fact, this border is ferociously jammed with several layers of different high-tech fences, enforced by Frontex, the privatized border police that deliberately ignores SOS calls from boats in the Mediterranean in order to lower the risk of illegal migrants entering the zone. These layers



Why is blue used as a background color to indicate no signal?

Asked 6 years, 9 months ago · Active 6 years, 8 months ago · Viewed 10k times

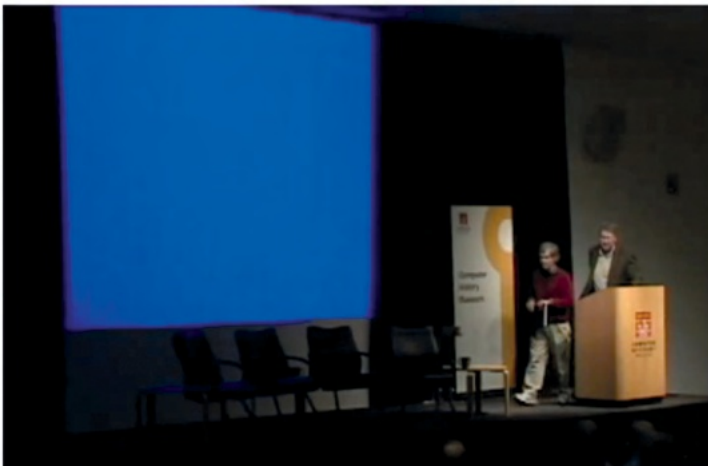


To my knowledge most projectors' "No Signal" screen uses a blue background:

58



8





Ronald Reagan G.C.B.
40th President of the U.S.A. 1981-1989
1918-2004

Michael Gove
Secretary of State for Education
2010-2014

Baroness Thatcher
of Kesteven O.M. F.R.S.
1925-2013
Prime Minister of the United Kingdom
1979-1990

are followed by another bureaucratic border stack—the so-called Dublin regulations. The broad deterrence campaigns of fencing and armed patrols and intervention by sea, land, and air make it almost impossible for asylum seekers to claim protection under the 1951 UN Refugee Convention. But if they manage to reach Europe alive, under the Dublin regulations they are restricted to the country they first enter. They often end up in detentions centers in Greece or Italy. Together, these measures partition the infinite blue sky into fortified layers that protect Europe’s radiant circle of perfection and completeness.

In yet another layer, Europe’s outer limits effectively configure a gigantic mass grave. A democratic order claims the monopoly over who and what is allowed to move legally, thereby quashing its own foundational values and claims in order to protect those very values and claims. The antinomy grows in proportion to the number of deaths, but it is not part of the picture. Frontex released a 135-page “governance” document entitled *Programme of Work 2014*. The text does not mention the word “death” a single time.⁵

The limitless blue firmament in fact has an unflattering backstage—an unexpected depth that is not eternal, not borderless, but nonetheless constitutes a very, very deep void. This depth is of another order, controlling and masking its layeredness to obscure what it rests on.

In this sense the EU flag and the blue light emanating from my phone oddly have something in common: both suggest limitlessness while being constructed of highly regulated layers and frontiers. How can I touch or enter these layers?

I got the ticket to fulfill your dreams,
Just touch the sky with it, just touch the sky with it
Just touch the sky with it, just touch the sky with it
Just touch the sky with it, just touch the sky with it
Just touch the sky with it, just touch the sky with it
—Sean Paul, “Touch the Sky,” *Tomahawk Technique*, 2011

Surface Depth

Donna Haraway received a JPEG file in an email from a friend named Jim. It was a picture that she named “Jim’s Dog.” Jim’s Dog depicted a burned-out redwood stump overgrown with mosses, ferns, and lichens that resembled a sitting dog. Jim took a photo of this particular resemblance, which lasted for one season only. But not only because of its temporality: Jim’s Dog melts into a conglomerate of forces. According to Haraway, we touch Jim’s Dog with a visual system inherited from our primate kin and now folded into the metal, plastic, and electronic flesh of the high-resolution digital camera, but also the email program and the computers and servers that brought the compressed JPEG onto our screen. In this touch we are inside the histories of IT engineering and assembly-line labor, but also those of nineteenth-century loggers whose labor practices involved leaving the burned stumps of the trees they cut to then be taken over by myriads of bacteria and fungi. The whole layered picture is also indebted to the California policy of the “green belt,” an environmental measure wherein Californian cities resist the fate of ever-growing Silicon Valley. This measure prevented Jim’s Dog from being bulldozed for Santa Cruz real estate expansion. Haraway decided to use Jim’s Dog as the screen saver on her computer, as it helped her to think about the necessary responses to such a complex visual phenomenon, or about what she calls “becoming worldly.”

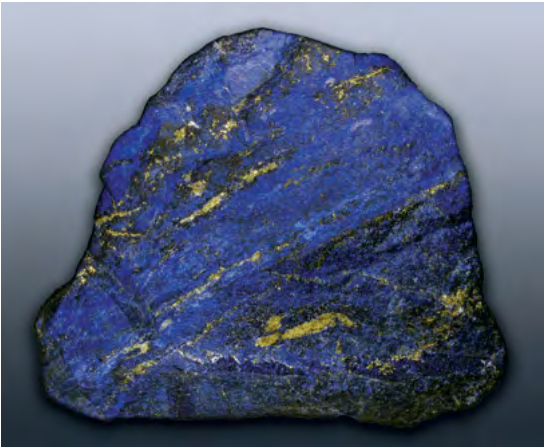
We receive our daily dose of images, texts, audio, and video on increasingly flat devices, and interestingly, these devices are increasingly difficult to disassemble. I recall a time when I was able to open my laptop or phone, or even remove the screen and replace parts. Now their slimness connotes an impervious object that is just surface, and effectively, its parts are also mostly glued together. The device seemingly has no material depth; it is a mere surface, a screen held by your hand or another base. When you look at it from the side, it looks like one thin, consolidated entity. But although a liquid crystal display is astonishingly flat, it consists of several layers assembled in a glass stack that help to make things visible on the screen and also to deal with problems like the ones traffic

lights have to confront: diffusion, directionality, and conflicting light sources, like the sun.

Despite its physical flatness, the display is eternally deep if you install the required software and apps that connect you to the stream of data provided in never-ending sequences by tireless algorithms. Exposing one's gaze solely to the frontal view of the device and to the infinite hypnotizing stream of images, text messages, and other content on the screen, the experience of depth is magnificent. But any other experience, or, as Haraway would say, "touching," of depth is fairly complicated. Looking at my tablet from all sides, I suspect that this is intentional. I am supposed to remain in the belief that my device is flat and that the potentials it facilitates are infinitely deep.

Already our motionless posture in front of a screen suggests that we're experiencing a resurgent version of a flat-earth belief system—one that makes it hard, painful, and even dangerous to look beyond the firmament. You might fall over the edge or be expelled. However, looking straightforwardly at the device will let you forget about this abyss, as you're always busy with a new feed. But the abyss of other depths—like the one found in Jim's Dog—will not simply go away if we ignore it. As Paul Virilio points out, the invention of new technologies is also the invention of new accidents. By inventing the plane, you also invent the plane crash.⁶ Whether or not I want it to, the light on my LCD extends beyond the content on my screen and beyond the display's glass stack in both directions, toward me but also toward sources I can't trace with my eyes—the inventor or owner of the file format, the assembly line of the camera manufacturer, the room that hosts the server, the water that cools the data center, the nuclear accident that happened in the power plant, and so forth. A junkyard full of world-making stuff blows in my face when the light hits it, regardless of the image that shows on my feed.

In order to experience and grapple with the other depths beyond the flat device, I started to look for techniques—techniques of



looking, and as Haraway suggests, techniques of becoming worldly. Just like when I studied the refracting and reflecting properties of a signal lens, I quarry for the contact zones between my figure and other figures, my body and other bodies, my eyes and visual events, to seize the world-making entanglements that might constitute this other depth. Becoming worldly is a form of striving, an acknowledgement that looking is participating, that touching is in fact an entanglement.

If I can't disassemble the device, I can start by taking apart my visual system. The necessary dispersion of my gaze starts by untying it from the image on the screen and shifting at least half an eye outside the frame, examining the edges of the image and the peripheral areas of the screen in order to grapple with the image and look beyond content. In a second step, I can explore more complicated ways of looking, like bending and refracting my gaze in front of a visual event. This can be challenging if done unaided, but using mirrors or glancing over the shoulder, deliberately looking awry, and crying are some ways to practice these techniques. Tears can be a major force in refracting incoming visual events like images or light beams. They enhance, warp, multiply, and redirect the visual perception of the seen.

I use all of the above techniques to develop awry contact zones with the visuals emanating from the flat devices and with the depths beyond. These techniques circumvent the anesthetizing and leveling effect of scrolling the indifferent visual stream of images of decapitations, drone strikes, and cat stunts. Yet, as I tried to demonstrate by tracing the symbolism of the eternal blue light and its material history, it is also the brutality of the very light and not merely the images that hits or touches and even enters the body. The techniques also help me to observe the effects of this light on me, as it also visualizes me, makes me, and makes me visible, as much as it visualizes something for me, like the feed on my phone.

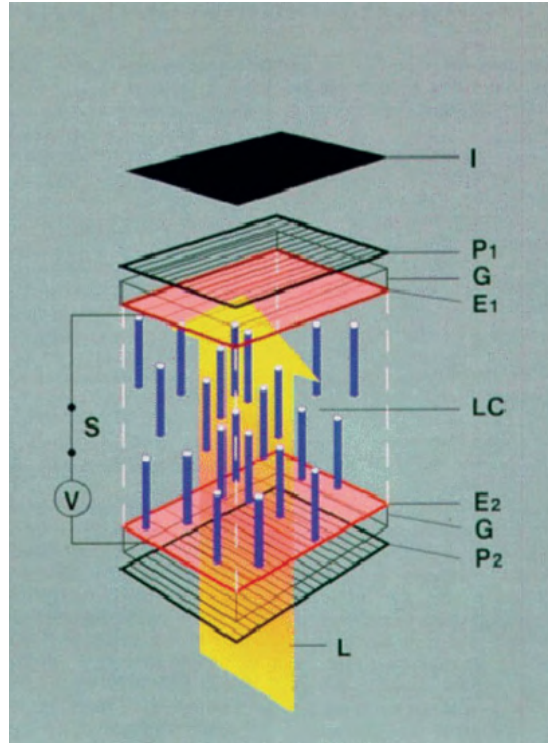
On the website Gizmag, the physicist Brian Dodson following the lead of computer artist Brusspup recommends scraping off the

polarizing filter of one's monitor in order to deal with the implications of visible and invisible layers of surfaces.⁷ When the first layer of an LCD display is removed, the images disappear and only the light remains. Polarizing glasses can aid the eyes to still see the content of the screen. Even though Dodson's main motivation is privacy in public spaces, the intervention also serves another purpose. It's a first step toward making the stack's depth tangible and creating a contact zone with the light itself.

But how does this help with touching the depth beyond the glass stack in my display? A depth that some have described as a multi-layered stack that structures the political geography and architecture that I as user and my address, my interface, the cloud, the data center, and eventually the planet are part of.

The Stack

I know stacks first of all from Donald Judd. One of them, consisting of nine identical rectangular units made of brass and plexiglass sheets, hung equally spaced, is dwelling in the Tehran Museum of Contemporary Art. Unlike most of the museum's impressive collection of modern and postmodern art, which is in storage most of the time, Donald Judd's *Untitled (Stack)* is on permanent display in the last corner of the course that takes you through the entire exhibition space. It is patiently sitting between two fire extinguishers: crooked, dusty, badly lit, the metal surfaces dented and stained from failed attempts at cleaning. It is completely removed from the controlling maintenance and display arrangements that you would normally find in a museum and that would make it look eternal. Judd placed high value on ample dispersed daylight. He was really upset about mishandlings that would break up the uniformity of a flat surface, like fingerprints or scratches. I think of Eleonora Nagy, the chief expert on conserving Judd's work. She would certainly be desperate to bring this stack back on track. But for now it remains here in its bleak existence, inaccessible to conservation. I do enjoy visiting it here. I enjoy it much more than seeing its decent



and proper cousins at any of the well-tempered environments like MoMA or the Kunsthaus Bregenz.

This stack is a bit like the signal lens I had in my bag. It has been rid of its function, relevance, value. It is just an optical thing that helps you understand and discover seeing. You can physically sense and explore its surfaces and reflections as they struggle with dust and darkness. In this light and condition it helps me to understand what a stack is: a rather fragile, unstable proposition that needs continuous maintenance, control, and repair. It also allows me to see how surface is a continuous intense struggle for seamlessness and flatness, which seems so effortless when you see the stack elsewhere. I discover the same sticky black dust particles on the acrylic sheets of the *Stack* that also cover my window sill and my computer screen in my apartment in Gisha and basically all of Tehran as the polluted air of the city leaks into any space.

This is disco of the finest complex sort. I can contemplate various ambitions, failures, and depths, visually, spatially, and contextually without forfeiting the pleasure of looking at the tinted, refracted, and reflected lights that play with the different surfaces on and around the object. Analogous to the glass stack of my display, Judd's *Stack* is part of other stacks that involve geopolitical orders, histories, and possibly futures. It casts and refracts the light using plastic and metal elements. Both materials come from subterranean strata. Judd's *Stack* was acquired with petrodollars before the Revolution. It is part of the most valuable collection of Western modern art outside Europe and the United States. Yet it is neglected, like the traffic light on Ohlauer Strasse—still in operation but not directly representing the current order. But it is also a stack of another time. Judd's *Stack* was produced in the 1960s. It echoes a time of serial, industrial production: each section of the stack is a uniform unit of a sequence, and each *Stack* is part of a sequence. Today, a vast portion of production has shifted to planetary-scale computing, and industrial production is accompanied and often replaced by other types of automations that are run by algorithms. Stacks look different now.

Benjamin Bratton has offered a comprehensive analysis of the territories and layers of the pervasive structure of planetary-scale computing and what it entails.⁸ He suggests the model of a stack to envision the structure, and he emphasizes that it is an abstract schema and at the same time a concrete technical machine, composed of physical spaces like rooms, buildings, cities, streets, and subterranean energy sources, but also of social and human layers of gestures and affects, and of digital software and hardware layers that include cloud computing, fiber-optic cables, data centers, and protocols. According to Bratton, the top level of this vertical stack is inhabited by the user or human/inhuman actant. Below this is the layer of the interfaces that facilitate and structure access to and from the stack. And below this are the other four layers that make up the stack: IP address, city, cloud, and earth. The message containing the JPEG that Jim sent to Donna would go down the entire stack and up again to arrive at Donna's inbox.

But established formations like geography, jurisdiction, and sovereignty are inconsistent in this stack. They appear distorted, refracted, partial, and sometimes contradictory. The way that places, things, and events correlate is reorganized in the stack and does not follow the established coherences. It even creates previously inexistent territories, for example via cloud computing. Who or what governs, who or what maps, regulates, or judges these new territories is partly unaccounted for. Human and inhuman actants can multiply as they appear and act simultaneously as consumer, producer, commodity, data, citizen, activist, hacker, and owner, and as carbon storage within the stack, changing their mode of involvement, status, and identity. To trace the refracting lights in this stack is to be violently scattered, like shrapnel. It is to experience depth as a nonconsistent space—at least not consistent in the way we have learned to understand geographies, nation-states, identities, and legality. And like decolonial and queer struggle have challenged and unraveled the established narratives of consistency of nations and subjects, the computational space and its narratives have to be unraveled. Theoretically, I can appear several times, as entirely different instances, in the chain that leads from my display

to your display. As Hito Steyerl ostensibly showed in her lecture “Is a Museum a Battlefield?,” you can trace something like a bullet through the stack and end up at your own artwork. Invisible gunshot residue and bullet holes in the various layers of the stack show you the way.

Dispatching my gaze down the layers, I intend to use the various acquired techniques of refracted and bent looking as tools and protection at the same time. It is hard to adopt, as I sense a certain blindness or strain. I go back to training with the polarizing filter removed from my screen to get accustomed to the initial disorientation when content is invisible. As soon as my eyes don’t expect a coherent, recognizable picture any longer, I can allow my gaze to go down the stack and multiply and scatter, to enter the succeeding layers. While the blindness was disorientating, the multiplied and scattered view of seeing all the conflicting, irreducible things at the same time and from different angles and perspectives is plain sickening. Jean-Luc Godard recently issued a warning, in his latest film, and first 3D work, *Adieu au langage* (*Goodbye to Language*, 2014). He demonstrated how 3D is actually meant to be applied, and he ripped apart the integrity of our visual apparatus. One eye is forced to go left, the other one has to go right to follow the secret agent and the dissident at the same time, or the lovers who go opposite directions, and the effect is nausea. But we had better practice it, as this is the most actual and contemporary state of seeing; it does not smooth out irreducible antinomies and it does not stabilize the void that exists beyond flatness. 3D is not watching *The Lego Movie* at a Cineplex. Nor is it another immersive experience of “being there”; it is rather a sickening gap in the next level of becoming worldly.

And what about the mess in each layer of and beyond that stack?

Parallax

The English word “pig” refers to the animal raised and sold by farmers, while the French-derived word “pork” refers to the edible meat

from the pig. The gap between these two words relays the class dimensions of the animal, its producers, and its consumers. The dual wording marks the distance between those who produce and those who consume: the prosperous Norman conquerors who could afford to eat *porque* from the *pig* raised by the underprivileged Saxon farmers. Japanese philosopher and literary critic Kojin Karatani refers to this very gap as the parallax dimension—a phenomenon that appears when we are confronted with irreducible antimonies and the opposed positions they produce. Karatani says that radical critique starts with asserting antimony as irreducible and renouncing all attempts to close the gap between positions. True critique, then, involves seeing things neither from one's own viewpoint nor from the viewpoint of others, but rather recognizing the reality that is the structural interstice between positions.⁹

Parallax is the reason why we have a perception of depth, why we see in 3D. It occurs when a thing is viewed or screened from two positions, like the position of our eyes. But what if the positions are further apart than our own eyes?

In disco, this is a standard technique of visual experience. Lights from different positions blink down on the moving bodies and make forms jump, change size, and multiply. It's a visual play that provides valuable experience of incoherent spaces, of interstices, and of worldly entanglement.

What if this parallax is in fact the default experience of viewing—of staring at the irreducible antimonies the system constantly produces? The siege on Ohlauer Strasse had this parallax dimension, and not surprisingly, it was undecidable where inside and outside were. The positions are structurally so far apart that they cannot create coherent space together. For the time being, one has to endure the nausea that the parallax produces in order to see and formulate a radical critique of the system that produces such antimonies. Blocking the police siege made the space jump, change size, multiply. Together with the police line and the rooftop withdrawal, the irreducible gap became visible.

I am back at the corner of Ohlauer Strasse, but instead of facing a police line defending Europe's outside borders in the middle of my neighborhood, I am stopped by the traffic light whose red signal I awkwardly obey—not because I normally do, but because there is a police car right behind my bicycle. The light turns green and I continue my journey, cycling past the intersection along with all the other bicycles, cars, pedestrians. On the surface, the street corner has turned back to normal after ten days of an exceptional police operation and the protests that accompanied it. The refugee activists left the occupied school's roof after continuous, nerve-splitting threats of eviction and negotiations with municipal officials. All this effort led only to a minimal agreement: officials would tolerate the remaining forty activists in the building, but they rejected the other demands, concerning rights of residence and free movement. So in fact the state of exception that had been very visible and tangible a few days earlier was not resolved, but was rather folded in and tucked away behind the surface of normality. Underneath this surface, which lets traffic flow, shops open, cyclists pay attention to traffic lights, and which makes the neighborhood livable, rests a continuous state of exception in which mobility is not a human right. But this state has retreated back to another layer, one that is hardly visible, even though the banners are still covering the facade of the school and the refugees have to show ID when they leave and enter the building. Even though the events that happened on the same surface a few days earlier have accidentally allowed a glimpse into the depths of the stack and revealed the parallax dimension of the European system, it is tempting to adjust your eyes back to the smoothness of restored order.

Twenty-eight seconds green

Two seconds yellow

Thirty-seven seconds red

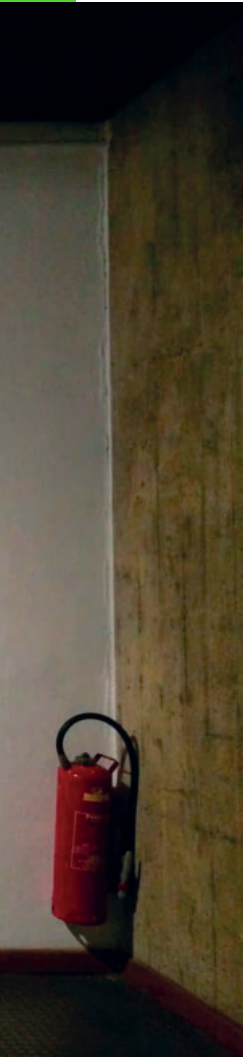
One second yellow

and again

Twenty-eight seconds green

- 1 Mohammad Rahsepar took his own life in a refugee camp in Würzburg on January 28, 2012. See ulimuc ~ today's political prisoner might be tomorrow's refugee, March 31, 2012, ulimuc.wordpress.com/2012/03/31/mohammad-rahsepar/ .
- 2 "The Traffic Light turns 100," Siemens China Innovation News, August 1, 2014, w1.siemens.com.cn/news_en/frontier_technology_en/2687.aspx
- 3 See "Willis Lamm's Traffic Signal Collection, Traffic Signal Lenses," www.kbrhorse.net/signals/lenses01.html [accessed October 14, 2020]. Another impressive collection can be found at ampelfreund.de [accessed October 14, 2020] .
- 4 Peter Diem, "Die Symbole der Europäischen Union und der Vereinten Nationen," in: *Austria-Forum*, austria-forum.org/af/Wissenssammlungen/Symbole/Europasymbole [accessed October 14, 2020].
- 5 See "About Frontex: Key Documents," Frontex website, frontex.europa.eu/about-frontex/key-documents/?category=programming-document&year=2014 [accessed October 14, 2020].
- 6 Paul Virilio, *Politics of the Very Worst: An Interview with Philippe Petit*, ed. Sylvère Lotringer, transl. Michael Cavaliere, New York: Semiotext(e), 1999, p. 89.
- 7 Brian Dodson, "How to Build a 'Stealth' Computer Display," in: *Gizmag* [now: *New Atlas*], November 10, 2013, newatlas.com/stealth-computer-display-lcd-polarizing-glasses/29700/, see also: "Amazing Secret Monitor! (How To)" by YouTube user brusspup, October 29, 2013, www.youtube.com/watch/zL_HAmWQTgA-glasses/29700/.
- 8 Benjamin Bratton, "The Nomos of the Cloud," in: Bratton, *The Stack: On Software and Sovereignty*, Cambridge/Mass.: MIT Press, 2015, pp. 19–40.
- 9 See Slavoj Žižek, "The Parallax View," in: *New Left Review*, no. 25, January–February 2004, pp. 121–134.















LIVE NACH GESCHEITERTER ABSCHIEBUNG
POLIZEI-PRESSEKONFERENZ NACH EINSATZ IN ELLWANGEN
welt 10:34 te die P



*"There was a lot of talk about us,
speaking!"*



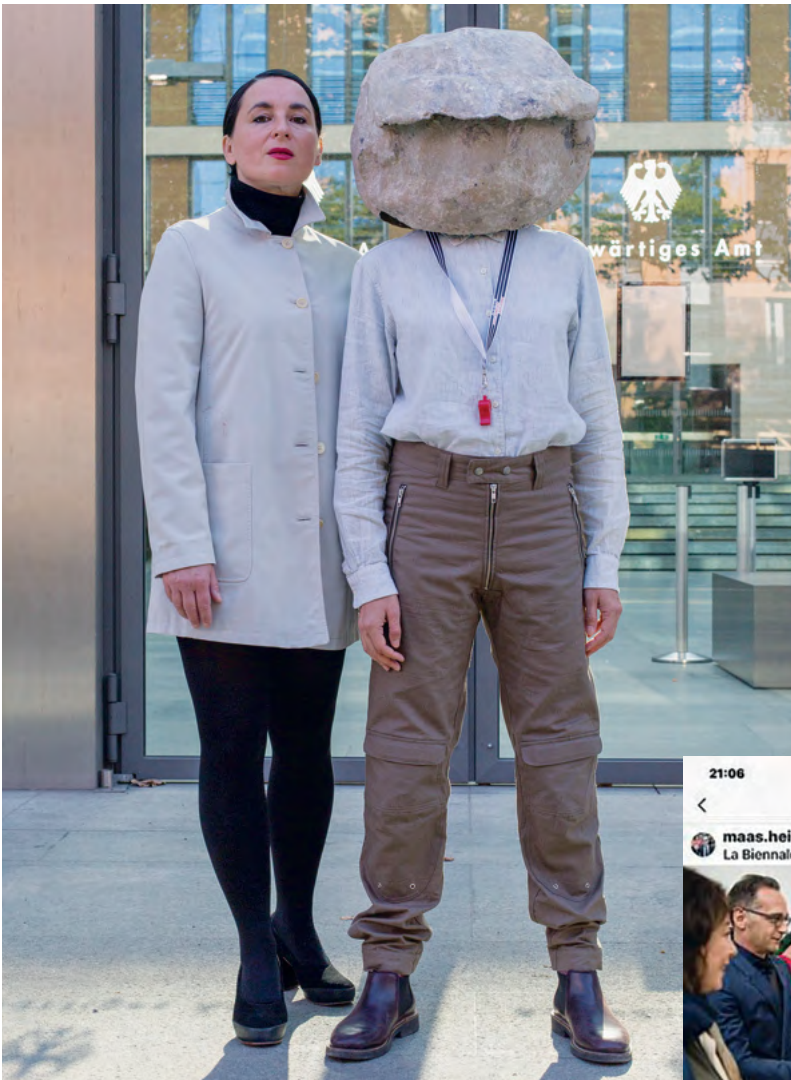
We are here today to defend our position as immigrants in Ellwangen







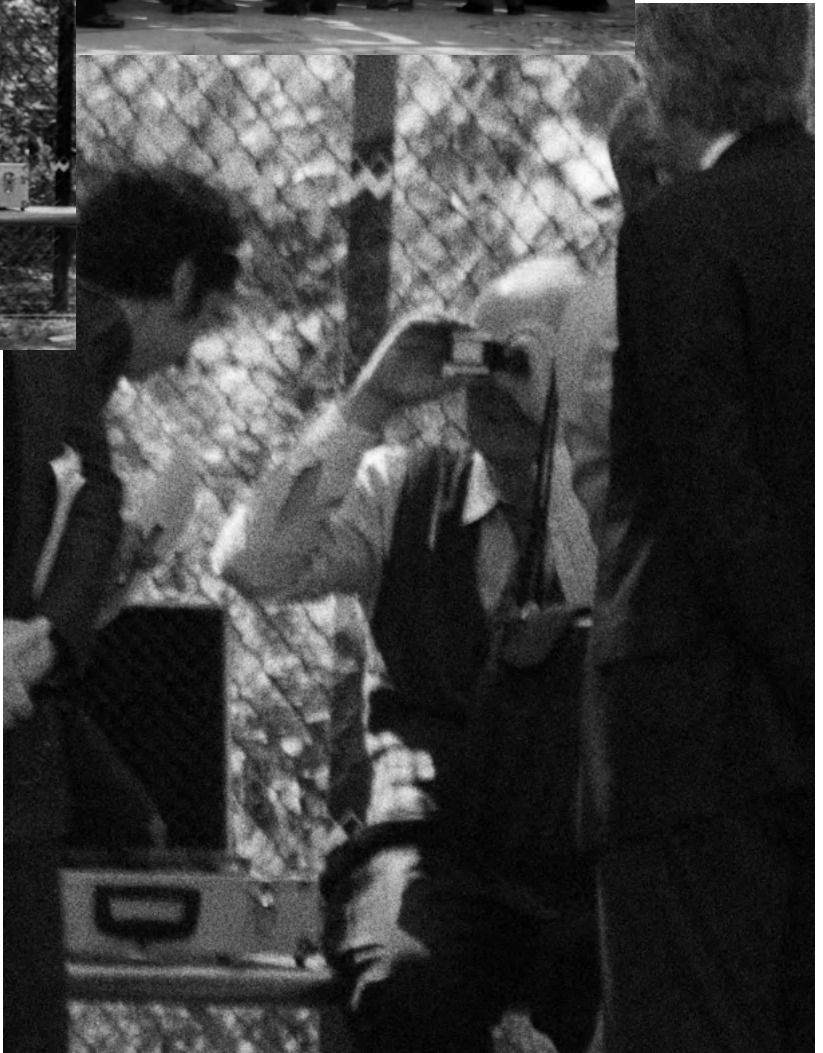




afiy und 995 weiteren

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+ ♥ 🌐









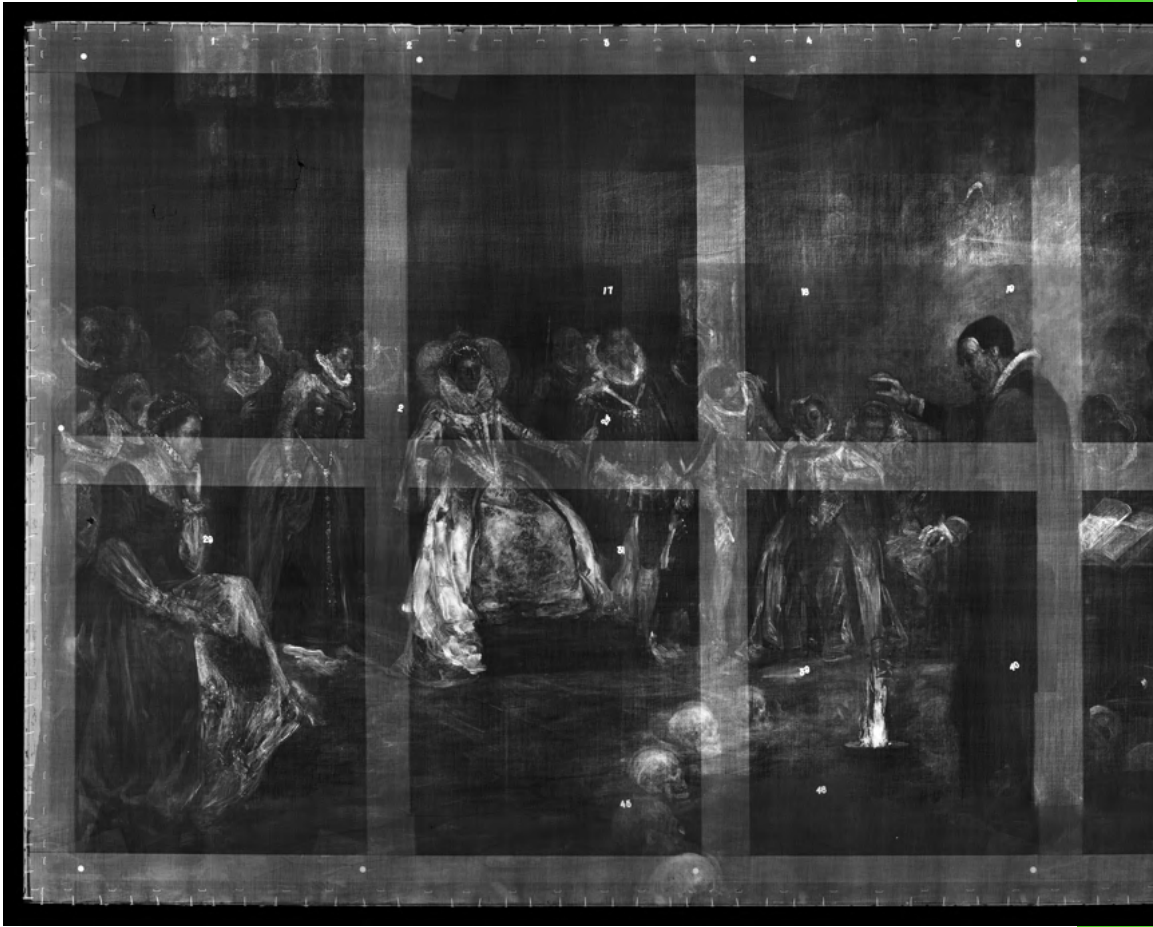














Every breath you take
Every move you make
Every bond you break
Every step you take
Ill be watching you

Every single day
Every word you say
Every game you play
Every night you stay
Ill be watching you

Oh, cant you see
You belong to me
How my poor heart aches
With every step you take

Every move you make
Every vow you break
Every smile you fake
Every claim you stake
Ill be watching you

Since youve gone I been lost without a trace
I dream at night I can only see your face
I look around but its you I cant replace
I feel so cold and I long for your embrace
I keep crying baby, baby, please...

Oh, cant you see
You belong to me
How my poor heart aches
With every breath you take

Every move you make
Every vow you break
Every smile you fake
Every claim you stake
Ill be watching you

Every move you make





Pink Panther Template



Caption this Meme

All Meme Templates

Template ID: 145336670

Format: jpg

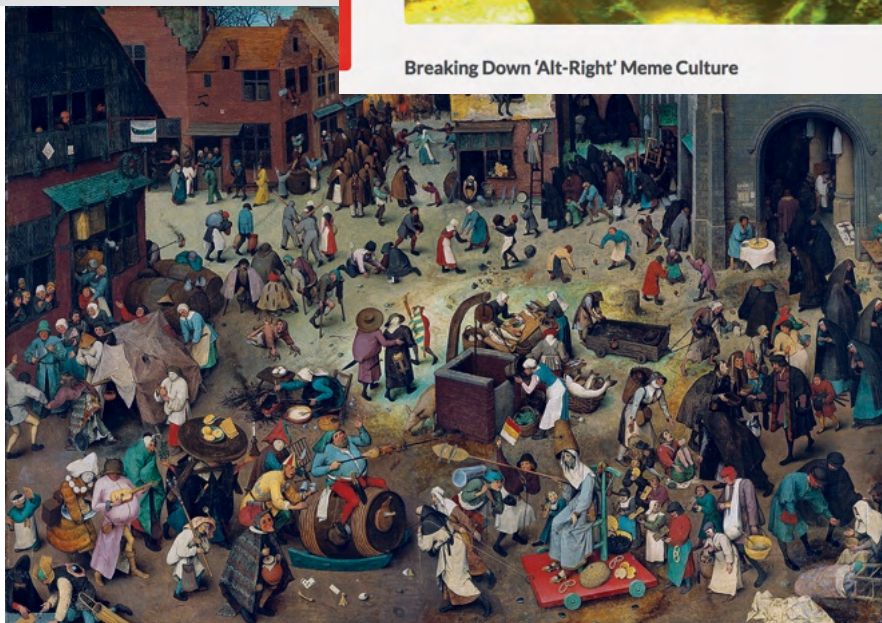
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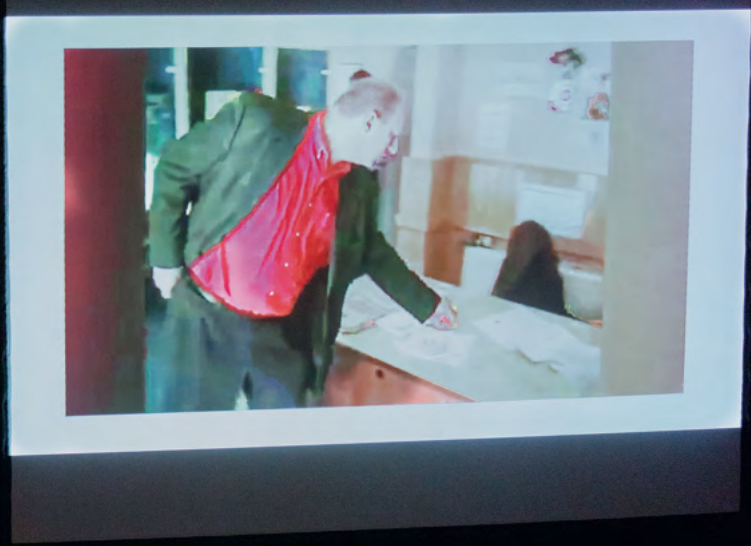
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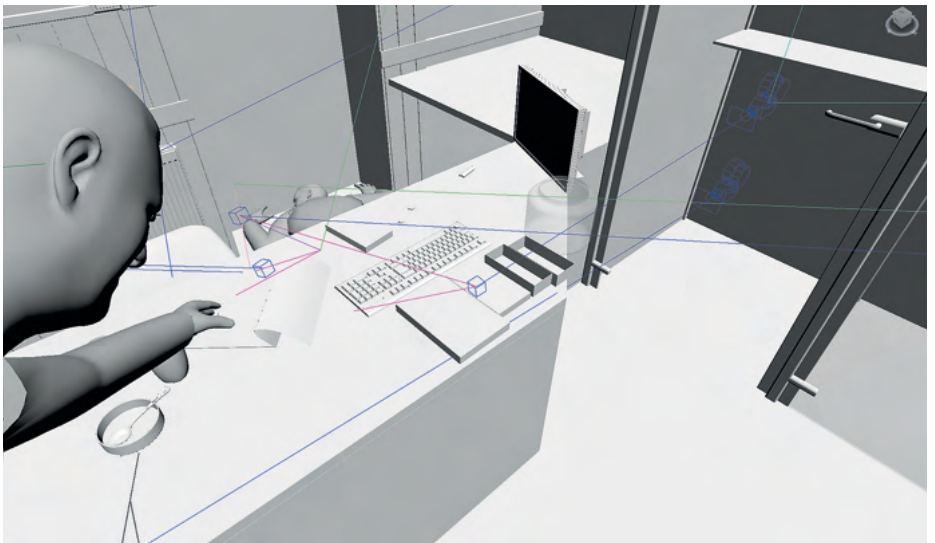
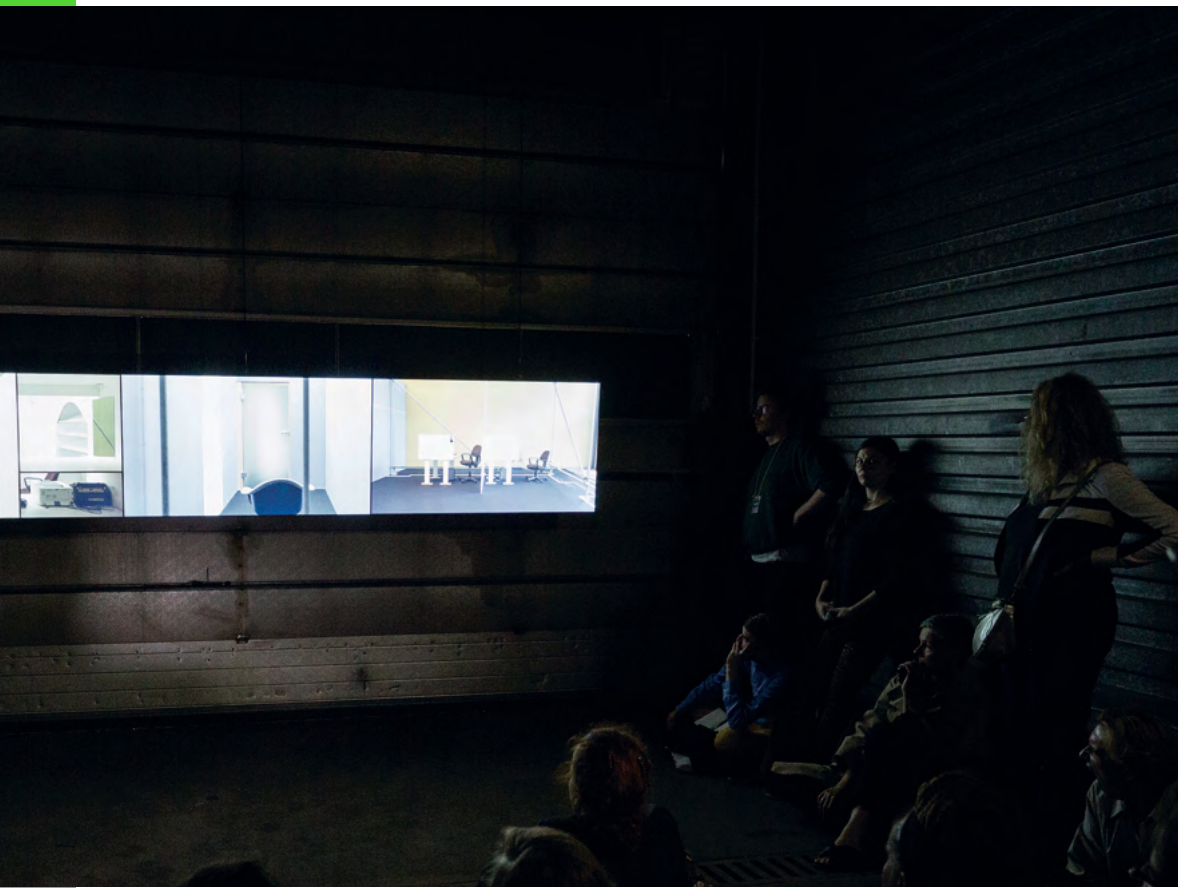
Florian Cramer: Weaponization of the Carnavalesque



Breaking Down 'Alt-Right' Meme Culture















Captions for section two: **DOUBLE VISION**



The engraving shows a scene from the Thirty Years' War. In 1626 General Tilly captures the city of Hann Münden, killing 2,260 inhabitants, after laying siege to it and breaching the city walls with cannon balls. In the image, he stands atop a hill later named after him, stroking his beard, looking out over the city he is about to capture. His gaze and the trajectory of the cannon's projectile seem to meet in the distance. ♦ General Tilly standing on the Tilly Schanze (Tilly Sconce) Source: Public Domain



Natascha Sadr Haghighian, *onco-mickey-catch*, 2016 (sketch), pencil drawing



World leaders at a unity march in Paris on January 11, 2015, after the attack on the French satirical weekly newspaper *Charlie Hebdo* on January 7, 2015. The image of forty world leaders attending a rally of 1.6 million honoring the victims of the attack on the offices of *Charlie Hebdo* triggered a variety of memes and commentaries, including the release of a wide shot shared on French news reports and Twitter that shows a different vantage point than the official one. The wide shot shows that the world leaders were not leading the big unity march but instead standing in a side street, cordoned off from the main march. The front line of leaders was followed by just over a dozen rows of other dignitaries and officials, staging a photo op. ♦ Unnamed author, "Digital Encounters: Deconstructing the Photograph of World Leaders at the Paris March," in: *Photoworks*, photoworks.org.uk/world-leaders-paris-rally-2015 [accessed February 18, 2021]. Photo from news coverage, source not stated



Amid an attempted coup on July 15, 2016, Turkish president Recep Tayyip Erdoğan appears on CNN Türk from an undisclosed location via FaceTime to address the citizen of Turkey. He speaks from an iPhone screen held by news anchor Hande Firat. The ticker below says, "President Erdogan makes a statement" and "Country's Administration completely seized." ♦ Screenshot from CNN Türk (Live)



A snapshot taken at the exhibition *onco-mickey-catch*, by Natascha Sadr Haghighian, at Neuer Berliner Kunstverein in 2016 ♦ Photo: Jumana Manna



Split image of a work by fictional artist Robbie Williams from the project *SOLO SHOW*, 2008, by Natascha Sadr Haghighian and Uwe Schwarzer. The left side depicts the piece in art-production company mixedmedia berlin's workshop; the right side shows the work on a white background. The depicted object is one of five sculptures resembling obstacles from a horse-jumping course. They were produced by mixedmedia berlin for *SOLO SHOW*. ♦ Photo on the right: Rainer Jordan. Photo on the left: mixedmedia berlin. Collage: Natascha Sadr Haghighian



The video installation consists of a double projection angled toward the same spot on a wall. Names and identifications culled from Kathy Acker's novel *Empire of the Senseless* (1988) flash from both projectors, though their overlap renders both sets of words illegible. The text can be read only by standing before one and blocking the other projector's beam. The result implicates the viewer's body two ways. ♦ Natascha Sadr Haghighian, *Empire of the Senseless Part II*, 2006, exhibition view at *No Matter How Bright the Light, the Crossing Occurs at Night*, Natascha Sadr Haghighian, Judith Hopf / Deborah Schamoni, Ines Schaber, curated by Anselm Franke, KW Institute for Contemporary Art, Berlin. Photo: Ines Schaber



Unknown English miniaturist, Diagram of the brain, circa 1300 ♦ Wikipedia, public domain



A taxidermy of what could be the dorsal part of an oversized mouse carries back-to-back monitor screens, each equipped with videoconferencing software and the gaze-correction application

CatchEye ♦ Natascha Sadr Haghighian, *onco-mickey-catch*, 2016, exhibition view at Neuer Berliner Kunstverein. Photo: Natascha Sadr Haghighian



"Luxury Hotel in Dubai," Google search, October 25, 2020 ♦ Screenshot



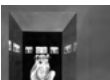
Natascha Sadr Haghighian, *onco-mickey-catch*, 2016 (detail), exhibition view at Neuer Berliner Kunstverein ♦ Photo: Natascha Sadr Haghighian



Natascha Sadr Haghighian, *onco-mickey-catch*, 2016 (sketch), pencil drawing



The so-called Vacanti mouse (1997) was a modified laboratory mouse carrying an ear-shaped cartilage structure on its back. The "ear" was implanted from a mold formed with cow cartilage by researchers at Harvard Medical School. It became iconic in protests against genetic engineering and was often mixed up with the OncoMouse™. The OncoMouse™ (cancer mouse) gained notoriety as the first transgenic, patent-protected mammal. ♦ Yilin Cao, Joseph P. Vacanti, Keith T. Paige, Joseph Upton, and Charles A. Vacanti, "Transplantation of Chondrocytes Utilizing a Polymer-Cell Construct to Produce Tissue-Engineered Cartilage in the Shape of a Human Ear," in: *Plastic and Reconstructive Surgery*, vol. 100, no. 2, August 1997, pp. 297-302. Photo: Wikipedia (fair use)



Lynn M. Randolph, *The Laboratory, or the Passion of OncoMouse*, 1994, back cover of Donna J. Haraway's *Modest_Witness@Second_Millennium. FemaleMan_Meets_OncoMouse: Feminism and Technoscience*, New York: Routledge, 1997. Cover design: Alan Hill



Video still from *catcheye - real eye contact in video chats* (2017). The application CatchEye, developed at ETH Zurich in collaboration with Technion - Israel Institute of Technology and the BeingThere Centre at Singapore National Research Foundation, uses a Kinect sensor device and face-tracker algorithms to synthesize a gaze-corrected 3D model of the face in real time and transfer it onto the original image. The software tries to emulate the eye contact famously missing in videoconferencing, caused by the divergent coordinates of face and camera. ♦ Claudia Kuster, Tiberiu Popa, Jean-Charles Bazin, Craig Gotsman, and Markus Gross, "Gaze Correction for Home Video Conferencing," in: *ACM Transactions on Graphics*, vol. 31, no. 6, 2012, article no. 174, pp. 1-6, graphics.ethz.ch/publications/papers/paperKus12.php



Video still from *catcheye - real eye contact in video chats* (2017)



"3D positions of the tracked facial feature points. Left: without stabilization. The points near depth discontinuities (from the perspective of the camera) can slide arbitrarily along the direction, depicted as black arrows. Right: with the proposed stabilization. Points are stable in 3D even near depth discontinuities." ♦ Illustration from Kuster et al., "Gaze Correction for Home Video Conferencing," www.cs.technion.ac.il/~gotsman/AmendedPub/Claudia/gazecorrection.pdf [accessed February 15, 2021].



Tests with neon tubes and chairs, fabrication of a metal lamp, and other scenes from the workshops of art-production company mixedmedia berlin, producing a work by fictional artist Robbie Williams for the project SOLO SHOW, 2008, by Natascha Sadr Haghghian and Uwe Schwarzer. The project aimed to show and discuss division of labor, authorship, and the myth of the "solo career" in contemporary art. ♦ Photo: mixedmedia berlin



SOLO SHOW, 2008 ♦ Photo: mixedmedia berlin



SOLO SHOW, 2008 ♦ Photo: mixedmedia berlin



SOLO SHOW, 2008, exhibition view at MAMbo - Museo d'Arte Moderna di Bologna ♦ Curator: Andrea Viliani. Image courtesy: MAMbo, photo: Matteo Monti



SOLO SHOW, 2008, exhibition view at MAMbo - Museo d'Arte Moderna di Bologna ♦ Image courtesy: MAMbo, photo: Matteo Monti



SOLO SHOW, 2008 ♦ Photo: mixedmedia berlin



SOLO SHOW, (New York edition), 2013, exhibition installation, e-flux project space, New York ♦ Photo: e-flux



SOLO SHOW, 2008 (detail) ♦ Photo: Rainer Jordan



Split image of a work by fictional artist Robbie Williams from the project SOLO SHOW, 2008, by Natascha Sadr Haghghian and Uwe Schwarzer. The left side depicts the piece in art-production company mixedmedia berlin's workshop; the right side shows the work on a white background. The depicted object is one of five sculptures resembling obstacles from a horse-jumping course. They were produced by mixedmedia berlin for SOLO SHOW. ♦ Photo on the left: Rainer Jordan, photo on the right: mixedmedia berlin, collage: Natascha Sadr Haghghian



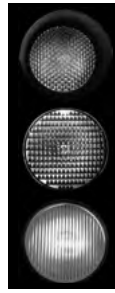
Split image of a work by fictional artist Robbie Williams from the project SOLO SHOW, 2008, by Natascha Sadr Haghghian and Uwe Schwarzer. ♦ Photo on the left: Rainer Jordan, photo on the right: mixedmedia berlin, collage: Natascha Sadr Haghghian



SOLO SHOW (Shanghai edition), 2014, wall text ♦ Exhibition view at the 10th Shanghai Biennale: Social Factory, Power Station of Art, Shanghai. Curator: Anselm Franke. Photo: Natascha Sadr Haghghian



SOLO SHOW (Shanghai edition), 2014, wall text ♦ Exhibition view at the 10th Shanghai Biennale: Social Factory, Power Station of Art, Shanghai. Curator: Anselm Franke. Photo: Natascha Sadr Haghghian



Traffic light - Marbelite 6540 Lens ♦ Photo: Willis Lamm's Traffic Signal Collection, Traffic Signal Lenses, Part Two, www.kbrhorse.net/signals/lenses02.html [accessed October 14, 2020]

Traffic light - Large Bead Lens. "Corning Glass patented a signal lens that contained prismatic beads in 1918. Known as the Type B, this lens was in many respects the forerunner of the modern traffic signal lens." ♦ Info and photo: Willis Lamm's Traffic Signal Collection, Traffic Signal Lenses, Part Two, www.kbrhorse.net/signals/lenses02.html [accessed October 14, 2020]

Traffic light - Holophane Ribbed Lens ♦ Photo: Willis Lamm's Traffic Signal Collection, Traffic Signal Lenses, Part One, www.kbrhorse.net/signals/lenses01.html [accessed October 14, 2020]



The eternal 8,000 kelvin glow of the lighting system of architect Peter Zumthor's Kunsthau Brezengz precludes the ability to tell time. ♦ Kunsthau Brezengz, 2012. Photo: Matthias Weissengruber / Kunsthau Brezengz



"The Color of Your Computer Screen Can Affect Your Sleep" ♦ Post by "Meaghan" in an online forum, September 19, 2010, screenshot



The video installation consists of a double projection angled toward the same spot on a wall. Names and identifications culled from Kathy Acker's novel *Empire of the Senseless* (1988) flash from both projectors, though their overlap renders both sets of words illegible. The text can be read only by standing before one and blocking the other projector's beam. The result implicates the viewer's body two ways ♦ Natascha Sadr Haghghian, *Empire of the Senseless Part II*, 2006, exhibition view at *No Matter How Bright the Light, the Crossing Occurs at Night*, Natascha Sadr Haghghian, Judith Hopf / Deborah Schamoni, Ines Schaber, curated by Anselm Franke, KW Institute for Contemporary Art, Berlin. Photo: Ines Schaber



Why is blue used as a background color to indicate no signal? The blue screen usually indicating no signal on a monitor or projector screen is called the "blue screen of death" (BsoD) in computing, where it indicates a system error or crash. In some systems, red or black replaces blue. ♦ Screenshot of a post by "Albert Xing" on the online forum StackExchange, April 28, 2014, ux.stackexchange.com/questions/56428/why-is-blue-used-as-a-background-color-to-indicate-no-signal



Margaret Thatcher in the company of Ronald Reagan and Mikhail Gorbachev at Madame Tussauds in London ♦ Photo: InSapphoWeTrust, Los Angeles, via Flickr / Wikimedia Commons (CC-BY-SA-2.0)



Lapis lazuli with pyrite, Afghanistan ♦ Image: Hannes Grobe, via Wikimedia Commons (CC-BY-SA-2.5)



A starry blue map delineates the European Union and Schengen Agreement Area ♦ Stock photo from dreamstime.com



Jim's Dog, from Donna Haraway's *When Species Meet*, Minneapolis: University of Minnesota Press, 2008 ♦ Courtesy: James Clifford



An LCD schematic view of a TN liquid-crystal cell shows the ON state with voltage applied ♦ Image: M. Schadt, via Wikimedia Commons (CC BY-SA 3.0)



Optical-illusion creater brasspup demonstrates the process of removing the polarizing filter from an LCD display. ♦ Screenshot from "Amazing Secret Monitor! (How To)," video by YouTube user brasspup, October 29, 2013, www.youtube.com/watch/zL_HAMWQTgA-glasses/29700/



Donald Judd, *Untitled (Stack)*, 1966, exhibition view at Tehran Museum of Contemporary Art ♦ Photo: Maria Lind



Changing the f.lux preferences to Sunset on a MacBook monitor sets the light at 3,400 kelvin. ♦ Photo: Natascha Sadr Haghghighian



Demonstrating a traffic light at the minisymposium *Politics of Shine* at MAK – Museum für angewandte Kunst in Vienna, June 13, 2015. ♦ The symposium was conceptualized by Brian Kuan Wood and

Tom Holert in the context of the Vienna Biennale 2015: *Ideas for Change*. Curator: Maria Lind. Photo: Brian Kuan Wood



Signing an Agreement at Ohlauerstr. 12 – Refugee Strike House: "On the evening of July 2, 2014, refugees and the municipal district authority signed an agreement. The refugees were guaranteed the right to stay in the upper floors of the school building; the lower floors would be guarded by a security firm. Subsequently the district withdrew the eviction order issued earlier and the barriers were removed." ♦ Info and photo: Hermann Bach / Umbruch Bildarchiv, www.umbruch-bildarchiv.de/bildarchiv/ereignis/250614refugee_dachbesetzung.html



On August 6, 2018, twelve agricultural-migrant workers returning from nearby tomato plantations died in a fatal accident on Strada Statale 16, near Lesina, Puglia, when the van transporting them collided with a truck. A few days earlier, four migrant workers died in a similar accident nearby. Agricultural work in Italy is organized by an agricultural mafia called Caporalato, creating slave-labor conditions for migrant (and Italian) workers. ♦ Photo: Jasper Kettner



Police raid in the Donauwörth asylum reception center on March 14, 2018, targeting and brutalizing the Gambian refugee community in retribution for protesting deportation and the racist conditions in the camp. The image was taken from the window of one of the rooms when police equipped with long sticks and unusual gear approached the building. ♦ "Call for Solidarity: Donauwörth Police Attack;

Court Proceedings against Refugees Start on November 7 in Augsburg," cultureofdeportation.org, October 25, 2018, cultureofdeportation.org/2018/10/25/donauwoerth-call/. Photo: anonymous, source: archiv.fuechtlingsrat-bayern.de/proteste-donauwoerth.html



Police raid in Stephansposching Ankercenter in October 2018 in response to a failed deportation attempt in the facility the night before. The brutal raid included SEK (Special Deployment Commando), dogs, and riot police in gear resembling Crusader outfits. ♦

"Call for Solidarity: Stephansposching Raid; Proceedings against a Refugee Continued on September 3, 16, and 26 in Deggendorf," cultureofdeportation.org, cultureofdeportation.org/2019/08/31/stephansposching. Screenshot from Dominik Schweighofer and Corinna Mühlehner, "Video: Großbeinsatz in Außenstelle des Ankerzentrums bei Plattling," in: pnp.de, October 24, 2018, www.pnp.de/lokales/landkreis-deggendorf/plattling/3115739-Polizei-Großbeinsatz-in-Aussenstelle-des-Ankerzentrums-bei-Plattling.html



"You can't evict a movement" ♦ Post by an anonymous user on the website linksunten.indymedia.org, June 28, 2014, linksunten.indymedia.org/de/node/117610/index.html



News coverage of massive police raid at the Ellwangen state reception center that took place on May 3, 2018, involving ca. five hundred police after a failed deportation on April 30 targeting only the African inhabitants. The legally dubious purpose of a "comprehensive identification measure" without warrant was later challenged. Nevertheless, the arrested refugees were prosecuted in court. Different to the many other police raids in refugees' camps that stayed largely invisible to the general public, the Ellwangen raid involved a nationwide media campaign suggesting that the situation in refugee camps was "out of control," stigmatizing the African refugees in particular as "dangerous." ♦ "There Was a Lot of Talk about Us, Now We're Speaking!; Ellwangen Refugees' Press Conference," cultureofdeportation.org, May 9, 2018, cultureofdeportation.org/2018/05/15/ellwangen-press-conference/. Screenshot from "Großbeinsatz in Ellwangen. Razzia in Flüchtlingsheim – Polizei schnappt Mann aus Togo," *B.Z.*, May 3, 2018, www.bz-berlin.de/deutschland/polizei-stuermt-fluechtlingsheim-in-ellwangen



News coverage of police press conference after the Ellwangen raid of May 4, 2018. Using racist language, the police justified the massive police raid as a necessary measure to bring "dangerous" African refugees under control. The press conference was followed by an announcement by the Minister of the Interior introducing a new form of refugee camp, called "Ankercenter," that would allow authorities to house large refugee populations designated for deportation more safely and guarantee successful deportations. "Anker" stands for "Ankunft, Entscheidung, Rückführung" (arrival, decision, return). ♦ Screenshot from "Razzia in Asylunterkunft – 18 Beteiligte hatten hohe Geldbeträge dabei," www.welt.de, May 3, 2018, www.welt.de/politik/deutschland/article176015286/Polizei-ueber-Ellwangen-Razzia-in-Asylunterkunft-18-Beteiligte-hatten-hohe-Geldbeträge-dabei.html



Natascha Sadr Haghghighian, *tumult* (based on the video stream of the police press conference on the police raid in the Ellwangen state reception center, May 8, 2018), digital drawing, 2019 ♦ The drawing was part of Natascha Süder Happelmann's *Ankersentrum (surviving in the ruinous ruin)*, 2019, German Pavilion, Venice Biennale.



Natascha Sadr Haghghighian, *tumult* (based on quotes from *The Philadelphia Negro* [1899], by W. E. B. Du Bois, chap. 3., sect. 8: "Emancipation, 1760–1780"; chap. 13: "The Negro Criminal"), digital drawing, 2019 ♦ The drawing was part of Natascha Süder Happelmann's *Ankersentrum (surviving in the ruinous ruin)*, 2019, German Pavilion, Venice Biennale.



Natascha Sadr Haghghighian, *tumult* (based on the press conference of the inhabitants of the Ellwangen state reception center: "There was a lot of talk about us, now we're speaking!," May 9, 2018), digital drawing, 2019 ♦ The drawing was part of Natascha Süder Happelmann's *Ankersentrum (surviving in the ruinous ruin)*, 2019, German Pavilion, Venice Biennale.



Press conference of the inhabitants of the Ellwangen state reception center: "There was a lot of talk about us, now we're speaking!," May 9, 2018 ♦ Video still from: cultureofdeportation.org, May 9, 2018, cultureofdeportation.org/2018/05/15/ellwangen-press-conference/



Press conference announcing the artistic position Natascha Süder Happelmann for the German Pavilion at the 2019 Venice Biennale at Zeughauskino in Berlin. From left to right: curator Francisca Zolyom, spokesperson Helene Duldung, artistic position Natascha Süder Happelmann, head of public relations Beatrice Di Buduo. ♦ The press conference was part of Natascha Süder Happelmann's *Ankersentrum (surviving in the ruinous ruin)*, 2019, German Pavilion, Venice Biennale. Photo: Stefan Fischer



Audio waveform of a whistle sound, 2018 ♦ The waveform was part of sketched responses to questions from the press as part of Natascha Süder Hap-

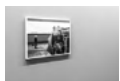
pelmann's *Ankersentrum (surviving in the ruinous ruin)*, 2019, German Pavilion, Venice Biennale. Image: Natascha Sadr Haghighian



Natascha Süder Happelmann and spokesperson Helene Duldung talking to the press at the opening of the German Pavilion at the 2019 Venice Biennale in the Giardini in Venice. ♦ The press conference was part of Natascha Süder Happelmann's *Ankersentrum (surviving in the ruinous ruin)*, 2019, German Pavilion, Venice Biennale. Photo: Jasper Kettner



Natascha Süder Happelmann and spokesperson Helene Duldung addressing visitors at the official opening of the German Pavilion at the 2019 Venice Biennale in the Giardini in Venice. ♦ The public address was part of Natascha Süder Happelmann's *Ankersentrum (surviving in the ruinous ruin)*, 2019, German Pavilion, Venice Biennale. Photo: Jasper Kettner



Natascha Süder Happelmann standing in front of the confiscated rescue ship *Iuventa* in the customs section of Trapani port. ♦ Natascha Sadr Haghighian, *social media series – Location: Porto di Trapani*, 2019. Part of the project *Ankersentrum (surviving in the ruinous ruin)*, 2019. Photo: Jasper Kettner. Exhibition view at *Im Rücken die alte Ordnung (he she they walked)*, 2019, Galerie für Zeitgenössische Kunst Leipzig. Curator: Franciska Zólyom. Photo: Alexandra Ivanciu



Natascha Sadr Haghighian, *social media series (video trilogy)*, 2018–2019 ♦ Part of the project *Ankersentrum (surviving in the ruinous ruin)*, 2019. Exhibition view at *Im Rücken die alte Ordnung (he she they walked)*, 2019, Galerie für Zeitgenössische Kunst Leipzig. Photo: Alexandra Ivanciu



social media series – Location: Strada Statale 16, near Lesina, Puglia ♦ Natascha Sadr Haghighian, 2018. Photo: Jasper Kettner



social media series – Location: Porto di Trapani, Trapani ♦ Natascha Sadr Haghighian, 2019. Photo: Jasper Kettner



social media series – Location: Max-Immelmann-Kaserne, Manching ♦ Natascha Sadr Haghighian, 2018. Photo: Jasper Kettner



Natascha Süder Happelmann and spokesperson Helene Duldung in front of the foreign office, 2018 (official press photo). Helene Duldung is played by actress, singer, director, and producer Susanne Sachsse. ♦ Photo: Jasper Kettner



Instagram post by foreign minister Heiko Maas on the occasion of the opening ceremony at the German Pavilion at the 2019 Venice Biennale, May 10, 2019 ♦ Screenshot from www.instagram.com/p/BxSv0TbIU13/



During the official opening ceremony at the German Pavilion at the 2019 Venice Biennale, protocol requires the artist to give foreign minister Heiko Maas a personal tour through the pavilion. Artistic position Natascha Süder Happelmann and spokesperson Helene Duldung respond to questions by the foreign minister. ♦ Natascha Süder Happelmann, *Ankersentrum (surviving in the ruinous ruin)*, German Pavilion 2019, Venice Biennale. Photo: Jasper Kettner



The jury for the ars viva Prize, including representatives of several German corporations and banks, convened at a bus stop in Berlin Mitte for a studio visit with nominee Natascha Sadr Haghighian, who was

awaiting the group carrying a metal suitcase containing slide viewers. The meeting was secretly recorded using video, photography, and a baby monitor. The meeting turned into a collective performance. ♦ Natascha Sadr Haghighian, *unternehmen:bermuda*, 2000, collective performance, video and publication, ars viva Prize, Berlin. Photo: Stefan Pentz



Natascha Sadr Haghighian, *unternehmen:bermuda*, 2000 (detail) ♦ Photo: Stefan Pentz



Natascha Sadr Haghighian, *unternehmen:bermuda*, 2000 (detail) ♦ Photo: Stefan Pentz



Exhibition view at *Manipulate the World – Connecting Öyvind Fahlström*, 2017, Moderna Museet, Stockholm ♦ Curators: Fredrik Liew with Goldin+Senneby. Natascha Sadr Haghighian, *unternehmen:bermuda*, 2000. Photo: Stefan Stähle / Moderna Museet, Stockholm



The brutal beating of Rodney King by Los Angeles police officers on March 3, 1991. Often referred to as the first recorded eyewitness account of police violence, the video ushered in an era of citizen journalists filming such incidents. It was taken by bystander George Holliday from his balcony, with his new Sony Video8 Handycam recorder. He started recording when he saw four officers beating King excessively with batons. After offering the footage to the LAPD, which declined to accept it, he sent it to a local news station. The incident was covered globally using Holliday's footage. ♦ Screenshot from the original home video by George Holliday, source: ABC News Archives, April 30, 1992, abcnews.go.com/Archives/video/rodney-king-beating-verdict-9922987



ABC news coverage of the verdict in the trial against four police officers accused of beating Rodney King. The defense attorney chose to break George Holliday's video footage into separate still images to argue that the officers had acted in self-defense. The officers were found not guilty, by a jury composed of ten whites, one Latina, and one Asian American. The verdict sparked the 1992 Los Angeles uprising. ♦ Screenshot from ABC News Archives, April 30, 1992, abcnews.go.com/Archives/video/rodney-king-beating-verdict-9922987



Video still of eyewitness footage of police officers beating Rodney King in Los Angeles in 1991, screen-printed on a fleece blanket. The print was part of a larger installation named *Fuel to the Fire* at Tensta konsthall, featuring several prints of crucial eyewitness images, disassembled patio heaters, and newspaper clippings. The installation traces the militarization of police from the emergence of SWAT (Special Weapons and Tactics) police in the 1960s after the Watts rebellion in Los Angeles to the killing of sixty-nine-year-old Lenine Relvas-Martins, shot by a Piketen police squad in his own apartment in Stockholm's segregated suburb Husby. The project also included a newspaper, reading circle, symposium, and several workshops ♦ Natascha Sadr Haghighian, *Fuel to the Fire*, 2016, exhibition view at Tensta konsthall, Stockholm. Curator: Maria Lind. Photo: Natascha Sadr Haghighian



Photograph taken by freelance journalist Björn Löckström at 3 a.m. on May 13, 2013, when Lenine Relvas-Martins's dead body was carried out on a stretcher wrapped in a red blanket adorned with a heart. The sixty-nine-year old retired resident of Stockholm's suburb Husby had been shot by Piketen police in his own apartment. Known as Piketen until 2015, the Swedish Reinforced Regional Task Force (RRTF) is a special operations unit of the Swedish police. The image went viral, together with other images taken by eyewitnesses proving that the police had tried to cover up Lenine's death. The cover-up sparked a significant nationwide uprising, spreading from Husby to the whole of Sweden, in 2013. ♦ Photo: Björn Löckström



Image of Lenine Relvas-Martins's body on a stretcher, screenprinted on a fleece blanket as part of the installation *Fuel to the Fire* at Tensta konsthall, 2016 ♦ Natascha Sadr Haghighian, *Fuel to the Fire*, 2016, exhibition view at Tensta konsthall, Stockholm. Photo: Natascha Sadr Haghighian



Images of police killings of Michael Brown, Eric Garner, Freddie Gray, Tamir Rice, and Mark Duggan (from left to right) screenprinted on fleece blankets ♦ Natascha Sadr Haghighian, *Fuel to the Fire*, 2016, exhibition view at Tensta Konsthall, Stockholm. Photo: Jean-Baptiste Béranger



Patio heaters form a cordon at the entrance to the installation *Fuel to the Fire* at Tensta konsthall. Newspaper clippings of media coverage of the 2013 Husby uprisings are taped to their reflector shields. ♦ Natascha Sadr Haghighian, *Fuel to the Fire*, 2016, exhibition view at Tensta Konsthall, Stockholm. Photo: Jean-Baptiste Béranger



Media coverage of the 2013 Husby uprisings, Af- tonbladet TV, Live: "More Cars Burning in Husby" ♦ Screenshot from Aftonbladet TV (Live)



Swedish Reinforced Regional Task Force (RRTF), known as Piketen until 2015, is a special operations unit of the Swedish police. The image shows a Piketen officer in full gear, with a badge bearing the RRTF insignia, walking in a Swedish suburb. ♦ Screengrab from www.pinterest.at/pin/694821048735722642/



Natascha Sadr Haghighian, *Fuel to the Fire*, 2016 ♦ Exhibition view at Tensta Konsthall, Stockholm. Photo: Jean-Baptiste Béranger



Natascha Sadr Haghighian, *Fuel to the Fire*, 2016 ♦ Exhibition view at Tensta Konsthall, Stockholm. Photo: Jean-Baptiste Béranger



X-ray scan of the painting *John Dee Performing an Experiment before Queen Elizabeth I*, by Henry Gillard Glindoni. The scan reveals a circle of skulls, an accoutrement of practitioners of black magic, surrounding John Dee. Glindoni had included the skulls originally but later decided to paint them over. Together with the medium Edward Kelley, Dee had pursued contact with angelic powers. Kelley is seen in the painting sitting behind Dee; he wears a skullcap because his ears had been cut off, as a punishment for counterfeiting. ♦ Courtesy of Royal College of Physicians / National Gallery, London / Wellcome Collection. Attribution 4.0 International (CC BY 4.0)

skulls originally but later decided to paint them over. Together with the medium Edward Kelley, Dee had pursued contact with angelic powers. Kelley is seen in the painting sitting behind Dee; he wears a skullcap because his ears had been cut off, as a punishment for counterfeiting. ♦ Courtesy of Royal College of Physicians / National Gallery, London / Wellcome Collection. Attribution 4.0 International (CC BY 4.0)



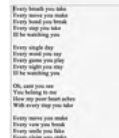
Henry Gillard Glindoni, *John Dee Performing an Experiment before Queen Elizabeth I*, late nineteenth century, oil on canvas, 152 x 244.4 cm. The painting prominently adorns the lobby wall of the Wellcome Trust Building in London. The pharmaceutical company Burroughs Wellcome held the monopoly on AZT, a medical treatment for HIV/AIDS infection that they patented in 1987. They were able to control the price for eighteen years, and made a fortune in the process. ♦ Photo: Natascha Sadr Haghighian

Curator Bartholomew Ryan lends his ear to the work *microscope* at Midway Contemporary Art, Minneapolis, in May 2013. A laboratory instrument is modified, its eyepiece replaced with a headphone loudspeaker, playing a vocoder version of the song "Every Breath You Take," by The Police. It is accompanied by a booklet containing



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a conversation with physicist Evelyn Fox Keller. ♦ Natascha Sadr Haghighian, *microscope*, 2006. Photo: Caylon Hackwith.



Lyrics of the song "Every Breath You Take," by The Police ♦ Screenshot from Google



The right-wing terror suspect Ralf S. covers his face with a filing folder at an appearance in court. On the folder's back a yellow ribbon and the drawing of a rabbit are visible. In July 2000 a pipe bomb

placed at a public-transport entrance of the S-Bahn station Düsseldorf-Wehrhahn injured a group of students enrolled in a German-language course. The suspect was known to patrol the area to keep it clear of foreigners and to have ties to neo-Nazi networks. A secret-service informant with the code name Gonzo worked in his militaria shop. Due to a lack of evidence, S. was not convicted. ♦ Photo: Federico Gambarini/dpa. Source: www.sueddeutsche.de/politik/wehrhahn-prozess-der-zeuge-aus-dem-nichts-14007785



Pieter Bruegel the Elder, *The Blind Leading the Blind*, or *The Parable of the Blind*, 1568, distemper on linen canvas, 86 x 154 cm ♦ Photo: Collection of the National Museum of Capodimonte, Naples, Italy, via Wikimedia Commons (public domain)



Video still from a video by the neo-Nazi terror group NSU (National Socialist Underground) claiming responsibility for several murders and bomb attacks.

The fifteen-minute clip uses a Pink Panther meme in its racist accounts of violence. The image shows the Pink Panther holding a newspaper clipping with a cookie tin and the headline "The Little Bomb." On January 19, 2001, a bomb placed in a cookie tin resembling the one in the video exploded in a small shop owned by an Iranian family on Cologne's Probststeigasse. The nineteen-year-old Maschia M. was seriously injured and remained in a coma for several months. ♦ More information here: www.nsu-watch.info/material/transkript-des-nsu-bekennervideos. Image source: www.bild.de/video/clip/nsu/bekenner-dvd-nsu-30275480.bild.html



Pink Panther meme template ♦ Screenshot from imgflip.com/mememtemplate/160631080 [accessed February 17, 2021]

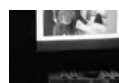


"Weaponization of the Carnavalesque": lecture announcement for researcher Florian Cramer's mapping of the network and history of the white-supremacist subculture of the so-called

alt-right and its deliberately hermetic linguistic and visual codes. Cramer shows how alt-right meme culture employs humor, transgression, and the grotesque as rhetorical devices. ♦ Screenshot from "Florian Cramer: Weaponization of the Carnavalesque; Breaking Down 'Alt-Right' Meme Culture," NICA – Netherlands Institute of Cultural Research, April 20, 2018, www.nica-institute.com/florian-cramer-weaponization-of-the-carnavalesque



Pieter Bruegel the Elder, *The Fight between Carnival and Lent*, 1559, oil on panel, 118 cm x 164 cm ♦ Photo: Collection of the Kunsthistorisches Museum, Vienna, via Wikimedia Commons (public domain)



Presentation by Forensic Architecture at the People's Tribunal "Unraveling the NSU-Complex" in May 2017 in Cologne. Forensic Architecture presented the first results from their investigation into the presence of secret-service agent Andreas Temme at the crime scene of the murder of Halit

Yozgat, the ninth of ten victims of a racist murder series carried out by the neo-Nazi organization NSU (National Socialist Underground) between 2000 and 2011. ♦ More information on the People's Tribunal "Unraveling the NSU-Complex" here: www.nsu-tribunal.de/en. Photo: Jasper Kettner



A counterinvestigation of the murder of Halit Yozgat. The triple video installation investigates what secret-service agent Andreas Temme saw, heard, and smelled in the Internet café while Halit Yozgat was murdered. The investigation, commissioned by the People's Tribunal "Unraveling the NSU-Complex" was shown as part of the presentation of the Society of Friends of Halit at documenta 14, Neue Neue Galerie in 2017, only meters away from both the site where Halit Yozgat was murdered and Andreas Temme's workplace. The presentation was seen by thousands of people. ♦ Forensic Architecture, *77sqm_9:26min*, 2017, exhibition view at Neue neue Galerie (Neue Hauptpost), documenta 14. See full investigation here: forensic-architecture.org/investigation/the-murder-of-halit-yozgat. Photo: Fred Dott



3D rendering as part of a digital simulation of secret-service agent Andreas Temme's field of view while Halit Yozgat lies fatally wounded behind the counter of an Internet café on April 6, 2006. Forensic Architecture carried out an investigation commissioned by the People's Tribunal "Unraveling the NSU-Complex" in 2016, into the presence of Andreas Temme at the time of the murder, attributed to the neo-Nazi terror group NSU (National Socialist Underground). Forensic Architecture's investigation was presented as part of the Society of Friends of Halit at documenta 14. ♦ Forensic Architecture, *Investigation into the murder of Halit Yozgat*, 2017. Image: Forensic Architecture



The diorama *Der Schutz der Sicherheit* (The protection of security) was inspired by some of the characters appearing as part of the NSU-Complex, a term used to describe the collusion of neo-Nazi organizations, informants, and government officials. The scene is part of a larger diorama: Three mannequins covered with blankets bearing the initials VS (for "Verfassungsschutz"), for the German domestic-intelligence agency, pass elements for making bombs to each other, while a separate figure on the right tucks his wallet back into his pocket. The German domestic-intelligence agency, employs an unknown number of neo-Nazis as informants, a fact that has not only hindered investigations into neo-Nazi terror but has in several cases also actively enabled the crimes. ♦ Natascha Sadr Haghghian, *Der Schutz der Sicherheit* (The protection of security), 2018, exhibition view at *Von fremden Ländern in eigenen Städten*, Worringer Platz 5, Düsseldorf. Curator: Markus Ambach. Photo: Natascha Sadr Haghghian



Pipe bomb presented as evidence ♦ Found footage, source unknown



A cookie tin is changing hands, part of the diorama *Der Schutz der Sicherheit* (The protection of security). A similar cookie tin was used by the NSU to place a bomb on Cologne's Probsteigasse. The figures passing the box are covered with blankets carrying the initials VS (for "Verfassungsschutz"). ♦ Natascha Sadr Haghghian, *Der Schutz der Sicherheit* (The protection of security), 2018, exhibition view at *Von fremden Ländern in eigenen Städten*, Worringer Platz 5, Düsseldorf. Photo: Markus Ambach



The demonstration "Kein 10. Opfer!" (No tenth victim!) in Kassel on May 6, 2006, took place one month after Halit Yozgat was killed in his Internet café by the NSU. He was the ninth victim of a murder series that started in 2000. A march of four thousand people stayed largely invisible and unheard as the media and the police investigations interrogated and surveilled the families of the victims. While the police looked for the suspects in the families

and communities of the victims, the communities themselves already knew that these must have been racist murders. The structural and institutional racism that rendered the knowledge of the communities invisible was only acknowledged when, in 2011, five and a half years later, the NSU became known as the perpetrators of the murders. Only then was a public debate initiated, asking why police had not pursued leads in that direction. Initiatives were formed in the cities where the NSU had attacked; eventually the People's Tribunal "Unraveling the NSU-Complex" was organized, in 2017. ♦ Photo: Sefa Defterli



Memorial demonstration "Kein nächstes Opfer! NSU-Komplex auflösen!" (No next victim! Unravel the NSU-complex!) on April 6, 2017, in Kassel, for the eleventh anniversary of Halit Yozgat's death. Yozgat's family, together with the Initiative 6 April, organizes a memorial every year demanding the unraveling of the NSU-Complex and the renaming of Holländische Strasse, where Halit was killed, as Halit-Strasse. ♦ Photo: Protestfotografie.Frankfurt

troubled witness



where is the tiger?









00:03-23-14

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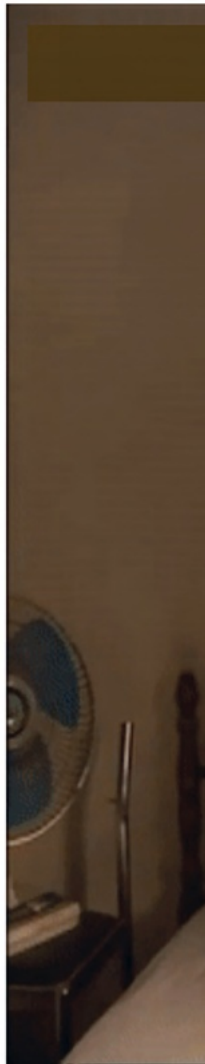














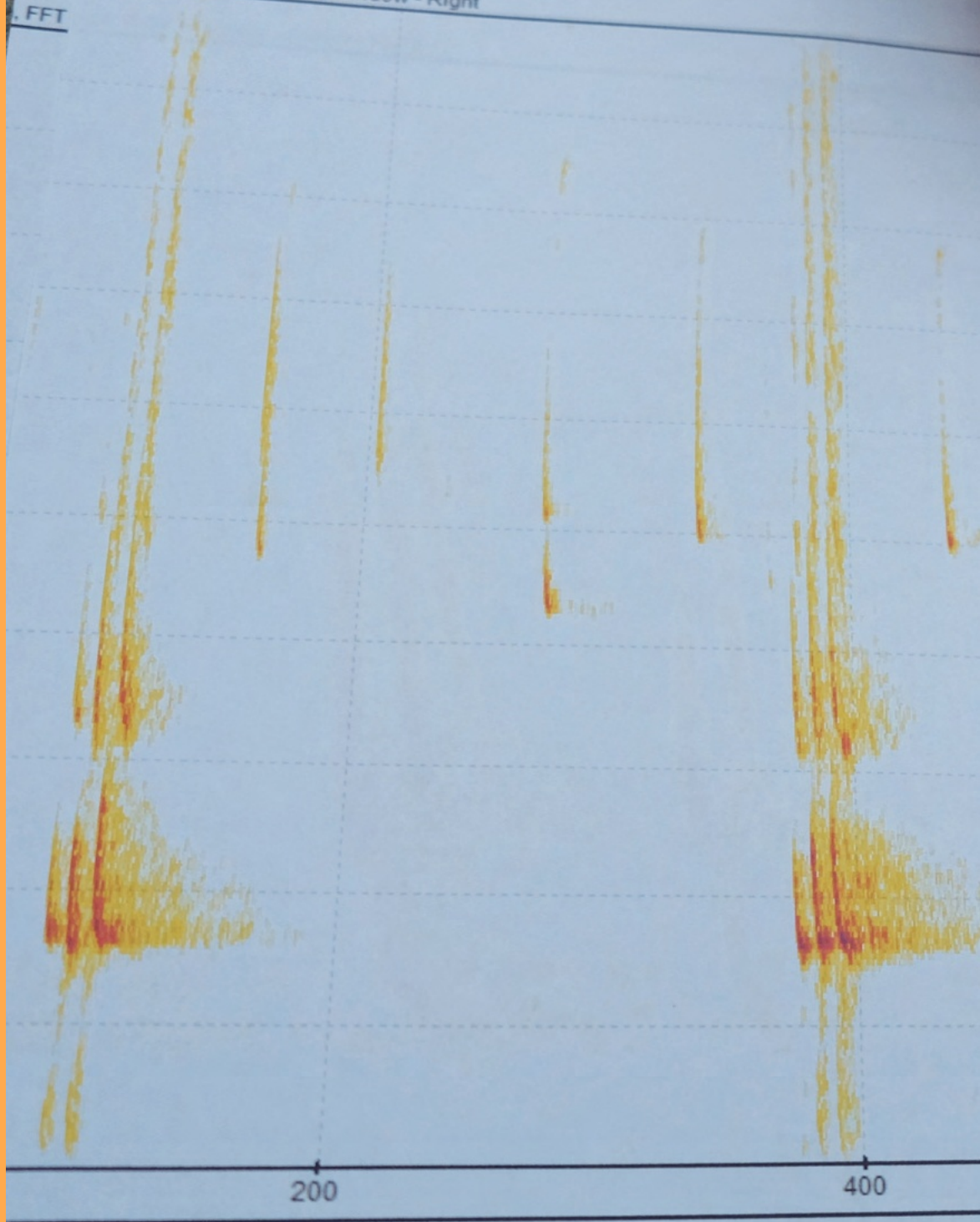
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the microscope

NATASCHA SADR HAGHIGHIAN > I've been looking at representational structures in various contexts, especially image production, and I noticed that they play a large role in science. This is how I came across your books. I found your analysis of the conditions of image production in science—and I would probably even say, of the production of reality, which is a question I might return to later on—very profound and detailed. I'm referring particularly to three of your texts. The first is "The Biological Gaze," in the book *FutureNatural*, where you describe how an object of study is prepared for observation, how some objects are not necessarily visible, that one must render them visible. You take the microscope as an example, and you describe how it works.¹ Could you explain what you mean when you talk about the biological gaze and what your motivations for analyzing that process have been?

< **EVELYN FOX KELLER** What were the other texts?

NSH > In the second one, in *Making Sense of Life*, you are talking about a visual culture in molecular biology.² The third one that I want to refer to, later on, is in *Refiguring Life: Metaphors of Twentieth-Century Biology*.³ In this text you talk about Austin's speech act as a way of introducing a reality into science.⁴

< **EFK** Actually, I wouldn't pretend to do as much as you credit me with. I don't try to give an account of how visual representations are produced or how they constitute reality. Rather, each time I have—and I have a number of times—returned to one or another aspect of the role of vision in science, and each time with a rather particular concern. “The Biological Gaze” was an inquiry into the innocence of looking, and the motivation for that paper was prompted by Rosalind Franklin's remark in the film *The Race for the Double Helix* (1987), “I just want to look. I don't want to touch.”⁵ This remark expresses a certain romanticized yet, I think, fundamentally fallacious view of science, and echoes in many different ways. One echo is the division between pure and applied science. Pure science is just looking, just thinking, just understanding. It's just representing, if you will, to make a reference to Ian Hacking's book *Representing and Intervening*.⁶ Pure science is good; applied science is what's dangerous. It is intervening, it is technology, et cetera. I had myself accepted—bought into, if you will, an innocence, or a romanticism about basic science. I was in fact trained in it. I was a theoretical physicist, and theoretical physics is the purest of the pure, right? We just think; we don't do. I also think that this innocence infected to some degree my biography of Barbara McClintock. I wanted to reexamine the relation between looking and touching, because I knew that this dichotomy was not going to hold. It wasn't so simple. So I focused on the fact that in biology—I argued more generally as well—that to look is in some sense already to touch, already to interact with, to disturb the object that one is observing. That the gaze is penetrating, and it's not just in the sense—in the almost trivial sense, I might say—of quantum mechanics and the uncertainty principle, but rather more deeply. Take the microscope: the question is, How do you know what you see is real?⁷ That's one aspect, that

the reality of what one sees is established by being able to touch it, I argued (though hardly originally; other people claimed this too). If you can touch it, it's real. It's similar to the proverbial notion of stubbing your toe against the rock. The touching makes it real, and this also is true in the history of microscopy, where one sees the intimate relationship between looking and touching or looking and cutting.⁸ As we see, there are many echoes of this entanglement. Isn't it interesting that we use the word *shoot* both for guns and for cameras? That captures something of what I am getting at. However, more generally, there is another aspect of the entanglement: that is, that we represent in order to intervene. We look in order to act, touch, interact with. Touching doesn't have to be aggressive. The gaze doesn't have to be phallic. I don't want to buy into another kind of romanticism or simplistic construction of the world. Neither looking nor touching is either good or bad. The gaze is multivalent, as is the touch. In another paper I wrote a long time ago, called "The Mind's Eye," I was concerned precisely with the erasure from the history of Western thought of the affiliative dimension of looking, of vision.⁹ Vision is not just to distance; it is also to make contact, to touch in an erotic sense, to lock eyes, to make a connection. So you can't use the division of looking and touching as an attempt to make vision pure and touching impure. Nothing is pure, and nothing is totally impure. Touching is essential. With regard to "The Biological Gaze," the title was not meant to embrace or buy into the early, simplistic arguments about the penetrating gaze being phallic, et cetera. The gaze is multivalent. Gazes can be loving; gazes can be hostile; gazes can be of all kinds. So, when I say we look in order to touch, in order to interact with, this is not a criticism. It's just to destabilize those simplistic divisions that we tend to buy into. That was the purpose of that article.

NSH > You describe, however, that the process of rendering something visible by touching it also produces artifacts, or that the danger is that one mistakes the representation for the object.¹⁰

< **EFK** Correct. That's the history of microscopy, and that's the question: How do we know that what we see is the way it is, that what we see is really there? The answer is that we don't. As scientists we need to persuade ourselves that what we're looking at is real, but vision is never veridical. We know this physiologically in terms of the neurophysiology of vision; but still, one of the values of vision for science is to produce veridicality.

NSH > What's veridicality?

< **EFK** The truth, the way it really is, some aspect of the way it really is. We always need to try and confirm that what we see is real; and that was part of my argument—that touching was a way of confirming reality.

NSH > Would you agree that reality could be seen as a relationship between the physical world or physical events in the world and their abstract representation, that this is what produces reality?

< **EFK** This is what produces our understanding, our conception of reality (what is out there); and our means of interacting with it and representing it are our mode of access. All we have is our perception of reality. We never have anything more than our representations, our experience of the phenomenon. That's all we ever have. Our experience of the phenomenon is always mediated; e.g., it's mediated for scientists by their instruments. Also, experience is rarely firsthand. There are many distinctions to be made. For example, in *Making Sense of Life*, I write about the scanning electron

microscope as a wonderful development in biology, because it gives us visual access to the living cell.¹¹ It does not require us to kill a cell in order to see it, and that's really wonderful and very important for biology. But first of all, there is the scientist who looks through the scanning microscope. What does he see? He sees an image that is a constructed image rather than seeing the thing itself; he sees an image that has been manipulated. The thing itself has been altered to make it visible, and the visual recording of what has been seen is computationally processed. So, the scientist who looks through the scanning microscope has an experience, his experience of the cell; but between his experience and the cell there are layers and layers of processing, of intervention of various kinds. Then there is the audience or reader to whom the scientist who has looked through the scanning microscope reports his experience. What he shows is a representation, maybe a photographic image of what he saw. There are many levels of representation involved, and there are many layers or levels of experience; e.g., the experience of looking at a photograph that somebody has taken or at a movie that somebody has filmed is very compelling. Or, you might be looking at a computationally processed virtual reality, at a representation of a simulation.¹² This is one of my favorite examples. What do you see when you look at the representation of a simulation, especially in artificial life? It's just wonderful. You look, you see insects, you see animals, biological entities. Ah, you see them emerge, you see them evolve. Isn't that amazing? Well, what are you looking at? You're looking at a representation that is a representation of what? In the case of artificial life, it is the representation of bits of code, computer code. Nobody has photographed living insects or filmed how living entities emerged. No, they have simply transformed bits of coding, sequences, bits of information into insects. I write a lot about how biologists

learn from each other by way of their displays and the increasing brilliance and persuasiveness of the displays, aspects that are so important for the communication of knowledge—making it look real, making it look as if one is sitting in the audience. I'm seeing life emerge. I'm seeing the organism develop. I envision that scientist looking into the microscope, which already is a kind of metaphor for the magnifying glass; but a microscope is not a magnifying glass, and even a magnifying glass transforms. There are so many layers and levels of transformation involved. There are so many distinctions to be made, and they all involve levels and layers of processing, mediation, and representation.

NSH > There are two things that I see as connected: at some point you describe something you call a “dead” metaphor, and I was thinking that this “dead” state might also apply to what we call representation. At one point you say that seeing is an equivalent for knowing, or a metaphor, an analogy, and that this is an abstract relationship in a sense that comes from a certain Western tradition of knowledge production—the connection between seeing and knowing, and to see that it's not the same, that it's just a reference. It has been used so much that the transfer became unrecognizable.

< EFK You're absolutely right. It is like a dead metaphor, and in fact it's very interesting that we're so deeply imbued with that association between seeing and knowing,¹³ or more specifically, with the collapse between seeing with the mind's eye and seeing with the retina—seeing with what we might call the body's eye—that even very assiduous, very conscientious scholars fail to make the distinction between seeing and representing. Now, as I said, it's not a simple distinction; but there is certainly a distinction between a mental image and a visual image; or there are different ways of understanding

and seeing. It's a very complex relationship, so one of the things I argued in *Making Sense of Life* was that yes, it is true that we come from a tradition in which to know is to see with the mind's eye. We talk about understanding as seeing, as in, "Oh, now I see." Enlightenment is about understanding. It's not about literally lighting up the world, the dark, the unknown. It's figuratively lighting up the dark, the unknown; and the way we figuratively lighten up the dark, the unknown, is through science. That's what science does. Now which science? Well, in physical science mathematics has been a crucial tool for lighting the unknown, for casting light on the unknown; and in fact for physical sciences it's mathematics that is the mind's eye, the true eye. You can't trust what you see on your retina. You can't trust what you see with the body's eye. At best it can provide evidence for what's really there. What's really there is not what you see with the retina but what you can access only through the mind's eye with, for example, mathematics. Historically, the life sciences have a different tradition. I raise the question: Is it possible to configure seeing and knowing differently? Look at the word *evidence*, *evidential*. This already has a double meaning. It is made explicit, available, visually available, but for the sake of something else. So, I ask the question: When is seeing with the body's eye already an end in itself, an answer to the question? When is it that you will say, "Oh, I see!," because you've seen with the eye? (And at that point it's an end to the question; it's an answer.) "Oh, I see. I saw what happened." It's not evidence for something else. It is itself an explanation. When is visual evidence itself an explanation, an account that is satisfying in itself? I argue that in the life sciences, for many people, it was *only* what you could see with the body's eye that was to be trusted, that the intellectual arguments and the conceptual arguments were not as reliable. I suggested that the microscope

was to the life sciences what the calculus was to the physical sciences, that the calculus was the metaphorical microscope, the tool for knowing, or the tool that enabled the mind's eye to see. The microscope was the tool that enabled the body's eye to see, but I think I strayed from your question ...

NSH > No, not at all. But could you explain again what a dead metaphor is?

< EFK In general, a dead metaphor is a metaphor, the metaphorical status of which we are no longer conscious.¹⁴ If you refer to the legs of a table, you're not conscious that "legs" is a metaphor. It's now literally the legs of the table, and you don't see any metaphor there. Does its metaphorical origin still carry force? Well, I argue that it does, and often it carries greater force simply by virtue of being unconscious. To say, "Oh I see," to speak of the Enlightenment, to speak of illumination, or to say, "Let's bring clarity to this problem"—these are all metaphors. They are all relying on the fundamental metaphor of the mind's eye, but it's a dead metaphor. This is what we now mean by clarity, Enlightenment, et cetera. So, is the metaphor still working? I think it is working, and I think it works very powerfully. For example, it is working through the difficulty we have in distinguishing between what you see in the microscope and what you see in the representation. We also have difficulty for technical reasons, because the modes of seeing have been so confounded, particularly by computer graphics. It's difficult in the first place to make the distinction because of the persistence of the metaphor. When we say, "Oh, I see," it's almost as if we've seen with the eye, or maybe for the biologist when you present a mathematical argument it's the converse. He might say, "Oh, I see," only when you translate the mathematical argument into a visual representation.

NSH > The relationship between the mind's eye and the retina is quite tricky. It seems to produce some kind of blind spot. One doesn't work without the other; but on the other hand, the way we perceive with the retina is so very dependent on the mind's eye that one could say it almost makes the retina blind.

< **EFK** Well, in fact we don't see with the retina. We see with the mind. We see those words, and we think we see them. However, they are physiologically entangled. There is no seeing without the mind's eye at work, and is there seeing with the mind's eye that does not depend on seeing with the literal eye? I suppose there must be.

NSH > Our mind's eye is very much shaped, though, by a certain history of seeing or of understanding, of knowing.

< **EFK** The mind's eye is our history of knowing, but it is, I think, shaped also by a history of visual representations. Absolutely.

NSH > Do you also critique this tradition by analyzing visual representation in science?

< **EFK** I have not focused on the extremely complex tradition of visual representations in science. It's now a big and very interesting field that examines the way in which visual representations shape our understanding. It's very important, but I'm just not in the position to advance it.

NSH > In *Making Sense of Life*, in the chapter "The Visual Culture of Molecular Embryology," you wouldn't say that that's about...

< **EFK** I know it's primarily about seeing with the body's eye, about the importance of that, and I say that in the beginning of the chapter. I am not writing about the role of representations in the construction

of knowledge. I want to look at the role of the embodied experience of seeing.

NSH > In its extensions through technology.

< EFK Yes.

NSH > It seems, however, so difficult for me to even think without talking about the theories, the preconceptions, and all these things that work behind this apparatus.

< EFK Of course it does, but I still don't want to erase the distinction between representing and seeing, however confounded the seeing is.

NSH > So, would you say that it is about trying to reactivate a dead metaphor in order to be able to speak about it?

< EFK Yes, that's exactly it. By doing so I'm asking different kinds of questions than the people who ask how representations have shaped the construction of scientific knowledge. I have to keep these questions separate in order to see what they are and how they are different.

NSH > I do understand what you mean, although you keep on referring to systems of representation, for instance, when you say that our perception of real time assimilates with our perception of reel time.¹⁵

< EFK Yes, I'm not pretending that seeing with the retina is pure. It's not, even though I am interested in how the representation shapes the mind's eye by way of the illusion of seeing, by the illusion of a visual experience. You thought you saw. If you walk down the street and you see a guy come up to somebody with a gun to steal his wallet, you are a witness. You saw it happening, but really you only think you saw. There is always that

problem, but it's nonetheless compelling that you saw it. To the viewer or to the observer it's very compelling. You could be wrong. The microscope can lie. There are visual illusions, but that doesn't diminish the force of seeing. I know what I saw. You can't tell me otherwise. I am trying to focus on the subjective power of seeing, or of thinking one is seeing and how that shapes our understanding, especially in biology. We sit there and we look through the scanning microscope or we look on the screen. What are we looking at? I saw that happening! But you only saw it on the screen. Did you see it in real life? Do you always know?

NSH > Is there a consciousness about that in science?

< EFK No.

NSH > Not so much?

< EFK Well, yes and no.

NSH > That's also why you bring it up as a point of discussion.

< EFK Yes, it's a constant leading back and forth.

NSH > At one point you differentiate between seeing and watching.

< EFK Now that's really important. Historically, or more specifically until the twentieth century, the difference between a representation and seeing something was, first and foremost, the same as the difference between seeing and watching. That is to say, representations were pictures. They were static images frozen in time; whereas, actually seeing something happening was watching, seeing in time. Nobody would mistake a frozen image, a static image, for a real event, right?

One recognizes this as a representation, because it's not moving. With the advent of moving pictures, however, it became more difficult, and as we develop the technologies of representation, the distinction becomes ever harder to access. Even into the twentieth century and toward the latter part of the twentieth century after we had movies, movies were still sequences of stills.

NSH > Sequences of frozen images.

< EFK As a matter of fact, you could not watch the living cell, because you had to kill it in order to get an image. All you could do is construct the illusion of seeing the living cell by pasting one frozen image on top of another; however, if you can get visual access to the interior of the living cell without killing it, then you can watch. That's the idea. It is, indeed, true that you still have a series of images, but they are much, much faster. You say, what's the difference between the scanning microscope and a movie camera? Well, it's speed. You can see things happening very fast that the frozen images, however sophisticated the stacking of the frozen images is, miss. You catch things on the fly. The difference between watching and seeing is quantitative, but also qualitative. When we watch, we see events happening. We don't in fact see things happening, because our temporal resolution is not perfect. We can't see things happening if they happen too fast. Our eyes are also limited. It almost becomes a question of quantitative difference. Still, there is the distinction between a living cell and a dead cell, a distinction that is qualitative rather than merely quantitative. We can now capture aspects of that cell, because we can get in there so fast. We have such exquisite temporal resolution.

NSH > Something comes into my mind when you describe how a cell had to be killed before it could become visible

or be seen. In *The Birth of the Clinic*,¹⁶ Foucault describes the medical gaze and this tradition of dissection, of cutting up bodies in order to understand where the organs are located and how the body works.¹⁷ It was a matter of trust that one could look at a dead body and understand the living body, and I wonder where that trust comes from. We seem to have a tradition of understanding in which that abstraction seems possible. This tradition is also quite a strong one, to take something inanimate and ...

< **EFK** That's absolutely right. And I think it has precisely to do with our embeddedness in, with the depth of our commitment to, the structural view, to structuralism, that the world is made of structures, of things, of entities. If you have to kill something to see what it is made of, *tant pis!* The important thing is that you get at the structures of things, and this, of course, shapes not only what we see but what we think. I also pointed out that, according to this view, the stable structures are what are important, and if you have to kill this cell in order to see it, you will only see the most stable structures. If you look at a dead cell, what do you see? Chromosomes. They are all that's left, practically. Well, not all that's left, but they stand out. Ah, they must be important! The processes, the dynamics, the things that happen very fast have disappeared, and they have also disappeared from our biology, from our science. They didn't just disappear from our vision; they disappeared from our science. So, I do think that your observation is a profound one, and it's very deep within our cultural history and in our language. I gave a talk one and a half years ago in Beijing, at the International History of Science Congress, about this. I was asking the question: Are there languages that are better suited to the apprehension of process and the dynamical world? There have been arguments that East Asian languages are better suited to dynamical and relational experiences.

NSH > Because there is a different tradition.

< EFK It's a different linguistic tradition. You can't separate the linguistic tradition from the intellectual tradition; they go hand in hand. I'm not a Whorfian; i.e., I'm not saying that we only think what we can say. We say also what we can think, but there are different traditions. I think it's very, very deep. I also think that our language and what we are taught to think shapes our brains just as our brains shape our thinking.

NSH > It seems so obvious that there are certain limitations to this type of practice, limitations that come from a certain Western tradition upon which our understanding of science is based, and this has so much to do with the tradition of the Enlightenment. I was wondering: If it's so obvious that there are these limitations and that there might be something beyond—or it seems to be in need of an extension or some sort of...

< EFK Yes, but how do we talk about what we can't talk about? How do we think about what we can't talk about?

NSH > I want to read this quote to you. It's by Thomas Keenan and it says, "One can, and must, oppose as militantly as possible all new obscurantisms, fight for the extension and radicalization of all enlightenments (*Aufklärung*, *glasnost*, and *Öffentlichkeit*) and still insist: no matter how bright the light, the crossing occurs at night."¹⁸ I would like to ask you whether or not you could imagine some sort of new Enlightenment, and what that should consist of (if you agree that the one we have right now is not sufficient—I'm not sure). Do you see shifts of paradigms or of certain elements of the discussion that are trying to develop a new Enlightenment?

< **EFK** Well, it is in the nature of the scientific endeavor to always try to find new ways of shedding light on things that cross in the night. To extend the Enlightenment is the mandate of science. Are there changes in paradigms? Always, just as there are changes in technology. There are always changes in paradigms. I just talked to you before about the shift to a more dynamic relational focus. That's happening in biology, and it is happening in part because of the technological transformation. That is a kind of shift of paradigm. The problem for scientists is, as it also is for Thomas Keenan, just like that of the microscope: How do you know what you're seeing is really there? How do you know that your extension of the Enlightenment is not a form of obscurantism? That's always the problem. Keenan hasn't solved it, and scientists haven't solved it, but they try. We all try. But you can't just by fiat say, "Okay, I am just going to think about the things that pass in the night." How do you know that what you think you are "seeing" is there?

- 1 Evelyn Fox Keller, "The Biological Gaze," in: *FutureNatural: Nature, Science, Culture*, ed. George Robertson et al., New York: Routledge, 1996, pp. 107, 121.
- 2 Evelyn Fox Keller, "The Visual Culture of Molecular Embryology," in: *Making Sense of Life: Explaining Biological Development with Models, Metaphors, and Machines*, Cambridge/Mass.: Harvard University Press, 2002, pp. 205–233.
- 3 Evelyn Fox Keller, *Refiguring Life: Metaphors of Twentieth-Century Biology*, New York: Columbia University Press, 1995.
- 4 See J. L. Austin, *How to Do Things with Words*, Cambridge/Mass.: Harvard University Press, 1962. Austin's theory of the speech act says that language not only functions descriptively but can also execute an act. In other words: in saying something, we do something. Different from a descriptive sentence, a speech act is not checked for its verity, but instead has to be judged by its "felicity," its success, and its consequences. Therefore, it is conditional upon common societal ideas and agreements. Keller claims that scientific language also has to be judged by its felicity, not only by its verity. Scientific reality, therefore, is also produced with the help of speech acts.
- 5 See Evelyn Fox Keller, "The Biological Gaze," pp. 107–108. *The Race for the Double Helix*, BBC Television, 1987, based on James Watson's 1968 memoir *The Double Helix: A Personal Account of the Discovery of the Structure of DNA*, shows Rosalind Franklin gazing down, admiring the evidence of her latest experiment, and murmuring beatifically, "I just want to look. I don't want to touch." Rosalind Franklin was a scientist in the grand tradition of innocent inquiry. She was a pure scientist. Like Barbara McClintock, she had no interest whatsoever in the

use value of the objects she studies. She was not after control, only understanding.

- 6 Ian Hacking describes both realist and anti-realist arguments in “What Is Scientific Realism?,” in his book *Representing and Intervening*. “Scientific realism says that... protons, photons, fields of force, and black holes are as real as toe-nails, turbines, eddies in a stream, and volcanos” (p. 21). He describes an experiment by Stanford experimenters George LaRue, William Fairbank, and Arthur Hebard to hunt down “free” quarks. They used a ball made of niobium, “which is cooled below its superconducting transition temperature of 9°K [to detect the quarks]. Once an electric charge is set going round this very cold ball, it stays going, forever....The initial charge placed on the ball is gradually changed, and ... one determines whether the passage from positive to negative charge occurs at zero or at $\pm 1/3 e$. If the latter, there must surely be one loose quark on the ball. ... Now how does one alter the charge on the niobium ball? ‘Well, at that stage,’ said my friend, ‘we spray it with positrons to increase the charge or with electrons to decrease the charge.’ From that day forth I’ve been a scientific realist. So far as I’m concerned, if you can spray them then they are real” (p. 23). A passionate scientific realist himself, Hacking admits that anti-realists’ arguments are legitimate, due to different intertwining scientific and philosophical concepts of what is “true” or “real,” and to unobservable entities and their “fictional” representations. He states: “We have indeed mastered many events in nature, says the anti-realist. Genetic engineering is becoming as commonplace as manufacturing steel, but do not be deluded. Do not suppose that long chains of molecules are really there to be spliced. Biologists may think more clearly about an amino acid if they build a molecular model out of wire and coloured balls. The model may help us arrange the phenomena in our minds. It may suggest new micro-technology, but it is not a literal picture of how things really are” (pp. 21–22). “What Is Scientific Realism?,” in: *Representing and Intervening: Introductory Topics in the Philosophy of Natural Science*, pp. 21–31, Cambridge: Cambridge University Press, 1983.
- 7 “There was of course the microscope, one of the great developments of the seventeenth century. Long before biologists came to agree about the need for an experimental science, an instrument had appeared that promised to do for the living form what the telescope was already doing for cosmic form, namely that would vastly enhance the power of the naked eye to peer at, and even into, the secrets of life. But even from the start, there was a crucial difference. The preparation of an object required for the microscopic examination was necessarily more intrusive than that required by the naturalist. Before looking at an animate being, it was necessary to first cut and fix it, in a word, to de-animate it.” Keller, “The Biological Gaze,” pp. 109–110.
- 8 “Despite the crucial (and somewhat infamous) role the photograph [of DNA] turned out to play in Watson and Crick’s race to the double helix, in leading them to their discovery of the secret of life, it is not, in fact, an image of a cell or of any other living object. It is an X-ray photograph of a crystalline structure composed from cell extracts—that is, from extensive preparations and purifications (or, manipulations) of the homogenized contents of a vast number of cells. No living object could possibly survive these preparations. Indeed, no living object could even survive the process of imaging. To obtain this image, one needs to bombard the object at issue with a barrage of X-rays that would quickly destroy the vital functions of any living thing. X-ray crystallography is thus too transgressive to enable us to see an animate entity in its living state.” *Ibid.*, p. 108.
- 9 See Evelyn Fox Keller and Christine R. Grontowski, “The Mind’s Eye,” in: *Feminism and Science (Oxford Readings in Feminism)*, ed. Evelyn Fox Keller and Helen E. Longino, Oxford: Oxford University Press, 1996, pp. 187–202.
- 10 “What does it mean to see through a microscope? What in fact can one see? For most of us, even with a modern-day microscope, the answer is precious little—apart, that is, from one’s own eyeball. Only with a great deal of practice, fiddling with

the focusing knob, does one learn to see anything at all through a microscope. And once one does, the question arises, is it a real thing one sees? Is it an object on the slide, or a spot on the lens? And if on the slide, is it a shadow or a ridge?" Keller, "The Biological Gaze," pp. 110–111.

- 11 "The great age of biological microscopy came in the nineteenth century with the arrival of better lenses, greater magnification and resolution, improved preparation of microscopic specimens, and, above all, renewed confidence in the veridicality of the basic instrument. Nineteenth-century microscopy enabled virtually all the classic observations—of eggs, sperm, fertilization, and the contours of embryonic cleavage—on which modern embryology is based" (p. 213). "But no improvement in technique could extend the power of resolution of optical microscopes beyond the limit imposed by wavelength of visible light, and despite even the substantial advances that developments in optical microscopy brought in our ability to see inside living cells, these were soon overshadowed by the dramatic increase in resolution provided by the electron microscope" (pp. 217–218). "Bringing molecules within view was the great achievement of the electron microscope. The advent of this new visual technology in the middle of the twentieth century—increasing powers of resolution by as much as three orders of magnitude—undoubtedly marked a triumphant advance in the history of microscopy" (pp. 216–217). Keller, "The Visual Culture of Molecular Embryology."
- 12 "A close admixture of conceptual and material tools has characterized experimental biology throughout the past century. What lends the mix in contemporary molecular biology its principal novelty, I argue, is the arrival of new technologies. The computer vastly extends the range of tools available, while the techniques of recombinant DNA make such an extension virtually mandatory. But there is more, for the recombinant DNA revolution has also added new horizons to the very meaning of words like tool and practice. In the past, the possibilities for intervening in the course of biological development—without causing its disruption—were limited to control of the mating process and, only under special circumstances and in relatively isolated cases, to the manipulation (cutting and pasting) of body parts. Now, however, and for the first time in biological history, it has become possible to directly intervene in the internal dynamics of development without interrupting the process, and to do so on the molecular scale" (pp. 261–262). "In short, just as the distinction between theoretical and experimental begins to dissolve upon examination, so too does the distinction between pure and applied" (p. 263). Evelyn Fox Keller, "New Roles for Mathematical and Computational Modeling," in: *Making Sense of Life*, pp. 234–264.
- 13 "The colloquialism 'I see' is hardly innocent, for it indicates the depth with which the meaning we give to understanding has been bound up with seeing, and the difficulty of speaking—or for that matter, of thinking—about understanding without invoking the metaphor of vision. The aim of science is to discover Nature's secrets, to see her unveiled. To explain is to make things 'clear and evident,' to illuminate and enlighten. We have understood when we have seen with the mind's eye. The visual metaphor for knowledge is everywhere. And as is the way with metaphor, it simultaneously reflects and enforces a dynamic interdependence between mind and eye too complex to permit disentangling, and too embedded in our cognitive apparatus to do without." Keller, "The Visual Culture of Molecular Embryology" p. 206.
- 14 "It is difficult to talk about things that are obvious, about images that have become so familiar as to be effectively invisible. For example, when feminist scholars first began to call attention to metaphors of gender in the language of science, one of the principal obstacles they encountered lay in the very ubiquity of such metaphors. The most obvious figure was of course Mother Nature, her secrets hidden from view, simultaneously provoking and resisting the penetrating gaze of science, but here was a metaphor so commonplace

as to have become effectively unnoticeable. Even when noticed, its significance was often discounted on the grounds of its being a 'dead' metaphor and hence devoid of force. But metaphors are dead only because we cease to notice them, because we are no longer conscious of their effects on our perception. It might even be argued that dead metaphors are the most forceful of all, just because their mode of operation is beyond the realm of consciousness, effectively screened by their very banality. In any case, all dead metaphors were once alive. Certainly, the figure of the maternal womb as the harbor of primal secrets was once very much alive, not only in historical time but in the lives of all of us as inquirers, as seekers of knowledge, and it left its trace. In the early history of science, the mystery of embryonic life provided a readily accessible image for representing Nature's ultimate secret; it could stand for the unknown precisely by virtue of being so deeply hidden, so fully sequestered beyond the range of human vision." Ibid., 208–9.

15 "Four-dimensional representations have become a central component of presentations of new results to colleagues in seminars and conferences, and the accessibility of video clips on the Internet and the use of CD-ROMs as adjuncts to traditional journals have brought the observation of intra- and intercellular dynamics to yet larger audiences of specialists and nonspecialists. Accordingly, it is not only the researcher who has the opportunity to watch these processes unfold in living time: the remote spectator, too, who is often far removed from the site of 'direct' observation, has 'virtually' the same opportunity. Fifteen years ago, Steven Shapin and Simon Schaffer introduced the felicitous term 'virtual witness' to describe the role of such remote spectators, and the expression has since become a part of the basic vocabulary of historians of science. But the CD-ROM, I suggest, gives new meaning to the notion of 'virtual witnessing.' For, as anyone who has seen high-quality video representations of biological developments will recognize, the experience is at once thrilling and compelling, and in ways that traditional representations can scarcely

begin to rival. So lifelike can the animated spectacle be made to appear that it induces a powerful sense of firsthand witnessing, the conviction that one is watching 'life itself.' Thus, the very technology that has so vastly increased our visual access to the inner workings of living organisms also has an ironic side-effect—namely, that our perception of 'real time' comes to be more and more closely assimilated with our perception of 'reel time.'" Ibid., pp. 232–33.

16 Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, London: Routledge, 1973.

17 Xavier Bichat (1771–1802) quoted in *ibid.*: "For twenty years, from morning to night, you have taken notes at patients' bedsides...and all is confusion for you in the symptoms which, refusing to yield up their meaning, offer you a succession of incoherent phenomena. Open up a few corpses: you will dissipate at once the darkness that observation alone could not dissipate" (p. 146). In the same volume, Foucault states: "The figure of the visible invisible organizes anatomo-pathological perception. But, as one sees, in accordance with a reversible structure. It is a question of the visible that the living individuality, the intersection of symptoms, the organic depth, in fact, and for a time, render invisible, before the sovereign resumption of the anatomical gaze. But it is as much a question of this invisible of the individual modulations, whose extrication seemed impossible even to a clinician like Cabanis [an old-school physician], and which the effort of an incisive, patient, eroding language offers at last to common light what is visible for all. Language and death have operated at every level of this experience, and in accordance with its whole density, only to offer at last to scientific perception what, for it, had remained for so long the visible invisible—the forbidden, imminent secret: the knowledge of the individual" (p. 170).

18 Thomas Keenan, *Fables of Responsibility: Aberrations and Predicaments in Ethics and Politics*, Stanford/Calif.: Stanford University Press, 1997, pp. 12.



sleepwalking in a dialectical picture puzzle

NATASCHA SADR HAGHIGHIAN > I'm going to start by introducing the seminar, and then we can start our conversation.

< **THOMAS KEENAN** Okay.

NSH > And we don't have to look at the camera at all.

< **TK** We can look at the fruit.

NSH > Welcome to the second part of this seminar. We are at Whole Foods on Bowery and Houston, and let me just briefly explain why we are here instead of the auditorium. I see the conversation held in a store, more precisely in a grassroots-organic-movement-turned-major-corporation-type store, not only as posing an urgent question of how to relate knowledge and action in a way that makes sense and creates agency, but also as a necessary shift away from the secure and isolated situation

of an auditorium to a more challenging place that incorporates the contradictions and incompatibilities of theory in everyday life. I hope this makes sense.

We have the pleasure of being here with Thomas Keenan, whom I'll briefly introduce. You're the director of the Human Rights Project and associate professor of comparative literature at Bard College. You work in the field of human rights, where you have worked with different organizations, among them the Soros Documentary Fund, WITNESS, and the Journal of Human Rights, and you are the author of *Fables of Responsibility: Aberrations and Predicaments in Ethics and Politics*, a book that was really important to Ines Schaber, Anselm Franke, and myself in preparation for our unitednation-splaza seminar, "who's there?" Today I wanted to discuss two of your more recent texts. One is "Translation, or: Can Things Get Any Worse?" As I understand it, this is a text that you wrote for the Dictionary of War symposium. The other text is "Mobilizing Shame," which I think you published in ...

< **TK** It was in *South Atlantic Quarterly*, in a special issue on human rights.

NSH > Right. In both texts, you talk about the connection between knowledge and action, and some of the complications that occur between them in the current situation. I remember in one of our last conversations you mentioned a bin Laden tape called "Knowledge Is for Acting On." At first that sounds so good, but in the end it becomes rather complicated. One part of this complication that you describe in "Mobilizing Shame" considers how the strategies of human rights groups are traditionally based on revealing something—injustice or violence, for example. These strategies don't seem to work anymore in the way that they used to.

Revealing the images of atrocities no longer seems sufficient to produce a state of shame that then becomes a motivation for action. Could you describe the relation between revelation and shame on the political stage? How did revelation lead to shame before, and why does it no longer have that effect?

< TK Well, it might still have an effect—this is not really a historical argument. I think there are many times when the revelation of atrocities does have some kind of effect. But in this case, I was mainly interested in two different ways of conceiving the political function of images. The bin Laden tape, which celebrates the anniversary of the September 11 attacks by presenting the mujahideen of al-Qaeda in a variety of situations before the cameras, along with many other videotapes from the global jihad, is yet another example of the preeminence of the photo opportunity today. Whether it's those tapes, or the ones produced by the American army arriving on the beach in Mogadishu or depicting the president holding a press conference, they represent and exemplify an increasingly important dimension of political image-making. It's sort of what we're doing here, right? The event takes place in order to be photographed and reproduced and rebroadcast, transmitted and distributed, copied and viewed.

It seems to me that, epistemologically, that's a very different kind of role than the one we traditionally associate with images—namely, that of making visible something that is otherwise hard to see: converting observation or visualization into knowledge in hopes that some kind of action will come about, based on the rational, reasonable, deliberate interpretation of those images. Although a great deal of political practice now takes place in the realm of the photo opportunity or the performance, many—maybe too many—activists for



social justice, human rights organizations, and civil society practitioners are still working within the realm of the traditional image and its interpretation. There, the idea is, if we can not only see something, but create a visual representation of that thing, we'll make it known to a wider public. And that knowledge, properly considered, leads to wise decisions. There is a whole theory of the public sphere and the rational democratic public in this idea that, as things become known, the actions that ought to be taken because of what we now know will more or less follow logically or in train.

I think this "logic," or reason, too often misses a more properly political moment: one that tries to inscribe those images within a narrative or a persuasive project, within a campaign that actually narrates them, captions them, makes them more available for some kind of political action, and doesn't just take for granted that their meaning follows automatically, or that action follows automatically from the meaning that's seen. So I'm partly interested in confronting the limits of this revelatory theory and practice of politics, this epistemological model of revelation and exposure, and in appreciating in turn the increasing prominence of the photo opportunity and the performance, the stage, as a way of working with images politically.

So I don't want to go so far as to say that images don't work anymore. I wouldn't want to be the one who proposed that we stop trying to know things and stop trying to make pictures and render things visible and so on. But to think that rendering things visible totally covers the field of preparation for action overlooks the way this performative dimension already involves a kind of action that doesn't pass through the same cognitive circuits or the same process of knowing as we might have thought it did.

You could take the place we're standing in now. A lot of investment goes into producing various kinds of images, whether they depict organic wholesomeness, development through trade, ecological sensitivity, or various other good things. There are a lot of images and narratives at work here. So this kind of place is probably particularly susceptible to the politics of exposure or revelation. Imagine if it turned out that, for instance, the food was not what it was advertised to be, or that it made people sick, or contributed to the exploitation of other people, and so on. So the rule goes, I think, that the more one lives by the image, the more vulnerable one is to the exposure of the distortion or falseness of the image. Those strategies have not gone away, and they shouldn't.

NSH > But from what I understood, overexposure also means the anticipation of people's expectations by presenting an image that already seems to include everything we could have asked for. What we see in this store is a flow of images that provide answers to any doubts or questions that might occur, saying: You might think we are an anonymous, gigantic corporation, but you're wrong—we even show you the picture of the guy who harvested the coffee. You might be in doubt because we exploit our employees, but we even tell you the story of his grandmother. It is an overexposure of righteousness in an anticipation of a possible accusation. Are these the kind of staged images that create overexposure?

< TK They're definitely not stupid here. We're in a hybrid situation. There is obviously a great deal of performance in a situation like this, and they are also still making claims about "the way things are out there." To a certain extent, this hybrid form makes the process of challenging those operations at the level of the image more complicated, because they seem capable of

absorbing so much. One can't produce a lot of surprise in a heavily saturated environment like this. But it's not completely saturated—I think there are points of vulnerability even in this situation. I suppose it's more of a tactical question. What I've been interested in is probably best described as shifting the focus of the discussion about the use of images toward a more contextual, tactical location, rather than staying at the level of general strategic discussion about the politics of images.

NSH > What would that look like, a contextualization of an image?

< TK Well, paradoxically, it involves a lot more research. So, again, my suggestion that knowledge or revelation might not be everything is by no means to suggest that we should give up on doing research, but rather that it probably involves knowing more and working harder on what we already know. I only have clichés to offer here, but it means a kind of local sensitivity; it means trying to get a rich sense of the political context in which you operate, knowing about the history, knowing what the local forces are, who the actors are, and so on. Too often, well-intentioned and ethically self-confident political movements are reassured by the quality of their own good intentions, and they take this as an alibi that allows them to skip over a lot of local analysis, research, or interaction with people who live in the places in which they want to intervene.

NSH > One problem that I see, just in my own experience, is that the kind of research you describe often takes a long time, and its outcome is quite complex, resulting in complicated answers to the situation. Where do you see the political stage for presenting this research and the knowledge that it produces? What kind of language,

what kind of format, or, perhaps, what kind of images are useful for creating agency on a political stage?

< **TK** One thing that's been happening over the last twenty or thirty years is a kind of fragmentation, a dissolution of the obvious political spaces. Some years ago, it seemed pretty clear where one would want to be in order to produce images for political reasons and make those images work. In the United States, this place would have been in the major metropolitan daily papers, the news magazines, and on the three television networks' nightly news at 6:30. This doesn't entirely seem to be the case anymore. Now, the stages on which one wants one's images to appear seem infinitely more dispersed, and this has its positive and negative effects. It means that the threshold for entrance into various political spaces can be lower, but also that, because of this dispersal, one is robbed of the chance to access a mass audience.

NSH > Maybe I'll try to pose this question a bit differently. In "Mobilizing Shame" you describe a situation in which images are increasingly staged or performed. In the case of overexposure to this performed information, disclosing the results of our research will not have the desired effect, or possibly any effect at all; regardless of what I discover, people either think they know it already or they just don't care. In light of this overexposure, do we need to consider working more with staged formats in order to get attention for the results of our work? Or is it not so much a question of presentation formats, but a more general problem concerning the connection between knowing and acting?

< **TK** I guess there's a simple point to be made: just acknowledging that things aren't the way they seem, however necessary, is not sufficient. After discover-

ing this, more research is required to consider what could be different, what the potential outcomes of the knowledge that one has produced might be, because the results could be completely equivocal and go in totally opposite directions. For me, the strongest and most painful example of this was the news coverage of the war in Bosnia. For weeks, months, years—three and a half years, in the end—the most dedicated reporters, photographers, and investigators in the world covered this catastrophe very carefully, producing the most astonishing and shocking images and headlines. Their work produced a lot of responses, but didn't really stop many of the terrible things from happening.

Until just before the very end, there was a conflict of interpretations—a debate around whether what was being portrayed was a humanitarian catastrophe that required tents, clothing, and medicine, or a genocide that required emergency political and military intervention. Though they were not unprocessed, the images nevertheless constituted a kind of raw material for this debate by making the situation available for recoding, contextualization, narration, and there was a battle between different political agendas over how to put this quasi-raw material to work in the service of a project. In the end, the ones who advocated a humanitarian interpretation of the crisis did a better job of persuading policymakers (and even the general public, in a lot of European countries and elsewhere) that this was just a crisis of suffering and not a crisis of an ideological or political sort.

NSH > In one of our last conversations, you said that you're interested in excavating the unacknowledged theoretical dimensions of a lot of current political events or texts. Is that the process you just described?

< TK [laughs] That would be a very grand name for what I just described! But I guess so. I always enjoy talking with you, because you show me things in texts I've written that I didn't notice before. But yes, not only are the political situations we're talking about places where some kind of intervention or action is required—and where we're capable of taking on the responsibility to engage—they are also opportunities for research. There are a lot of bad stories and failures in our lifetime that do need to be excavated and thought about, and theoretical insights can be and need to be drawn from them. In that essay on translation, I was interested in the flipside of the conversation we're having now. Whereas we've been talking about the failure to make an adequate move from knowledge to the domain of action, in that essay I was interested in, let's say, the fantasy of being able to move so directly from knowledge to action that one almost skips the moment of knowledge altogether.

I was fascinated by that moment in Roland Barthes's essay on myth and mythology, "Myth Today," in which he offers this example, this fantastic dream of the woodcutter who, in cutting the tree, manages to avoid language—for Barthes in that essay, "language" is representation and knowledge of a certain sort, knowledge as representation—and, as Barthes says, simply "act the things."

He skips over all the opacities and paradoxes and difficulties of representation and just goes after the tree directly. In my essay I was insisting that this notion of a language that needs no translation is not only impossible—conceptually impossible—but also dangerous, and that Barthes's example should be a warning to us when we become, let's say, too hasty in our desire to arrive at the realm of action.



So in that sense, it's the other side of what we were saying before—the delay, the calculation, the research, the investigation, the work with language seems incredibly important if you want to know what you're doing. I know that it's a very traditional theory of responsibility and knowledge, that you need to know as best you can what you're doing before you do it. But the problem is that you can't always know what you're doing, and this is the story that I tried to tell in *Fables of Responsibility*: that there are demands which are placed on you that won't wait for the knowledge that is necessary, or situations in which you might feel as though you've been overwhelmed by too much knowledge. That might be the problem of overexposure as well. Then one's action is in some important way disconnected, or not entirely saturated by one's knowledge, and one has to act in a way for which the knowledge doesn't provide a full alibi. This seems to me to be a more rigorous definition of responsibility.

NSH > Tell me if I'm wrong, but this image of a language that needs no translation, and that seems to mark some recent political events as being successful, or somewhat successful, is this the dream of the ultimate felicity of the speech act coming true, end of discussion? It sounds great to say that we can now immediately see the effect of what we say. But I think you're suggesting that taking this shortcut is rather dangerous and problematic.

< TK Maybe this is just something a priori for me, so you can challenge it if you want. I was referring to an essay by Saskia Sassen about September 11, published the day after, in which she characterized the events this way: "The oppressed and persecuted have used many languages to reach us so far, but we seem unable to translate the meaning. So a few have taken the personal

responsibility to speak in a language that needs no translation.”

As much as I admire her work, I thought that that was a mischaracterization of what happened. That event, of all events, was one rich in translation, a moment when an enormous number of competing narrative frames were already available for understanding or processing or reading what was at stake in those attacks—precisely not a moment in which meanings were self-evident.

What happened after September 11 was in fact a global debate over its meaning, motivations, rationality, sources—a debate rich in implications for the way we responded to it. I thought it was a mistake to suggest that it was an unequivocal act. Of course it needed translation, desperately (and Sassen was in fact offering one, needless to say). So why say that it was finished—that once it had happened, it was over? Actually what happened was that it went on happening, it’s still going on, and it’s going to continue going on for a long time. If we think that its meaning is unequivocal, we abandon the important process of debating and trying to shape its various possible outcomes. And I actually think a lot of us did unfortunately miss the opportunity in the short run to make a persuasive claim about what those events meant and how to respond to them.

NSH > In the “Translation” essay you refer to Jacques Rancière’s notion of a radical or active translation. The question I’m trying to get at is, What could that be, a radical translation? It seems to be a process of interpreting an event, or a deconstructive process—one takes it apart, and might come up with a new set of revelations in the process that are different than what was originally proposed.

< **TK** Yes, I would emphasize the mediated quality of a translation—the sense that some labor, some contextualization, some uncertainty is involved in the work of offering the interpretation, that it's not just the voice of the event finally speaking in its own language, and so on.

NSH > In the same essay, you introduce two important figures, and both seem problematic. One, as you mentioned, is the woodcutter, and the other is the witness. I wonder what their relationship might be, if there is one. One suggestion would be that any act on a political stage needs witnesses. In other words, the woodcutter needs the witness to cut the wood, right? The fact that somebody is watching becomes part of the cutting. So what happens when we're unwittingly drawn into the role of being witnesses to events? We haven't chosen to be part of the event, but it nonetheless seems like we are part of it. Whether active or passive, we are chosen to be part of it, as it were. How do we relate to this attribution? Is the translation process you described part of being a witness?

< **TK** That's pretty complicated. In Barthes's little fable, the woodcutter has a solitary kind of bilateral—or not even bilateral, almost unilateral—relation to the tree, and no one is said to be watching. But in the fantasy of the act that needs no translation or the language which needs no translation, there is a witness for whom no translation is necessary, right? So there is a third party implicated.

But there are a lot of different kinds of witnesses. If it's the media context that we're talking about, then a powerful category is one that I learned from Levinas and Blanchot, which would be that of the hostage. The television, or the event—the public event—takes us hostage. The hostage is neither active nor simply

passive. It's a position of extreme passivity that is equally the most intense experience of responsibility. There's no particular reason why you became a hostage—you were in the wrong place at the wrong time, and you were chosen through no intention or fault of your own. But everything that happens in this situation happens to you, so in that sense you are completely responsible. There is something complicated and confusing for a traditional theory of political activity or agency when we locate at least some agency in this witness, in this observer. But for me, the important thing is to try to think about what sort of activity is in fact characteristic of the witness without just subsuming the position within the classical notion of the subject or the political actor.

NSH > I think it relates back to the question of responsibility, however traditional or not. It's an important question. For me, the publication of the images of the Iraqi prisoners' torture and abuse by American soldiers at the Abu Ghraib prison in Iraq was one of the moments where I felt I had been forced to be a witness to something I didn't choose to participate in.

< **TK** There's the hostage, right?

NSH > Right, and I somehow stubbornly, and in an almost childish way, refused to even look at the images. I turned my head away from newspaper stands or televisions, trying to boycott the mandate to participate in witnessing that performance.

< **TK** Did you succeed?

NSH > Well, of course you can't avoid getting glimpses of the newspapers, but so far I've managed not to see the whole thing. Knowing what the images look like doesn't change my opinion about torture, so I don't need to see them.

< **TK** It's tricky; there are many things to say. I looked, I looked immediately, I looked at as much of it as I could find. And I respect very much the rigor of your refusal to look. But in spite of one's refusal to look, one still sees somehow what's going on. And if one doesn't see, one imagines. So that's the sign of a real, public address: it means that it even overrides your private intention in some way, making those images visible even if you don't want to see them.

Why not look? To avoid a certain kind of implication, I imagine, or complicity, or cooperation in the work that those images seem to be intended to do. But what if a certain amount of complicity or collaboration or cooperation—even in evil, for lack of a better word—is a price that we currently have to pay for challenging those kinds of things? Perhaps not looking or opting out of the complicity also deprives us of any kind of position from which a challenge can be mounted. That would constitute a political reason for looking. But there might be an ethical reason not to look as well, and I am sympathetic to the idea that politics perhaps shouldn't completely take over the ethical sphere.

But, back to the images. For me they are the most incredibly powerful hybrid of the two kinds of images we started out talking about. They were, at least initially, a kind of pure performance, staged for all sorts of reasons that still remain unclear. We don't know whether they were meant to be trophies, souvenirs, or part of some potential future blackmail; but, in any case, they were staged. They were not exactly documents of something that was happening independently; they were made to be pictures—of events performed in order to be pictured. And they were revelatory, in the most extreme way: they exposed not only the torture that was going on in Abu Ghraib but also the fact that these people,

the guards in Abu Ghraib, felt comfortable enough in doing what they were doing to entrust their actions to these photographs. So they became a kind of auto-exposure, photo opportunity turned into document.

That forces us to ask a bigger question: What is the political effect of revelation? I used to think more unequivocally about this, that the Abu Ghraib photographs had simply failed, because they didn't result in any significant punishment for those who organized the torture there, they didn't immediately force a change in American policy regarding the Iraq war as a whole, et cetera. But today, I think that they had a more low-level, corrosive, and subversive effect that is difficult to measure. Beyond the immediate shock effect of the images, and beyond the impunity of those responsible for them, I think they are actually a testament to the ways in which many different political actors made use of them over a long period of time, and with interestingly different outcomes. I totally agree with what you just described as the effect of these images, but I think it's necessary to also mention another effect; namely, that they helped to normalize the discussion around torture; they made it possible for the CIA and even politicians to openly discuss the advantages and possibilities of torture in public.

So there's the fourth dimension ...

NSH > Yeah, it's complicated.

< TK But torture is not one example among others here. The American rediscovery of torture is the best example of this phenomenon we can call "the open secret." For me, that's another important version of the "beyond revelation" paradigm. On the one hand, where torture and interrogation were concerned, it was a state

secret of the highest order that the US had more or less completely abandoned its long-standing commitment to international humanitarian law, the Geneva conventions, and human rights. Elaborate measures were taken to protect these secrets. On the other hand, American military and intelligence officials felt completely comfortable speaking under cover of anonymity on the front pages of our major newspapers about their renewed appreciation for the benefits of torture. So it wasn't that it was totally revealed, nor was it that it was totally secret. Torture and interrogation operated in an intermediate space between a traditional secret, which is then susceptible to revelation and exposure and delegitimization, and a kind of increasing (as you say) public acceptance that the question of torture could be openly discussed: "It's not an absolute, there are moments when, there are individuals for whom..." and so on. That's one function of the open secret: it robs the revelation of a considerable part of its power. Without admitting everything, without compromising sources and methods, it makes a topic for public discussion out of what had—as one of the great achievements of the human rights movement—previously been ruled out of public discussion. I think this openness of the secret was actually a key in allowing that discussion to go on for as long as it has. The Abu Ghraib photographs played a role in that. They made it viewable, maybe, for better and for worse.

NSH > I think this brings us back to where we started, with the question of the political stage. I'm glad you mention the open secret. If I understand you right, it relates to a politics of images that creates overexposure and invisibility at the same time—a play between the cause and effect of exposure and closure created for and with different types of witnesses. How do the human rights groups react to this? How does the

conservative public react? Depending on their reaction, the boundaries of the political stage are changed. Is it possible to develop an agency that actively produces a political stage and doesn't only react to an existing one? I guess I'm talking about a practice that goes beyond the traditional activist approach of exposing in hopes of producing shame, one that doesn't get stuck constantly absorbing and analyzing information about events, always lagging behind in order to properly analyze, making it a passive or reactive position at best. How does knowledge become a useful and powerful part of one's ability to act?

< TK Yes, I see what you mean. Let me try something out on you. I'm not even sure if I believe this, but maybe the line between acting and reacting is not entirely clear. I would be tempted to say that the notion of the completely innovative, inaugural, agenda-setting event is a little bit mythic. Let's put it this way: we shouldn't make the threshold for entry into political discussion or resetting political agendas too high. There are a lot of low-threshold ideas that may look like they're merely reactive—just responding to some bad things in the world today—but they may in fact offer ways of recasting or working with existing problems that can actually have serious implications. In their reaction, they might constitute a proposition about a very different way that the future should be organized. I think there are moments when politicization in the strong sense—taking something that wasn't political and placing it into the political sphere—is not a pure innovation, but on the contrary requires only a very slight shift in emphasis or interpretation, a little redefinition, maybe even just a sort of reactive mimicry; but this shift changes things significantly.



Hinter einer Folie versteckte





▲ Poultry workers inside







a crossing

We see a rubber raft surrounded by water. The size and color of the waves suggest that the boat sails on marine waters. It is densely packed with people standing upright, arms linked. The expression on their faces is serious and concerned, but they stand together as one, ready to face whatever awaits them. Some look around, others down into the waves. A few appear to be aiming their gaze at us. Their clothing—mostly dark blue or gray suits or dresses with dark overcoats—doesn't seem to match a boat trip. One wears a hat. Since these passengers face the side of the boat instead of the front, it's unclear whether the boat is arriving or departing. Nor is it clear whether it is being steered or if it's aimlessly adrift.

We've seen these people before, even in this formation, and we have seen the boat before, yet the two don't seem to fit together. They temporarily cohabit the image, much like in Rabih Mroué's performance *The Inhabitants of Images*, in which people or things from one image decide to visit other people or things in another, because they have business together or urgently need to talk.¹

The people in the photo are “world leaders,” heads of powerful states such as France, Germany, the United Kingdom, and Israel. We recognize Angela Merkel, François Hollande, and David Cameron, among others. Usually we see leaders on ships or boats only in situations of war or leisure. Maybe, most famously, we recall



the depiction of George Washington crossing the Delaware to fight the Hessians in Trenton. Washington, too, was standing in a vessel, but he looked ahead, purposefully, toward the coming battle. Perhaps another image from the leader-ship trope etched into our memory is President George W. Bush's "Mission Accomplished" photo op on the deck of the aircraft carrier USS Abraham Lincoln, where he addressed the nation to say that all major combat in Iraq had ended on May 1, 2003, just forty days after the start of the invasion.

The image of the group on the rubber raft appeared in my news feed on April 20, a day after a boat carrying more than seven hundred refugees capsized in the Mediterranean Sea south of the island of Lampedusa.² There were only twenty-eight survivors. (The record death toll was actually exceeded a few days later when another boat, with nine hundred people on board, capsized.)³

This unprecedented disaster came months after the European Union replaced the maritime rescue operation Mare Nostrum—which had saved more than 100,000 lives over the previous year—with Triton, an operation run by the EU border agency Frontex.⁴ Mare Nostrum was canceled because European governments refused to provide funding for the rescue mission, which cost €9 million per month, paid for solely by Italy. (Triton is less costly, at €2.8 million per month.)⁵

But the rescue operation was also terminated in order to discourage people from trying to reach European soil. Frontex head Fabrice Leggeri holds the view that saving migrants' lives in the Mediterranean should not be the priority for the maritime patrols of Triton,⁶ while Klaus Rösler, operations director for Frontex, is even more outspoken. He criticized Italian authorities for sending vessels into zones outside the operational area of Triton to rescue people in distress at sea. In Rösler's view, the rescue missions didn't "correspond to Triton's operational plan" and would just encourage more people to make the journey.⁷ In Frontex's own concept paper, Triton's aim is described as "controlling and combating illegal migration flows

and other cross-border crimes”—that is, its mission is to stop people from crossing into Europe, not to save them from drowning.⁸ But since November 2014, when Mare Nostrum was canceled and Triton began, the number of people taking this risk has remained the same—while the death toll has risen dramatically. Italian Prime Minister Matteo Renzi blames human traffickers for these tragedies, dubbing trafficking “a plague in our continent—the slavery of the twenty-first century.” The fact is that the European Union has made it impossible for people from regions of crisis, war, and poverty to reach its borders in legal ways.⁹ The only way left to make this journey is with the help of people smugglers. Renzi intentionally levels the differences between trafficking and smuggling in his statement, in order to scandalize and criminalize the act of aiding refugees. This is “a new slave trade,” he says in a factually incorrect statement that serves as an image of injustice. While it’s correct that most smugglers receive money for their more-or-less helpful assistance in the crossing, they don’t sell or buy the refugees as property. Renzi’s phrasing is in itself scandalous, as he tries to use the image of African people on a boat to evoke the image of a slave ship. If this is the reference that comes to his mind when he sees people of color on a vessel, it is in fact an utterly racist remark and an expression of an utterly racist migration politics.

Smuggling is not the problem; the militarized European border is. To prevent people from reaching European soil in order to claim protection under the 1951 UN Refugee Convention¹⁰ and apply for asylum, the EU chooses to accept the deaths of that many people (over 2,000 in the first six months of 2015). This position is clear in the ten-point response plan that the EU established after the April 20 disaster.¹¹

The plan focuses on

- a systematic effort to capture and destroy vessels used by people smugglers;
- increasing the financial resources and operational areas of Triton;
- creating a new program, coordinated by Frontex, for the rapid return of “irregular” migrants from the EU’s Mediterranean countries;



- speeding up asylum revisions to be able to send people back faster; and
- instituting fingerprinting of all migrants.

None of these points refers to rescue operations or to an acknowledgment of the UN Refugee Convention and the right to asylum.

In a belief system that effectively normalizes poverty and crisis in certain parts of the world, Europe likes to think that certain regions are simply unstable by default, because they have never had democratic processes or proper modernization, or because they are being radicalized by religious fanaticism, and so on. This almost-too-ridiculous-to-mention view still prevails among not only Europe's leaders but also a majority of its citizenry as well. As cultural theorist Stuart Hall so fittingly pointed out in an interview featured in John Akomfrah's 2013 film *The Stuart Hall Project*, there is an astonishing amnesia about both the past and the ongoing active involvement of former colonial powers in crises, wars, and poverty in the countries from which people are fleeing.¹² Europeans, he says, are looking into the "faces of these Black and brown people they've been ruling for four hundred years and [saying], well, I don't really know where you've come from and why you're here or what we have to do with your future."

One can only assume that it is in fact an intentional and systemic ignorance. None of the so-called world leaders acknowledges that their countries are involved (and, in fact, responsible) in various ways for the multiple crises that are spread across the African continent and the Middle East. Weapons sales, aggressive export policies, and agricultural dominance—not to mention interference and cooperation with dictators across Africa and the Middle East—make Europe responsible for some of the difficult living conditions in those regions. The apparent amnesia about the connection between the two sets of problems (economic, political, and military interference, on the one hand, and the influx of refugees, on the other) is in reality a denial of responsibility. It is a sickening double standard that is becoming increasingly apparent on many levels. Austerity,

privatization, segregation, the dismantling of social welfare programs, and the militarization of police and border control have all supported the exclusive interests of the one percent. Enough with equal rights, with equal chances, with fair distribution of wealth, health, rights, water, air, and life. We are officially at the point where one life matters more than another—and where this valuation depends on your skin color, your passport, where you happened to be born, and other factors that are beyond your range of decision-making. The so-called world leaders have demonstrated this double standard increasingly and on multiple occasions, even before they consciously and intentionally decided to let people drown by the thousands and then have the audacity to blame it on smugglers.

The source image for the world leaders on the rubber raft is from the unity march in Paris after the attacks on the *Charlie Hebdo* staff. The carefully choreographed photo became famous because the dignitaries seemed to be leading the march of millions of Parisians, when in fact they had gathered for a photo op in a protected side street.¹³ They weren't marching for freedom of speech, as they claimed; rather they were demonstrating their unity in fighting any power that challenged their leadership. While marching as one in Paris, they were busy hindering and threatening investigative journalism, putting whistleblowers and activists behind bars, and even giving tacit approval for the United States' kill lists of people whose speech they perceive as inciting violence or simply against their interests.¹⁴ The dismantled photo op of the leader's march was read as an accurate visual representation of their hypocrisy.

But beyond that, let's carefully look at their gesture. We see these people marching with arms interlocked, like real demonstrators, with their faces showing concern, determination, and their apparent support of the slogan "Je suis Charlie," even though we don't see them carrying signs to that effect (the Paris rally marched under this banner). Leaving hypocrisy aside, it is seriously problematic when Merkel, Cameron, and Netanyahu claim to "be Charlie"—because by definition they cannot possibly be Charlie. Their position does not allow for ambivalence of identity, capacity, or assignment.

As Michael Taussig pointed out in his book *Defacement: Public Secrecy and the Labor of the Negative*, only the revolutionary has the option to change her name or wear a mask, while the sovereign always has to stick to the very name he has defined.¹⁵ So when Merkel claims to be Charlie, she does something other than express her solidarity: she makes Charlie a state affair, subjugating his identity into a totalizing image of the world, a world under one set of values that are seemingly universal. She actually devours Charlie.

Maybe the very technique of expressing solidarity by claiming to be that other person (“I am X, je suis Y”) has actually come to an end of its potential exactly in the moment of making “Je suis Charlie” a state affair. It died when Merkel, Cameron, and Netanyahu swallowed it.

But back to the boat.

We have a memory of images. And the images have memories of one another and of us. They remember and call one another. They linger in the realm of unsolved problems, of injustice unaccounted for, of double-standard leadership, of crisis and war. And sometimes they suddenly gather or eject like vomit or spill from this pool of data and memory that we have collectively been making and participating in. Then they appear in our news feed as unstable but precise rectifications of the sickening spam that we’re constantly bathing in. They are corrected images, photoshopped to put things together that are usually held apart, and to visualize the actual mess. The boat image is one of these corrected images. The person who photoshopped it has left no traces of authorship or copyright claims before they committed it to the collective feed. The mash-up image features a boat that had landed in our news feed a few days earlier full of exhausted people who were rescued from the Mediterranean, but it replaces the passengers with these Charlie-devouring leaders. It is up to us now to sink this boat.

- 1 See “Rabih Mroue’s The Inhabitants of Images,” in: e-flux, February 3, 2011, www.e-flux.com/announcements/35956/rabih-mroue-s-the-inhabitants-of-images/.
- 2 Patrick Kingsley, Alessandra Bonomolo, and Stephanie Kirchgaessner, “700 Migrants Feared Dead in Mediterranean Shipwreck,” in: *The Guardian* (International edition), April 19, 2015, www.theguardian.com/world/2015/apr/19/700-migrants-feared-dead-mediterranean-shipwreck-worst-yet.
- 3 Jim Yardley, “Rising Toll on Migrants Leaves Europe in Crisis; 900 May Be Dead at Sea,” in: *New York Times*, April 20, 2015, www.nytimes.com/2015/04/21/world/europe/european-union-immigration-migrant-ship-capsizes.html.
- 4 “MareNostrum to End—New Frontex Operation Will Not Ensure Rescue of Migrants in International Waters,” European Council on Refugees and Exiles (ECRE), October 10, 2014, www.ecre.org/operation-mare-nostrum-to-end-frontex-triton-operation-will-not-ensure-rescue-at-sea-of-migrants-in-international-waters/.
- 5 Adam Taylor, “Italy Ran an Operation That Saved Thousands of Migrants from Drowning in the Mediterranean. Why Did It Stop?,” in: *Washington Post*, April 20, 2015, www.washingtonpost.com/news/worldviews/wp/2015/04/20/italy-ran-an-operation-that-save-thousands-of-migrants-from-drowning-in-the-mediterranean-why-did-it-stop/?arc404=true.
- 6 Patrick Kingsley and Ian Traynor, “EU Borders Chief Says Saving Migrants’ Lives ‘Shouldn’t Be Priority’ for Patrols,” in: *The Guardian* (International edition), April 22, 2015, www.theguardian.com/world/2015/apr/22/eu-borders-chief-says-saving-migrants-lives-cannot-be-priority-for-patrols.
- 7 See “Campaign: Push Back Frontex! Against a New Dimension of Left-to-Die Policy at Sea,” *Afrique-Europe-Interact* (æ act), December 18, 2015, afrique-europe-interact.net/1294-1-Appell.html.
- 8 See “Concept of Reinforced Joint Operation Tackling the Migratory Flows Towards Italy: JO EPN-Triton,” Frontex, Operations Division Joint Operations Unit, August 28, 2014, studylib.net/doc/5338632/programma-dif-ferita-nuovo-regime-forfettario-e.
- 9 Özgün Topak, “Surveillance, Migrant Deaths, and Humanitarianism in the Mediterranean,” in: *openDemocracy*, April 28, 2015, www.opendemocracy.net/en/can-europe-make-it/surveillance-and-migrant-deaths-in-mediterranean/.
- 10 See “The 1951 Refugee Convention,” UNHCR, UN Refugee Agency, www.unhcr.org/pages/49da0e466.html [accessed October 14, 2020].
- 11 See “Joint Foreign and Home Affairs Council: Ten Point Action Plan on Migration,” European Commission press release, April 20, 2015, ec.europa.eu/commission/press-corner/detail/en/IP_15_4813.
- 12 More on The Stuart Hall Project on Facebook: www.facebook.com/TheStuartHallProject.
- 13 Adam Withnall, “Paris March: TV Wide Shots Reveal a Different Perspective on World Leaders at Largest Demonstration in France’s History,” in: *Independent*, January 12, 2015, www.independent.co.uk/news/world/europe/paris-march-tv-wide-shots-reveal-different-perspective-world-leaders-largest-demonstration-france-s-history-9972895.html.
- 14 Jeremy Scahill and Glenn Greenwald, “The NSA’s Secret Role in the U.S. Assassination Program,” in: *The Intercept*, February 10, 2014, theintercept.com/2014/02/10/the-nsas-secret-role/.
- 15 Michael Taussig, *Defacement: Public Secrecy and the Labor of the Negative*, Stanford/Calif.: Stanford University Press, 1999.





Captions for section three: **TROUBLED WITNESS**



present but not yet active was a collective performance, choreographed as a meeting with the curators of Manifesta 4. It took place at the Frankfurt zoo a month before Manifesta's opening. The work's aim was to have the curators experience the problems of display and visibility in front of the tiger's habitat. Three characters named "Grzimek" (after Frankfurt's famous zoo director and filmmaker Bernhard Grzimek) documented the scene from different viewpoints. The resulting video was given to the curators, who were named "Witnesses," as a documentation of the shared experience. ♦ Grzimeks: Stefan Pente, Ines Schaber, and Natascha Sadr Haghighian. *present but not yet active*, 2002, collective performance and video (13:34 min), Manifesta 4, Frankfurt, 2002. Curators: Nuria Enguita Mayo, Stéphanie Moïsson Trembley, and Lara Boubnova. Still from the video



Audio recording of a Leopard 2 battle tank at Panzerlehrbrigade 9, Oberlausitz, using a shotgun microphone ♦ Natascha Sadr Haghighian, *psst Leopard 2A7+*, 2013-. Still from video documentation, July 2014. Camera: Natascha Sadr Haghighian



ABC news coverage of the verdict in the trial against four police officers accused of beating Rodney King. The defense presented still images of the eyewitness video footage to argue that the officers had acted in self-defense and that Rodney King had been the aggressor. The officers were found not guilty, by a jury composed of ten whites, one biracial man, one Latina, and one Asian American. The verdict sparked the 1992 Los Angeles uprising. ♦ Screenshot from ABC News Archives, April 30, 1992, abcnews.go.com/Archives/video/rodney-king-beating-verdict-9922987 [accessed February 17, 2021]



Natascha Süder Happelmann standing in front of the Donauwörth Ankercenter. ♦ Natascha Sadr Haghighian, *social media series - Location: Alfred-Delp-Kaserne, Donauwörth*, 2018. Photo: Jasper Kettner



Natascha Sadr Haghighian, *Der Schutz der Sicherheit* (The protection of security), 2018 ♦ Exhibition view at *Von fremden Ländern in eigenen Städten*, Worringer Platz 5, Düsseldorf. Photo: Markus Ambach



Los Angeles Police Department officer Jin Oh displays video from a body camera during a news conference on December 16, 2014. The LAPD introduced body cameras in 2014 in response to increasing protests against police violence. The decision was immediately criticized by different groups and organizations as not helpful. The technology, promising more accountability, was only to be viewed by the police department itself and not available to the public. ♦ Kate Mather, "A Fight over Access to Video from LAPD Body Cameras Is Shaping Up," in: *Los Angeles Times*, February 5, 2015, www.latimes.com/local/crime/la-me-lapd-cameras-20150205-story.html. Photo: Marcus Yam / Los Angeles Times



Ali Shallal al-Qaisi was detained in Abu Ghraib prison from October 3, 2003, to October 13, 2004. A victim of torture and abuse, he later founded the Association of Victims of American Occupation Prisons, in Baghdad. In a video he describes how the interrogations that led to a photograph showing him on a cardboard box, hooded and holding electric wires, took place: "I enter through a door like this and I remember they had me stand like this, in this position. He then stretched my hand in this position and attached wires to them." ♦ Video still from the documentary *Lifting the Hood*, 2005, produced by SBS Australia, www.journeymen.tv/film/2870/lifting-the-hood



Aerial view of the weapons-manufacturing facilities of Krauss-Maffei Wegmann in a central part of Kassel, German, where parts of the Leopard 2A7+ battle tank are produced ♦ Screenshot from Google Maps



Filip Van den Wyngaert pointing out characteristics of bat calls at Fort Van Walem, a former military fort turned into a nature reserve in Mechelen Belgium. ♦ institute for incongruous translation (Natascha Sadr Haghighian and Ashkan Sepahvand), Carbon Theater - A Planetary Drama around Life and Nonlife Act III Dark Loops, 2019



Natascha Sadr Haghighian, *microscope*, 2006 ♦ Exhibition view at Carroll / Fletcher, London, 2012. Courtesy: Carroll / Fletcher



Thomas Keenan and Natascha Sadr Haghighian meet at a Whole Foods supermarket for part two of the seminar *Sleepwalking in a Dialectical Picture Puzzle*, to discuss photo ops and the agency of images. The conversation was recorded using a spy camera and headset microphones. *Sleepwalking in a Dialectical Picture Puzzle* was a three-day seminar, part of Anton Vidokle's Night School Public Seminar at the New Museum in New York. ♦ Natascha Sadr Haghighian, *sleepwalking in a dialectical picture puzzle, part 2*, 2008, with Thomas Keenan, seminar, video (57:37 min). Spy camera: Angela Anderson



Natascha Sadr Haghighian, *sleepwalking in a dialectical picture puzzle, part 2*, 2008, with Thomas Keenan ♦ Seminar, video (57:37 min). Spy camera: Angela Anderson



Whole Foods slogan "Healthy Farms" ♦ Screenshot from legacyplace.com/tenant/whole-foods-market/



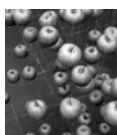
Whole Foods slogan "We know our roots" ♦ Screenshot from careers.wholefoodsmarket.com/global/en/locations



Cashier counter with makeshift COVID-19 protection in a supermarket in Bavaria, Germany ♦ Screenshot from "Bizarre Szenen im Supermarkt: Wie wir die Mitarbeiter vor Corona schützen," *Finanzen 100*, March 21, 2020, www.finanzen100.de/finanznachrichten/boerse/bizarre-szenen-im-supermarkt-wie-wir-die-mitarbeiter-vor-corona-schuetzen_H1476762123_11790948/



Cashier counters with makeshift COVID-19 protection in a supermarket in Schleswig-Holstein, Germany ♦ Screenshot from "Abstandsregeln und 'Spuckschutz': Supermärkte rüsten auf," *RP Online*, March 21, 2020, rp-online.de/panorama/coronavirus/coronavirus-abstandsregeln-und-spuckschutz-supermaerkte-ruesten-auf_aid-49682355. Photo: dpa / Frank Molter



Plastic apples suspended from the ceiling form a cloud as part of the installation *Fruit of One's Labour* at Frankfurter Kunstverein in 2008 ♦ Natascha Sadr Haghighian, *Fruit of One's Labour*, 2008. Photo: Natascha Sadr Haghighian



Fruit of One's Labour, exhibition view at the Aichi Triennale, Nagoya, Japan, 2016. Shredded money, euro pallet, all-burner stove, stovepipe, glass,

light, sound, decorative apples, dimensions variable ♦ Curator: Daniela Castro. Photo: Natascha Sadr Haghghighian



"Poultry workers inside a Fieldale Farms chicken processing plant in Gainesville, Georgia, USA, 27 April 2020." During the COVID-19 pandemic, patterns of negligence in various food industries are revealed as meat plant workers are exposed to increased health risks at already precarious working conditions. ♦ Screenshot from Oliver Laughland and Amanda Holpuch, "'We're Modern Slaves': How Meat Plant Workers Became the New Frontline in Covid-19 War," *Guardian* (International edition), May 2, 2020, www.theguardian.com/world/2020/may/02/meat-plant-workers-us-coronavirus-war



Video still from a news report on an accident at the junction between Strada Provinciale 105 and Strada Provinciale 110, in Puglia, where four agricultural migrant workers died and four others were injured when the van transporting the workers collided with a truck transporting tomatoes on August 4, 2018. The writing on the baseball cap in the midst of crushed tomatoes says, "LAVOROIN SICUREZZA.ORG, un progetto di RETE ISIDE ONLUS e USB" (I-work-in-safety.org, a project of Rete Iside ONLUS and USB). Many of the migrant workers protesting their working conditions, calling themselves *invisibili*, or "invisibles," are organized in the rank-and-file union USB (Unione Sindacale di Base). Agricultural work in Italy is organized by an agricultural mafia called *Caporalato*, creating often-deadly slave-labor conditions for migrant (and Italian) workers. ♦ Screenshot from Roberto D'Agostino, "Quattro morti al bivio tra Ascoli e Castelluccio: Le immagini sul luogo del tragico incidente," *FoggiaToday TV*, August 4, 2018, www.foggiatoday.it/cronaca/incidente-stradale/ascoli-castelluccio-sauri-foggia-morti-video.html



Location: Tomato fields near Ortona, Puglia ♦ Natascha Süder Happelmann, *social media series*, 2018. Photo: Jasper Kettner



Emanuel Leutze, *Washington Crossing the Delaware*, 1851, oil on linen, 378.5 x 647.7 cm ♦ Photo: Collection of the Metropolitan Museum of Art, New York, via Wikimedia Commons (public domain)



President Bush flashes a "thumbs-up" after declaring the end of major combat in Iraq, under a banner proclaiming "Mission Accomplished," aboard the aircraft carrier *USS Abraham Lincoln* off the California coast, in this May 1, 2003, file photo. ♦ Eugene Robinson, "Paying for Bush's 2003 Invasion of Iraq," in: *Washington Post*, August 11, 2014, www.washingtonpost.com/opinions/eugene-robinson-paying-for-bushs-2003-invasion-of-iraq/2014/08/11/2eee77ac-218a-11e4-86ca-6f03cbd15c1a_story.html. Photo: J. Scott Applewhite / AP



World leaders at a unity march in Paris on January 11, 2015, after the attack on the French satirical weekly newspaper *Charlie Hebdo* on January 7, 2015. More than 1.5 million people attended the rally under the motto "Je suis Charlie." The world leaders seem to be leading the rally. ♦ Unnamed author, "Digital Encounters: Deconstructing the Photograph of World Leaders at the Paris March," in: *Photoworks*, photoworks.org.uk/world-leaders-paris-rally-2015 [accessed February 18, 2021]. Photo from news coverage, source not stated



Wide shot of world leaders at a unity march in Paris on January 11, 2015, after the attack on the French satirical weekly newspaper *Charlie Hebdo* on January 7, 2015 ♦ Unnamed author, "Digital Encounters: Deconstructing the Photograph of World Leaders at the Paris March," in: *Photoworks*, photoworks.org.uk/world-leaders-paris-rally-2015 [accessed February 18, 2021]. Photo from news coverage, source not stated



World leaders adrift: a mash-up. The anonymous Internet mash-up appeared online on April 20, a day after a boat carrying more than seven hundred refugees capsized in the Mediterranean Sea south of the island of Lampedusa. The mash-up combines two images. The world leaders seen on the rubber raft stem from a photo of the unity march in Paris on January 11, 2015, after the attacks on the *Charlie Hebdo* staff. The original image of the rubber raft, taken by Marina Militare, the Italian Navy, showed a large group of refugees adrift in the Mediterranean.

beyond images





الفصل السادس في كيفية الابصار

قد تبين مما تقدم ان كل جسم مضيي ياتي ضوءا فان الضوء الذي فيه يصد
 منه ضوءا الى كل جهة تقابله فاذا قابل البصر فبصره ان البصر ان كان
 لمبصر مضييا ياتي ضوءا فان الضوء الذي في المبصر يرد منه ضوءا الى
 سطح البصر وقد تبين ايضا ان من خاصية الضوء ان يوتر في البصر وان من
 طبيعته للبصر ان يعمل بالضوء فخلق بان تايين احساس البصر بالضوء الذي
 في المبصر اذ ما هو في الضوء الذي يرد منه الى البصر وقد تبين ايضا ان كل
 جسم متلون مضيي ياتي ضوءا فان صورة اللون الذي في ذلك الجسم
 يذهب اذ الضوء الذي يصد عنه الى كل جهة تقابله اذ ذلك الجسم
 ويكون الضوء وصورة اللون ابدامعانا الضوء الذي يرد الى البصر من الضوء
 الذي في الجسم المبصر يكون ابدامعنا صورة اللون الذي في الجسم
 لمبصر واذا كان الضوء واللون يردان معا الى سطح البصر وكان البصر
 لحس بالضوء الذي في المبصر من الضوء الذي يرد اليه من المبصر

invisible

neo e
hype
ida

complex
personhood



ma.

essentialism

or real
entity



meme

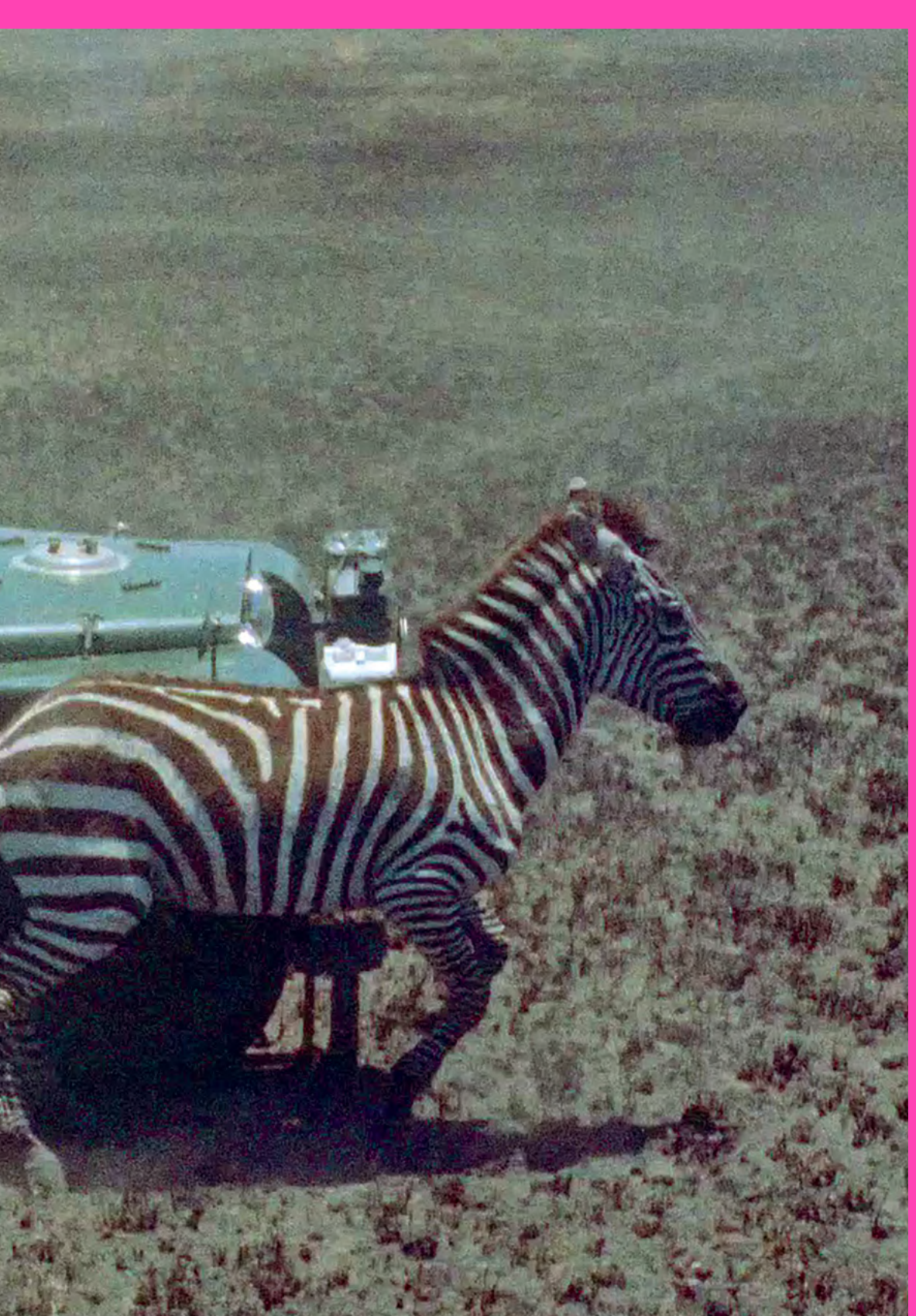
mimesis

I AM

Je suis Charlie

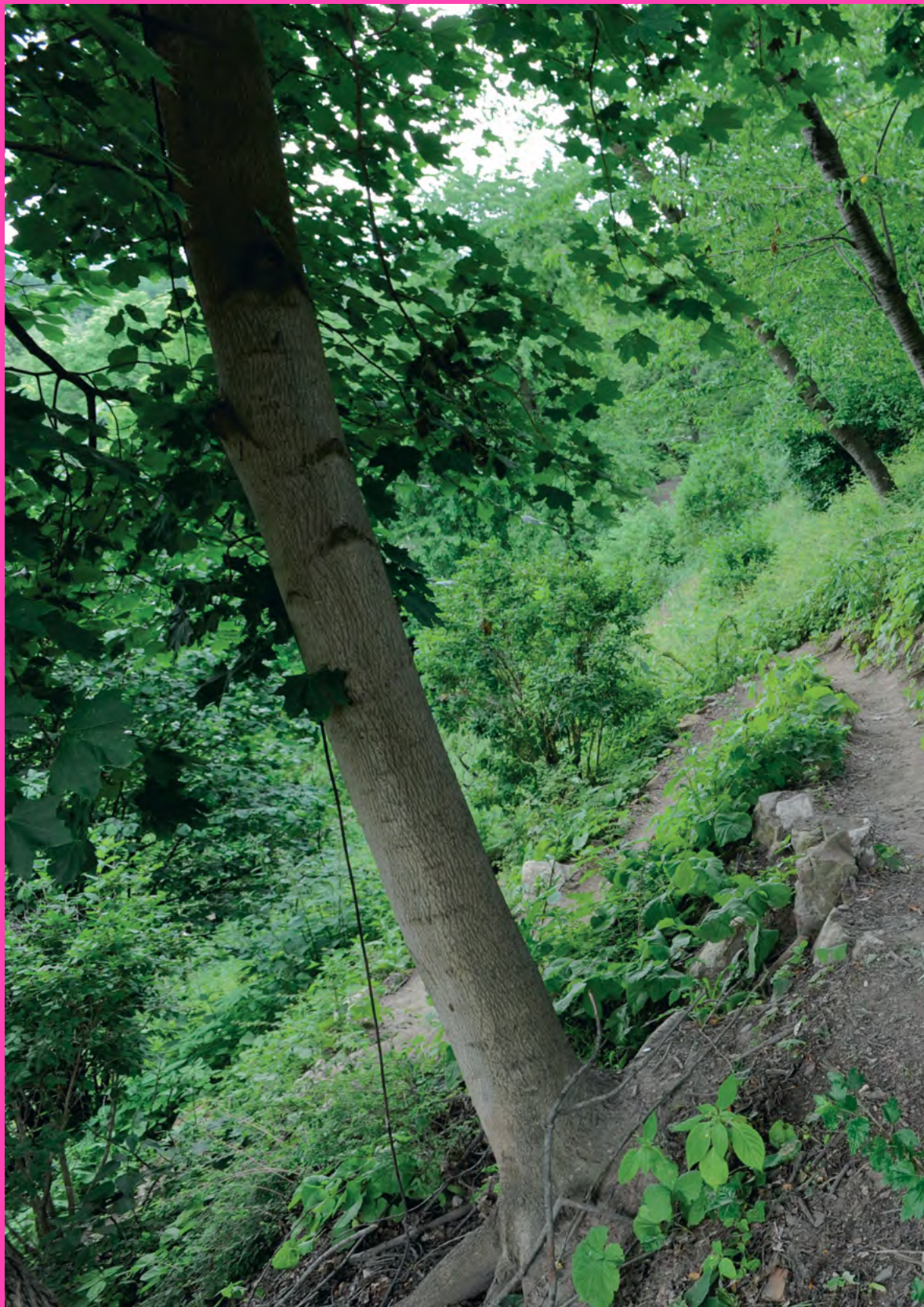
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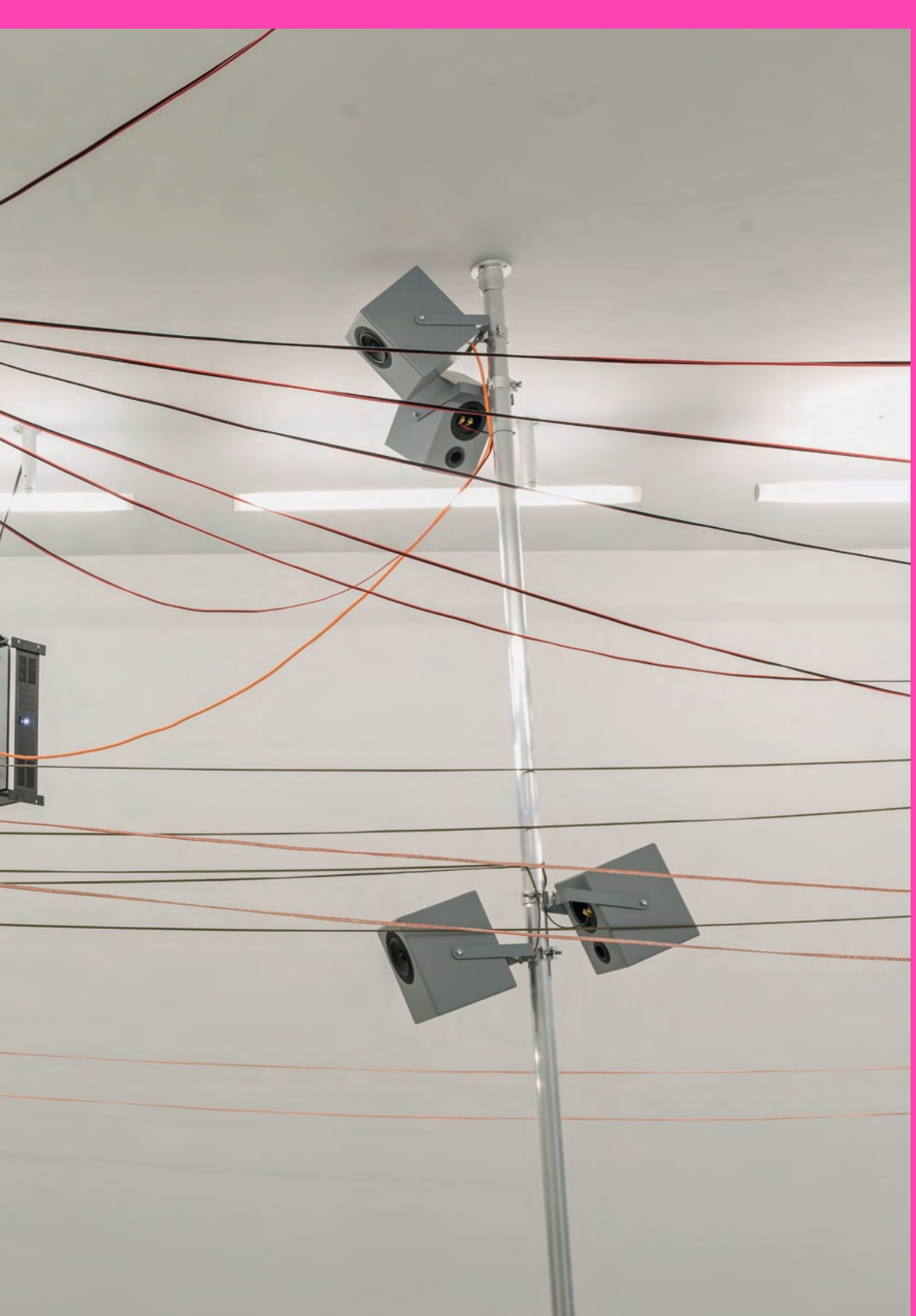












how to spell the fight – fish and fire

What will the future study group for liberation from autonomic computational governance look like?

James R. Murphy, a math teacher at LaGuardia High School, New York, has been teaching mathematics to sixth-grade students since the early 1980s. He regards mathematics as the most powerful and manipulable abstract language available to humans. Sadly, he has observed that students are often “math shy,” and therefore fail to acquire the ability to think in abstract terms and appreciate complex consequential phenomena. When he asks students to describe the additive or multiplicative inverse after three weeks of beginning algebra, Murphy is often met with blank stares. Simple yet seemingly inaccessible concepts seem to induce a state of amnesia.

I remember thinking, in fifth grade, that my brain would be incapable of ever grasping mathematics. At the time, the teacher only confirmed my fear with an indifferent shrug. During class, my head wandered elsewhere, while my hands kept busy drawing repetitive patterns or androgynous faces with European noses. The sketches that filled the margins of my exercise book left the center of each page awkwardly empty.

James Murphy overcame his students' disenchantment with algebra by devising a way to involve the hands in order to unfold the brain's potential to think abstractly and problem solve. As the principal of a college-preparatory school serving minority communities, he used string figures to acquaint students who don't "like" math with abstract and systematic thinking.

String-figure making consists of a succession of elementary operations or simple procedures that involve a loop of string and one's fingers.¹ Usually, a string figure is created by passing the loop of string from one pair of hands to another until the succession of movements produces a final figure. Sometimes intermediary positions in a sequence constitute figures too. When introducing the concept of inversion to his students, Murphy starts with a simple string figure called "The Trap". "The Trap" begins with a sequence known as Opening A, the beginning of almost all string figures. In the next step, a volunteer's wrist is first "caught" in the string, and then set free by repeating the earlier move Opening A.²

Opening A

Hold a loop of string in your right hand and then place it behind and around your left thumb and little finger. Repeat the above step with the right hand. This is the starting position. Now bring your right middle finger to scoop up the string from your left palm and pull it back. With your left middle finger, scoop the string from your right palm and pull it back. This is called Opening A, the most common base figure.

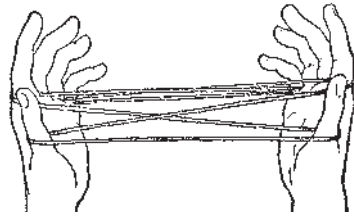
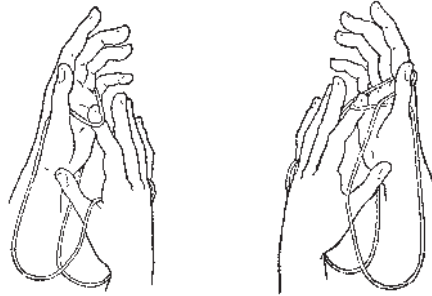
The concept of inversion is also found in a more complex series of figures named Ten Men. In a sequence of moves, weave A is followed by weave A', which results in a return to the original loom. The erasure of the two weaves indicates the existence of reciprocals. Mathematically, reciprocals must exist for a system to qualify as a group, a central organizing principle in modern mathematics. And this is how Murphy introduces math to his students. He considers string figures mathematical objects, in line with an expanded

definition of mathematical ideas described as any idea “involving numbers, logic or spatial configurations and even more significantly, combinations or organizations of those into systems or structures.” This definition was advanced in 1991 by Marcia Ascher, a pioneer in ethnomathematics.³ In order to expand a concept of math beyond the constraints of Western notation, she sought to consider practices of weaving and other pattern making as a form of mathematics prevalent in societies with a strong sense of oral tradition.

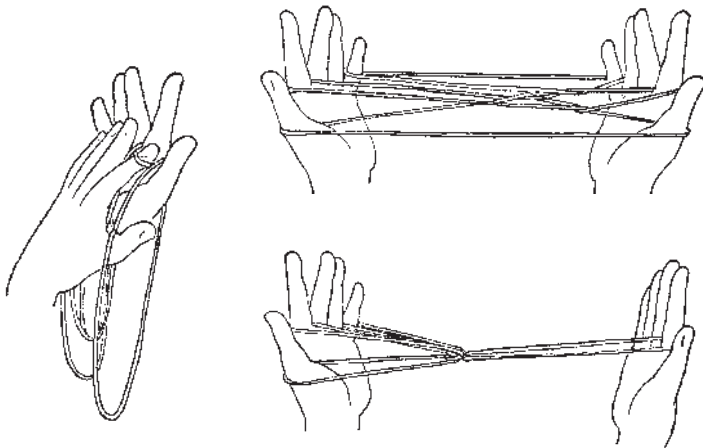
Making string figures is a ubiquitous practice that goes back to the prehistory of humankind. Its origins are unknown, but it belongs to very early human activities. As a global practice, string figures were introduced to Europe in 1888, presumably through the anthropologist Franz Boas. Recording and description of the practice started in 1902, when anthropologists and ethnologists W. H. R. Rivers and Alfred. C. Haddon developed a language for recording the sequences that lead to a string figure. With this invention, anthropologists rushed to collect and map figures from around the world. As they searched for contact patterns that would be evident in similarities of form, they hoped to trace and “prove” that prehistoric contact occurred. Whether or not these practices spread through actual contact is still disputed. But the practice of making string figures exists in indigenous cultures around the globe. Similarities are apparent in core figures existing in places as far apart as the Pacific Islands, North America, Australia, Africa, and Asia, even though the names given to the forms often vary. A figure, for example, known as “A Fish Spear,” which was found on Murray Island, or Mer, located north of Australia, is identical to that of “Pitching a Tent,” which belongs to the Coast Salish indigenous people in British Columbia, and is also called the “Sea-Egg (Echinus) Spear” by the Nuu-chah-nulth, living on the Northwest Coast of Vancouver Island.

A Fish Spear

1. *Loop the string on both hands in the First Position.*
2. *Insert the right index, from above, behind the string crossing the left*



Opening A



Fish spear

palm, and draw out the loop to the right, twisting the string several times by rotating the right index.

3. With the left index, pick up from below the string crossing the right palm, being careful to pick up the section between the strings of the right index loop and the right index, where the loop is not twisted . Separate the hands and draw the strings tight .

4. Release the loops from the right thumb and little finger and separate the hands. The points of the spear will be on the thumb, index, and little finger of the left hand, and the handle will be held by the index of the right hand .

Often words were muttered or songs were sung while making the figures, which, according to Haddon, made little sense.⁴ Whereas early anthropologists and ethnologists considered the string figure an expression of “primitive mentality” and therefore “prelogical,”⁵ the interdisciplinary approach of ethnomathematics, founded in the 1970s by Brazilian mathematician Ubiratàn D’Ambrosio, views them as manifestations of profound visuospatial⁶ mathematical procedures. A focus of ethnomathematics is the study of cultural variations within mathematics, especially with regard to geometrical forms and abilities, and this movement has more recently promoted the teaching of mathematics in connection with an appreciation of indigenous knowledge. Based on the string figures collected by anthropologists around the world, mathematician Eric Vandendriessche recognizes string figures (in essence, sets of elementary operations organized in procedures) as the result of genuine algorithms.⁷ Moreover, he suggests that string-figure algorithms are of a “geometrical” and “topological” order, insofar as the algorithmic practice at base investigates complex spatial configurations with the aim of expressing a two- or three-dimensional figure. This topological characteristic of string figures is confirmed by the way one figure (or drawing) transforms into another.

While I observe my fingers twisting and stretching string into figures, I cannot help but notice a resemblance to an experience of navigating virtual spaces, whether two-dimensionally in handheld devices like phones or three-dimensionally with the use of data gloves and VR controllers. Surely, virtual surfaces hold a visuospatial

memory of what hands used to fiddle with and handle. Such visual space often employs mimetic translations of familiar spatial interfaces such as knobs or sliders that are the result of algorithms, which visually emulate their physical counterparts. In the device, the interface between my hands and the abstract space of command language is guarded and only allows limited access to its algorithmic layers. Instead, those layers return to me as friends' selfie streams, Google results, shopping items, or news, highlighting the convenience of result-oriented interaction instead of enabling ever-more abstract levels of engagement. This shop-window deal, I suspect, de-skills not only my hands but also my cognitive capacity to understand involvement. I lose my sense of "whereness" in relation to what I do; I lose the relation or entanglement of objects and procedures, conditions associated with topological disorientation.

Returning to the physical string in my hand, I wonder what this resemblance all means. If there is a topological operation at the core of bending, twisting, deforming, and weaving a loop of string into algorithmic figures—abstract forms that function as images, stories, and the somatic storage of ideas—what can this tell me about the spatial relation between my fingers and my phone, or at this moment, the keyboard of my computer?

In the stack that characterizes today's planetary-scale computation,⁸ the interface is the intersection between the micro and macro layers of this megastructure. Whereas the spatial totality of the stack is difficult to grasp, the concept finds concrete expression in the space between my finger and a digital device. This space is a site of direct interaction between algorithm and body in the service of big-data patterning. Both infrastructure and design are expressions of the forces that govern this space on micro and macro levels.

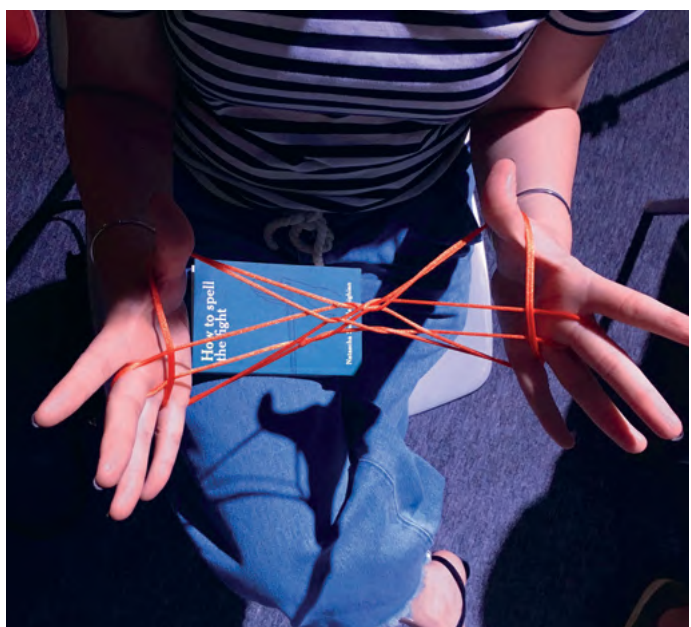
The movement of the index finger and thumb when interacting with algorithms on my phone emulates many of the gestures used to bend string into figures. In both cases, my gestures produce algorithmic suggestions in the form of images, stories, and ideas. Moreover, the space between my hands when I make a string figure

uncannily resembles a display when holding a digital device—a window into abstraction. As if someone pulled the string from my hands and replaced it with a phone. Or rather, did the string turn into a phone over time? If there is a rationale behind this semblance, then how did the practice of visuospatial cognition fold into the ever-transforming touch between my fingers and the algorithms of my phone? Is the somatic memory forged by the age-old practice of creating string figures still stored in muscle tissue, movement patterns, and fingers trying to form a thought? Even an addictive potential seems to linger; today, as before, algorithms still know how to keep my hands occupied.⁹

Observing this resemblance releases a hollow pain, although I find it difficult to pinpoint its origin. Is it in the ligaments, or the muscles, or the dense nerve endings in my fingers? Or is it in between my hands and my brain, somewhere in the branching nervous tissue that starts bending under the sudden recognition of loss or collapse of space? What I lost, what collapsed, I'm not sure.

Topology examines how space is preserved under conditions of duress, incursion, and folding.¹⁰ One of the conditions of duress my hands sense can be traced to the destructiveness and ignorance that characterizes the modern project itself. In its course, modernization excluded practices that were considered “primitive,” while at the same time absorbing them into its machinic order. A practice like string-figure making was considered worthless by colonizers and scientists, as it served no purpose, belonged to the informal domestic sphere of children and elders, and did not fit definitions of Western mathematics. Yet, the modern project still collected and analyzed these practices, while at the same time encroaching on the very land that supported the survival of indigenous societies, causing them to crumble and fold. More specifically, colonial scientists used string figures as a universal baseline of expression that enabled them to access these communities.

As A. C. Haddon once told anthropologist Louis Leakey: “You can travel anywhere with a smile and a piece of string.” The violent



incursion into indigenous societies, the space under duress, is enacted through a piece of looped string that becomes abstracted in the form of a line, a conceptual apparatus of modern progress and the industrial age that is now expressed as code, which operates the application that my fingers fiddle with today.

Fingering the line from string to geometric drawing to the nodes of the Internet, I try to understand the power of geometry, the language of the line, “a language full of ambition [...] with the power to conjure the future,” as Molly Nesbit writes.¹¹ Every generation grows up in the presence of a different line. When one line loses its abilities, the next one thrives. Every line comes with a new motto, beaconing the educational doctrine of the time, schooling the hands and the brains of a generation toward a pointed purpose (or product). At school, the line always extends into the future.

Ten Men

1. Begin with Opening A.
2. *With the teeth, draw the far little finger string toward you over all the strings, and bend the left index over the left string of the loop held by the teeth, and return the left index to its position. Bend the right index over to the left, and pick up from below the left string of the loop held by the teeth, and return the right index to its positions. Now release the loop held by the teeth, separate the hands, and draw the strings tight. You now have two loops on each index, a loop on each thumb, and a loop on each little finger.*
3. *Release the loops from the thumbs and draw the hands apart.*
4. *Put each thumb away from you, under the index loops, and pick up on the back of the thumb the near little finger string, and then return the thumb to its position.*
5. *Pass each thumb over the lower near index string, and put it from below into the upper index loop, finally drawing the thumb away from the index in order to enlarge the loop now passing around both index and thumb.*
6. *With the left thumb and index (or the teeth), pick up the right lower near thumb string closest to the right thumb, and draw it over the tip of*

the thumb , and let it drop on the palmar side, careful not to disturb the upper thumb loop. In the same manner, with the right thumb and index (or the teeth)[,] pick up the left lower near thumb string closest to the left thumb, and draw it over the tip of the thumb , and let it drop on the palmar side. Separate the hands.

7. Withdraw each index from the loop, which passes around both thumb and index, and draw the strings tight.

8. Transfer the thumb loops to the index fingers by putting each index from below into the thumb loop (Fig. 15, right hand) and withdrawing the thumb.

9. Put each thumb away from you under the index loops, and pick up the loops on the back of the thumb closest to the little finger string, and return the thumb to its position.

10. Pass each thumb up over the lower near index string, and put it from below into the upper index loop, and draw the thumb away from the index in order to enlarge the loop now passing around both index and thumb.

11. With the left thumb and index (or the teeth), pick up the right lower near thumb string closest to the right thumb, and draw it over the tip of the right thumb , and let it drop on the palmar side, being careful not to disturb the upper thumb loop. In the same way, with the right thumb, draw it over the tip of the left thumb , and let it drop on the palmar side. Separate the hands.

12. Bend each middle finger over the upper far index string, and take up from below on the back of the finger the lower near index string (the one passing from index to index) , and return the middle finger to its position.

13. Release the loops from the little fingers, and turn the palms away from you. The figure is extended between the thumbs and the middle and index fingers held close together.

Ten Men is the first in a series of five closely related Caroline Islands figures, which[,] after *Opening A*, are based on the addition of index loops formed from the far little finger strings. Since the ninth, tenth, and eleventh movements are repetitions of the fourth, fifth, and sixth, the figure is simpler than it appears at first sight.

While the anthropologists were harvesting string figures, a new curriculum was introduced in French classrooms as part of the

so-called Ferry reforms. During this period, students acquired the language of the line because drawing was made a compulsory skill answering calls from industry to forge a future generation of engineers. The curriculum introduced in 1880, as Nesbit describes in her text “Ready-Made Originals,” established drawing as a regular language.¹² Although the drawing instructions were designed by a sculptor named Eugène Guillaume, drawing was not taught as a poetic or artistic form of expression, but rather foremost as a business language. Industry and art were merged in geometric drawing, and their shared language was the geometric line that was taught through repetitive, laborious drilling in the classroom. Students had to draw straight and curved lines, perfecting the circle and square, the hexagon and trapezoid. Drawing after nature was not part of the curriculum, since a nonretinal view of the world was to be built: the cylinder, cone, and sphere all had to be rendered by students, who also learned about plan and elevation views, the better to create utilitarian household objects like chairs, rakes, pots, umbrellas, windows, and coffee grinders. After 1909, some modifications were made to the curriculum, introducing color theory and drawing after nature. Yet the utilitarian approach to drawing prevailed and cast thinking as a nonambiguous, logical activity.

Marcel Duchamp, who grew up with the vocabulary of the Guillaume method, subverted its alphabet by adding an illogical contradiction: “I did a coffee grinder which I made to explode; the coffee is tumbling down beside it; the gear wheels are above, and the knob is seen simultaneously at several points in its circuit with an arrow to indicate movement.”¹³ Duchamp’s approach to drawing the object was in defense of the fundamental ability to make a choice not offered by the predictive, commodified program of exchange posited by the shop window. He insists on the poetic liberation of the line:

When one is interrogated by shop windows, one is also pronouncing one’s own sentence. In fact, the choice is a round trip. From the demands of the shop window, from the inevitable response to the shop window, comes the end of choice. No obstinacy, out of absurdity, hiding the coitus through the glass with one or more objects from the shop window. The

*sentence consists in cutting through the glass and regretting it once possession is gained. Q.E.D.*¹⁴

He ends with an abbreviation for the Latin phrase “quod erat demonstrandum” (what was to be demonstrated), suggesting that geometry could be used in the implementation of a wicked plan. QED points to the predictive framing inherent in the geometric construction of the shop window. As a space of commodification, this glass display fucks with your eyes, goading a desire for visual penetration that emulates interaction with that of devices to come.

Amyl Nitrate is the protagonist of queer experimental filmmaker Derek Jarman’s 1978 film *Jubilee*. She is named after a drug that relaxes the muscles and blood vessels, causing a rush of oxygenated blood to the brain (aka poppers). Amyl leads a future underground female punk study group in a discussion about their school motto, “Make your desires reality.” She contends that artists can easily make desire into reality, and once that task is accomplished, art will become redundant.

She, herself, prefers the message “Don’t dream it, be it,” taken from a song in *The Rocky Horror Picture Show*. Amyl is a radical style icon of anarchic individualism and the No Future generation; she embodies all that is new and unique. And so it is no surprise that she and her radical expression of subjectivity is quickly absorbed by the very system she aims to rail against, as she signs with media mogul Borgia Ginz (“What can I do for you? Or rather, what can you do for me?”) to perform “Rule Britannia” as a contestant on the Eurovision TV show.¹⁵ Ginz is a Malcolm McLaren figure. Today, he would be the CEO of a start-up incubator comparable to Google, or rather, Alphabet Inc. Ginz introduces himself:

You wanna know my story, babe, it’s easy. This is the generation who grew up and forgot to lead their lives. They were so busy watching my endless movie. Its power babe, Power! I don’t create it, I own it. I sucked, and sucked, and sucked. The media became their only reality and I owned their world of flickering shadows. BBC, TUC, ATV, ABC, ITV, CIA,

NFT, MGM, KGB, C of E. You name it, I bought them all and rearranged the alphabet. Without me, they don't exist. ¹⁶

In this snapshot of neoliberal capitalism, sucking and absorbing are equivalently led and fed by desires and weave the alphabet of the commodity.

Jump forward to 2033. Azuma, an artificial intelligence from artist and filmmaker Zach Blas's short film *Contra-Internet: Jubilee 2033* (2014–2018), describes a flat geometric world consisting of only vertices and edges. A contemporary take on Jarman's film, Blas's work pictures the next generation of the study group as a squad of queer guerillas led by an art professor. They have just taken over the Silicon Zone and have turned it into an anti-campus, killing the co-founder of PayPal, Peter Thiel, and taking hostage all the start-up techies. Their lecturer is Nootropix, a contra-sexual AI prophet, who sits at a glass desk in front of a liquid backdrop and reads from their latest publication, "The End of the Internet (As We Knew It)." Nootropix reads:

Do you remember when internet evangelists re-wrote our alphabet and invented the world anew as a total reticular geography? Our lives dripped with Internet, in a process that was more like saturation—doused and drowned. But the earth dematerialized, and our bodies became geometric prisons. Suddenly, conquests were much easier in front of a screen. The future could be modelled, predicted.

The school's slogan during Nootropix's formative years was "don't be evil," which was also Google's ubiquitous motto and (unofficial) code of conduct until it was changed to "Do the right thing" after its 2015 restructuring under new parent company Alphabet Inc. This motto remained in place until the idea of having one was completely abandoned in April 2018. Coincidentally, the latter motto was also the Wi-Fi password for Internet access in the Google shuttle busses.

Nootropix closes their lecture by activating a 3D rendering with the press of a button. They start to dance on a geometric weave of

vertices and edges similar to the flat world Azuma described earlier. The mesh, devoid of textures, not only carries the memory of the shop window, the display, the screen but also, as an inner writing, the weave of a string-figure. Nootropix's dance on the mesh bends the vocabularies of yoga, gym posing, and dildotectonics (from the Countersexual Manifesto by Paul B. Preciado). In an endless cycle, their blue, erect, 3D-rendered strap-on dildo pisses a stream of digital liquid video onto (or into?) the hollow surface of waves from which the stream of data-piss emanates. The movement of the dancing body curves, bends, twists, and stretches the parabolic line of digital piss stream. That line holds the potential for all possible images, stories, geometries, school mottos, educational doctrines, social differentiations, and world views. This is the world as image¹⁷ in an endless stream of *Bild und Bildung*, mere busyness, the Californian everything is everything, a blend of digital and carnal fluidity.

As Nootropix tries to take back the space that lies beyond the limits of this geometric prison, pain comes back. All movements are flickering shadows of desire that are absorbed as quickly as they emerge. I'm not even sure what I'm breathing. The body is so saturated with its surrounding geometry, or in Nootropix's words, "doused and drowned," and "dripped with Internet" that the line is excreted from every pore and orifice. Bodies weep, drool, drivel, and exude predicted lines, vertices, and edges of and into the totalizing geometric order.

Although this order pretends to be constructive, endlessly additive and limitlessly receptive, in short, a free space, guided by the motto "Do the right thing," this system has actually absorbed and seized all stories, voices, and spaces. All thinking that matters has been violently disrupted, crunched, fragmented, neutralized, and collapsed. A geometry without world.

In search of spaces of companionship, intimacy, and experience, there is an urgent need to form new study groups and devise ways of reverse engineering this geometry without world. By now, it is clear that the school will not facilitate this study, at least not through institutionally sanctioned activity. Over the past 150 years,

the alphabets that structure life have been successively written by ever more corporate forces, and now in the era of algorithmic governance, alphabets can write and rewrite themselves with incomprehensible speed. Voilà, end of story.

Or we could ask James Murphy to help us learn to use our hands again in order to explore principles of additive and multiplicative inversion that might undo the planetary scale of computational prisons, algorithmic institutions, and enslaving logistics. Stefano Harney has suggested that thinking and making algorithms might teach us how to build the alternative infrastructures we urgently need today.¹⁸ For this very reason, I suspect that the future study group has a great deal to learn from the practice of making string figures. Donna Haraway has already given us our assignment—“think we must!” she has urged¹⁹—and also pointed to string-figure making as a cognitive exercise in complex thinking, patterning, and entanglement. In thinking with “fingery eyes,” a topology can be developed that ties infrastructure to joy.²⁰

As the sky closes in on us everywhere, I suspect the joyfully militant future infrastructuralists will soon have begun the urgent work of reverse engineering as they gather in study groups in many places. These groups will have studied string figures and the topologies of alternative infrastructures. They will have fought the agnosia produced by never-ending cycles of suggestion and prediction. They will have taken back the life that has been sucked into the vacuum of the colonial order.

Haraway has taught us that the worlds of “SF”—string figure, science fiction, speculative fabulation, speculative feminism, science fact—are not containers but rather patternings, risky comakings, and propositions. Patternings that make and preserve space for relaying, thinking with, and becoming within material-semiotic makings. The future study group will therefore involve a process of thinking together as an ongoing relay of patterns, in which one hand or pair of hands, mouth and feet, other body part or other being, will receive something, and in turn, add something new,

proposing another knot, another web. Take the word *algorithm*. Its story is buried in the workings of agnosia²¹ but reappears as a string figure in the form of the fish spear.

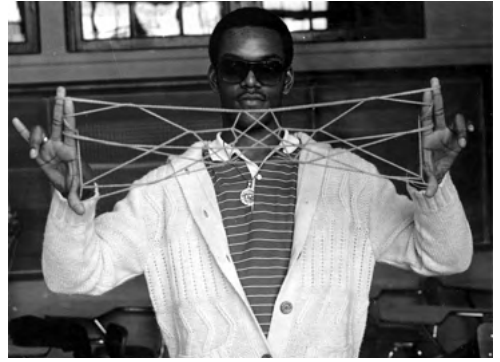
The Persian mathematician Muhammad Ibn Musa al-Khwarazmi (محمد بن موسیٰ خوارزمی), or Khorazmi, was born around 780 in the oasis region of Khorazm, and he worked most of his life in Baghdad. His book *On the Calculation with Hindu Numerals*, written around 825, was in the twelfth century translated into Latin as *Algoritmi de numero Indorum* (Al-Khwarizmi on the Hindu Art of Reckoning). From the name of the author, written in Latin as *Algoritmi*, originated the term *algorithm*. Khorazmi's books were responsible for the introduction of Hindu-Arab numerals and algebra to Europe.²² Whereas the algorithm in today's mathematics and computer science most commonly refers to a set of rules that specifies a sequence of operations, in the Portuguese and Spanish languages, the word simply means "number."

Discussion surrounding the root of the name given to Khorazmi's birthplace has given rise to various versions of a story. According to a legend told by the physician and astronomer Zakarya al-Qazvini, best known for his cosmography *The Wonders of Creation*, four hundred elders were said to have challenged the king, who in turn had them exiled to a distant land. When visiting the exiled community, the king asked how they were holding up, to which they responded, "We have fish, we burn firewood, we grill the fish, and eat it."

ما ماهی داریم و هیزم، ماهی بریان م یکنیم و م یخوریم.

The word خوار meant "eat" or "meat" and هیزم meant "firewood." Both words together, خوار and هیزم, meant "fight," رزم, in the language at that time. Hence, the place became known as Khorazm, fish and fire, or simply fight, thereafter. Although this story is not based in science, many historians and geographers have referred to the narrative over the centuries.

Khorazm, Khwarezm, or Khawarizm, today, is located between Uzbekistan, Kazakhstan, and Turkmenistan, south of the (former) Aral Sea on the Amu Darya delta. This area was historically rich in fish,



due to its close proximity to the Aral Sea, which was once one of the four largest lakes in the world. In more recent times, this sea served as a source of water for cotton irrigation, and later hydroprojects and oil exploitation, which depleted the lake almost completely. The near disappearance of the Aral Sea has caused toxic dust storms and catastrophic changes in the region's microclimate and ecosystem and has even given rise to poverty, due to the collapse of the fishing industry. These crises have also led to a condition of agnosia and an inability to relate to the language produced by the landscape that yielded this place its name. Khorazm emerges as a string figure of complex entanglements that unfold in the algorithm, or the fish and fire, or the fight. Learning to think and therefore act within topological, processual patternings not only entails tracing what turned fish and fire into algorithm but also involves developing a language to spell them as one inner writing.

- 1 Eric Vandendriessche, *String Figures as Mathematics? An Anthropological Approach to String Figure-Making in Oral Tradition Societies*, Cham: Springer, 2015.
- 2 All string figure instructions are quoted from Caroline Furness Jayne, *String Figures and How to Make Them: A Study of Cat's-Cradle in Many Lands*, New York: Charles Scribner's Sons, 1906.
- 3 Marcia Ascher, *Ethnomathematics: A Multicultural View of Mathematical Ideas*, Boca Raton/Florida: Chapman and Hall / CRC, 1991, p. 3, quoted in Vandendriessche, *String Figures as Mathematics?*, p. 3.
- 4 Alfred C. Haddon, introduction in: Jayne, *String Figures and How to Make Them*, p. xvii.
- 5 "In defining it [primitive mentality] as prelogical I just want to say that it does not compel itself first and foremost to refrain from contradiction, as our way of thinking does." Lucien Lévy-Bruhl, *How Natives Think*, transl. Lilian A. Clare, London: George Allen & Unwin, 1910, p. 76.
- 6 Visuospatial skill is the cognitive ability to represent, analyze, and mentally manipulate two- and three-dimensional objects. It helps when fathoming distance or when reaching for objects in the visual field. According to autism researcher Michelle Dawson, atypical cognitive mechanisms cause visuospatial peaks in autistic cognition. Amanda Baggs, an American blogger who has been diagnosed with autism, demonstrates this distinctive visuospatial ability and language in the video "In My Language" on YouTube, January 1, 2007, www.youtube.com/watch?v=JnylM1hI2jc. In contrast, visuospatial dysgnosia is a loss of the sense of "whereness" between oneself and one's environment and in the relation with and between objects, which is often linked to topological disorientation.
- 7 Vandendriessche, *String Figures as Mathematics?*

- 8** The stack, according to Benjamin Bratton, includes six layers: earth, cloud, city, address, interface, user. Benjamin Bratton, *The Stack*, Cambridge/Mass.: MIT Press, 2015.
- 9** String-figure making was generally embedded into a system of prohibitions and prescriptions. For example, Inuit societies prohibited playing string figures in the presence of sunlight, and when too eagerly pursued, there was the danger of getting carried away. The Netsilik Eskimos recount the story of Tuutannguarjuk, the dangerous spirit of the string figures, who challenged a child playing string figures at night, tricking the youngster into a competition that would have led to the child's seizure had not one of the adults suddenly woken up, causing Tuutannguarjuk to flee.
- 10** Fred Moten has explained that "Black topological existence [...] is all about the making and preservation of space under duress." Within this context, topology can be understood as a form of world making that includes mobilizing joy as a specific modality of social existence in the interest of its own self-protection. Robin D. G. Kelley and Fred Moten in conversation at the University of Toronto, April 2017.
- 11** Molly Nesbit in conversation with Ashkan Sepahvand, unpublished transcript, *Seeing Studies* 2010.
- 12** Molly Nesbit, "Ready-Made Originals: The Duchamp Model," in: *October*, no. 37, Summer 1986, pp. 53–64.
- 13** Quoted in *ibid.*, p. 60.
- 14** Quoted in *ibid.*, p. 61.
- 15** Derek Jarman, "Jubilee": *Six Film Scripts*, Minneapolis: University of Minnesota Press, 2011, p. 61.
- 16** *Ibid.*, pp. 56–57.
- 17** Der Grundvorgang der Neuzeit ist die Eroberung der Welt als Bild. Das Wort Bild bedeutet jetzt: das Gebild des vorstellenden Herstellens. In diesem kämpft der Mensch um die Stellung, in der er dasjenige Seiende sein kann, das allem Seienden das Maß gibt und die Richtschnur zieht." Martin Heidegger, "Die Zeit des Weltbildes," in: Heidegger, *Holzwege* (Gesamtausgabe, vol. 5), Frankfurt/Main: Vittorio Klostermann, 1977), p. 94. English: "The fundamental event of modernity is the conquest of the world as picture. From now on, the word 'picture' means: the collective image of representing production [das Gebild des vorstellenden Herstellens]. Within this, man fights for the position in which he can be that being who gives to every being the measure and draws up the guidelines" (Martin Heidegger, *Off the Beaten Track*, transl. and ed. Julian Young and Kenneth Haynes, Cambridge: Cambridge University Press, 2002, p. 71).
- 18** Stefano Harney, "Logistical Infrastructures and Algorithmic Institutions," lecture on the occasion of the project *Former West: Documents, Constellations, Prospects*, Haus der Kulturen der Welt, Berlin, March 20, 2013, www.formerwest.org/Documents-ConstellationsProspects/Contributions/LogisticalInfrastructuresandAlgorithmicInstitutions.
- 19** Donna J. Haraway, *Staying with the Trouble: Making Kin in the Chthulucene*, Durham/North Carolina: Duke University Press, 2016, pp. 34–47 passim.
- 20** *Ibid.*, pp. 174 note 6, 183 note 45. Haraway borrows the term "fingery eyes" from Eva Hayward. See *ibid.*
- 21** Thanks to Kodwo Eshun for introducing the term agnosia as a "work of forgetting" in his lecture "We Have Delivered Ourselves from the Tonal—Of, with, towards, on Julius Eastman," at *Savvy Contemporary* in Berlin in March 2018.
- 22** The introduction of algebra was tremendously significant, as it moved away from Greek concepts of mathematics and replaced it with mere calculation by introducing variables to be able to work with unknown figures. The word algebra is interesting, as it means both "duress, coercion" and "joining broken parts" in the Arabic original *al-jabr* (الجبر).

NATASCHA SADR HAGHIGHIAN > In your text “Signs in the Horizons”¹ you used the expression “the era before art,” coined by Hans Belting,² to frame a period in medieval Islamic societies and to locate possible meanings of figural representation at that time, also to hint at the significance of image making that was applied for certain purposes outside of the context of worship. The text starts with this misunderstanding of an alleged “Bilderverbot,”³ a prohibition of images in Islamic cultures, as one of the most ingrained misconceptions in the mainstream appreciation of Islamic art. And then you set forth the different ways of where and how images actually did appear and how they may have simply occupied other places and had other functions than representation or worship.

< **OYA PANCAROĞLU** Yes, a Bilderverbot exists, one which is very explicit: worshipping the image is forbidden. This interdiction is crystal clear, unarguable; and if you

violate it, you're in trouble. Things relax, however, the minute we leave that area of worship, outside of which the question becomes purely one of time, place, mood, and context, independent of whether a Bilderverbot is in effect or not. Moreover, the possibility of having an image can be found in every segment of the continuum spanning from the private to the public, as long as no intersection with worship occurs. Personally I don't see why the misconception about images in Islam is so ingrained, since it's so clear where the Bilderverbot lies. So why does this big misconception prevail? Look at the earliest coins in the Islamic world. They depicted images. Initially, in the Umayyad Caliphate, Byzantine coin types were selected; then they were imitated, slightly altered, and writing was added to them. Afterwards the Umayyads went through a phase during which they developed their own images for coins; and subsequently, in the 690s, the caliph 'Abd al-Malik implemented a monetary reform to standardize the weight of coins throughout the empire. He simultaneously changed the look of the coin, by making it exclusive of everything except writing. All of this he did as a matter of course, also because writing was so important for this emerging culture; however, the idea wasn't necessarily to declare a rejection of the image on the coinage. There had been portraits, not realistic portraits, but more the idea of the image of the caliph, on the transitional, early coins bearing images. Then these "portraits" on the coinage were combined with writing, especially with statements of faith about God and the Prophet. It was only after these fairly complicated visual-textual developments that the monetary reform came along to change the look of coinage and eliminate its figural component. The coin is a very public thing—it circulates—in that sense it is public art. And these changes in the look of the coinage had to do with the assertion of a new cultural and religious identity made by an ascending

political entity beginning to put its mechanisms of state into action.

NSH > Would you call it basically a rejection of idolatry, in the sense of using or looking at images as idols?

< OP Quite clearly. The Qur'an interdicts this unequivocally. So yes, idolatry is also at issue; for example, Muslims, in accordance with the Qur'an, have criticized Christians for what is perceived as their transgression of absolute and transcendent monotheism. One should not be able to describe God, nor associate Him with any other entity; hence the Trinity, the venerated image, the icon, all of these things—parts of Christian faith and (visual) culture—were criticized explicitly in Islam from its inception. This issue is distinctly present in very early texts. As Islamic cultures have evolved into very multicultural and complex societies, I don't think of Islam—more particularly, the medieval Islamic world—as a single, individual entity, or even of the religion itself as a discrete entity. It has borne so many different expressions, and it has evolved as a visual culture in a very complex way, whilst always being very straightforward about not mixing images with worship. Other than that, Islamic cultures have been determined by the time and place, as well as by other cultural factors that were effective in literature, philosophy, or popular philosophy. Always reacting in the most natural way to their environments, these cultures have held writing as very important. In fact, writing is the one aspect that unifies all these Islamic cultures: the image of and the value given to writing. Thus books became very important, and then illustrated books became very valuable, even highly treasured. These cultures upheld certain things steadfastly: you don't worship any images and you value writing. Take those two things, and one knows how to proceed.

NSH > Does the understanding of what can be depicted, and how, have its roots merely in a religious context, or were there also discussions beyond this framework? I am thinking of the work of the medieval scholar Ibn al-Haytham. In his *Book of Optics*,⁴ Ibn al-Haytham describes his scientific findings about the visual apparatus, employing various methods of experimentation, like the camera obscura, to observe how the rays of light enter the eye. He reports that the eye simply collects rays of light, while the images take shape in the brain. For this scientific reason, he concludes that it is impossible to depict what we see, to create a naturalistic image of our surroundings. So in this case, the conclusion to withdraw from “realistic” representation has nothing to do with idolatry or the discrepancy between Islam and Christianity. Do you think that such findings also had an impact on the medieval culture at the time?

< **OP** Yes, but one of our problems lies in the difficulty of bridging the gap between what we have as a material culture, on the one hand, and theories, on the other hand, theories from the medieval period, for example. In other words, what is the connection between the people who produced the works—the artists and the craftsmen—and the intellectuals who were writing about the phenomena of eyesight and light? I can’t actually offer more than my colleagues in Islamic art are able to offer. But I tend to give more credit to the artist, as there is evidence that many of them were fairly educated people, sometimes even people of [a certain] social rank. I tend to think that they did have access to certain ideas, but it’s actually hard to push it all the way to that level of scholarship or thinking and science. I think where the material culture and the theories do intersect is within the realm of literature, for example in poetry, in the way that readings of poetry evoke

images, how images are represented there; and I think that artists would have had access to scientific knowledge through its distillation into literature, whether popular or even high literature. I think there is an intermediate space, an intellectual space where things happened. That space is sometimes difficult to understand. You can read all this theory, which is interesting; but to what extent did it apply to activity on the ground?

NSH > Even if the artists in the workshops did not actually read scientific theory, they seemed to have shared a certain recognition of the potentials and problems of depiction. Departing from a close reading of a twelfth-century treatise on images, in “Signs in the Horizons” you describe specific criteria assigned to the image, criteria concerning both the different effects images can have as well as the roles within which they function. Images were used as parts of books and narrations, or as testimonies and talismans. Artists held the knowledge that the production of a likeness or portrayal of tangible reality was not the goal of image making. Therefore, what one could or should depict through images is a story, a mental image. These applications did not avoid visual expression; nevertheless, they were particularly mindful of an inherent incongruity between images and visual perception. Depiction, then, took on qualities of illustration, parable, and metaphor.

< OP I would say, just to expand on what you said, that the distinction between symbol and metaphor might also be crucial here. Sometimes people say, “This symbolizes that,” which is more of a Western cultural idea: A symbolizes B. This is strongly present in Western medieval culture; whereas in the Islamic world in general, the metaphor is the thing. You have an extension of one concept into another, minus the claim that A equals B. It’s not as if you lift the symbol and regard the thing

heretofore concealed by that symbol. It's more like a space where these things extend and interconnect. I think images also function in this way. They don't automatically symbolize A, B, C, D in the same way that much Christian imagery is invested with symbolism. This is problematic for Western audiences: when they look at Islam, they always ask, "What does this symbolize?" I respond, "Don't think about symbols; think about metaphors, how things are organically linked to each other in more of a horizontal and sometimes vertical fashion." Things often work this way in literature. Many metaphors and concepts appear, and we need to understand how they relate to one another; hence they are introduced as being interconnected. One concept leads to another, and another, and then it comes back to a first one, and so on. I think it's helpful to try to begin seeing also images and image making in this light. It is also important to mention that my article examines a text which is a chapter in a cosmography,⁵ the *Ajā'ib al-makhlūqāt* (Wonders of creation),⁶ a text written with a rather popular flavor. It was fashioned for the comprehension of the moderately educated rather than scientists or the like. It introduces a scientific concept of the universe, of creation, in a very Aristotelian manner, as would have been quite normal. The text also introduces many things related to human interest in people's lives, little illustrative stories and narratives. The author, Muhammad b. Mahmud b. Ahmad-i Tusi, and his audience, too, I believe, are situated in this middle area, which the author is perhaps aware of. He is talking about images in general rather than the image that is probably being produced in the art workshop somewhere in the city at the same moment he writes. Why is Tusi not talking about that particular image? Because, quite interestingly, he is talking about creation, something very fundamental and universal. Therefore, his interest does not lie in discussing the here and now,

what the bazaar artist is doing or what the court workshop is doing. He wants to discuss things that point to something related to creation and universal order, more ancient things which are quite widespread around the world. In other words, the images he discusses stem from all over the world, and he needs to draw attention to this in a kind of cosmic way rather than in this kind of local, “this artist painted a beautiful Shahnameh manuscript” way.

NSH > Although Tusi refers more to the stories and not so much to the images, the stories are often about images too.

< OP Yes, of course. He talks specifically about Taq-i Bustan, or the Bamiyan Buddha statues. Some readers would have traveled and seen those things; whereas others wouldn't have, even though they were reading about, or would have heard of, these stories and images.

NSH > What was his background?

< OP We don't really know, because this is, I believe, his only work.

NSH > When did he live?

< OP He wrote and lived in the twelfth century. We're not even sure when he died, but he wrote *Ajā'ib al-makhlūqāt* sometime in the latter decades of the twelfth century, which was the time when this kind of literature appeared, especially in Persian, and reached mixed audiences, particularly in the Seljuk realms of greater Iran, where people were not necessarily proficient in Arabic. It was quite standard within this period, actually, to offer this kind of encyclopedic knowledge at a level not proper to the scientist, but rather to the moderately educated person, who would seek to

enlighten himself by means of a well-rounded cultural formation known as adab. For example, you would have needed knowledge about astronomy and the planets, but not about all the calculations in detail. You would have needed to know a little bit about this and a little bit about that—a little bit about a lot of things in order to be a truly cultured person, to show your face in society and be appreciated, to participate in refined social gatherings known as majlis. If you didn't have a certain amount of adab-related knowledge to facilitate your participation in the majlis, you would have been excluded. This kind of literature gave people the agency to activate themselves in society. This book summarizes a kind of knowledge which was in circulation, like an instruction manual offering a quick and easy understanding of the scientific worldview, without getting into the nitty-gritty; and it makes this knowledge relevant with stories, with information on statues, tombs of famous people, and all things that existed in the everyday world, showing it all as part of a universal order. There was a real concern with understanding order—God's creation and how it works as a very well-oiled machine in a way that one must understand as order. At the same time, there's a desire to represent that order. It's an act of—I don't want to say worship—but of piety to say, "This is God's creation. I see it and understand it, and I approximate some of it." Of course, you can never ever claim it, but it's crucial to show how this is an order that we need to appreciate and understand—

NSH > —in between appreciation and testimony of God's creation.

< OP Yes, exactly. The idea of testimony holds great importance in this sort of text, because it's about creation. It's about where we stand as humans, our life

experience in the greater scheme of things. These are questions that we still ask, that they asked back then; and this was one way of answering them.

NSH > I was a bit confused by the central role of the human being, especially by one quote in the title of your doctoral thesis, “A World unto Himself: The Rise of a New Human Image in the Late Seljuk Period (1150–1250).”⁷ The quote is from Nasir al-Din al-Tusi: “When Man reaches...[perfection]...he becomes a world unto himself, comparable to this macrocosm, and merits to be called a microcosm.”⁸

< OP Nasir al-Din al-Tusi was a statesman and scientist active in the Mongol (Ilkhanid) period, a thirteenth-century figure and very famous. We know a lot more about him than about Muhammad b. Mahmud b. Ahmad-i Tusi, who is less known. This quote comes from his book known in English as *The Nasirean Ethics*, which is actually Nasir al-Din Tusi’s Persian translation of an earlier Arabic work on ethics by Miskawayh,⁹ who wrote one of the earliest systematic treatises on ethics and how to behave—good conduct.

NSH > I was puzzled by the notion of “a world unto himself” and the ambition to strive for perfection, because it seems to contradict the approach of worshipping, of announcing that God is the only creator, that everything one does, whether it be in writing or in image making, is testimony to the beauty of God’s creation. Wouldn’t you agree?

< OP Yes, but you have to take it in context: here Nasir al-Din Tusi (and before him, Miskawayh) was talking about the microcosm and the macrocosm and how all of creation is actually reflected in a single part of creation. All is designed by God, and the human being

is God's most perfect, complex, and wonderful creation. The human being is the final creation, so when God created man, he created him to actually reflect all of his creation. Hence there is all this discourse on how everything in man represents everything in the macrocosm.

NSH > I guess I was confused because it seems a certain concept of humanism is introduced here, one which could almost be perceived as an anthropocentric worldview. You reach perfection and become a world unto yourself, which may even endow you with godlike power and the ability to create. That can't possibly be what he's saying.

< OP I used the word humanism when I was writing "A World unto Himself," ten years ago. I suppose I used it a bit unrestrictedly, which I'm not sure I would do again. I think meanings change, and terms—like you mentioned, terms and terminology—are very problematic. Humanism is mainly understood via its European—West-European, even medieval—connotations. Now there are books on Islamic humanism, though they are very random, in that no set way of understanding humanism prevails. Since I was looking at the human image and why it becomes so widespread at this particular time, I wanted to talk about a visual humanism as something that privileges the human image and connects it with many other things (metaphorically), with texts and other images, with objects. At one point I define what I mean, but you might pick up another book on Islamic humanism which will contain another, perhaps more scholastic definition, something completely different. As for the concept of human perfection (or perfectibility, the potential for perfection), it is never even remotely suggested that this is a kind of deification of man or the assumption of divine power; rather, it is perfection of human faculties as designed by God in the context of Creation.

NSH > In the introduction of “A World unto Himself” you quote Muhammad b. Mahmud b. Ahmad-i Tusi: “Many images (surât-hâ) have been created on earth for the purpose of admonition so that people may take heed of them.” Would you describe this kind of humanism or the appearance of human images in a metaphorical landscape as a kind of manual of human behavior?

< OP Yes. This was the essential point of “A World unto Himself.” The idea of conduct is linked with the literature. You have to understand love poetry as an ethical statement. It is about love, but love is a channel through which ethics and conduct are expressed, as in how to be a good lover. In order to be a good lover, you have to be a good, ethical human being; and you must demonstrate that you are. Look at all these characters, especially in Persian literature. They’re all sacrificing this or that, and they demonstrate how to be a good human being. So love is the best way towards perfection; it’s a challenge and it’s a test of character.

NSH > The gaze often plays an important role in these love stories or poems, doesn’t it? A lot of the discussion on conduct is also about regulations or rules concerning the gaze. Somebody crosses the boundary of looking at something and basically falls in love.

< OP Exactly. There are also cases in which portraits are exchanged, or, as you said, someone sees an image and falls in love. Afterwards they are obsessed with finding the person, as in the cases of Khusraw and Shirin or the Haft Paykar, both romantic poems by Nizami from the end of the twelfth century.¹⁰ Those two works alone contain so much material leading one to think about the image and the gaze. In the Haft Paykar, these images are also interrelated with spaces: the prince Bahram Gur discovers a mysterious room in the palace which

contains portraits of the Princesses of the Seven Climes that affect him profoundly. Later, when he becomes king, he builds a palace of seven pavilions, one for each of the seven princesses whom he has brought to his court. He visits each of these pavilions in turn and listens to the tales told by the princesses. These edifying tales contribute to the king's ethical perfection, and it is particularly telling that all of this is initiated by the portraits. These kinds of texts are built up in a very complex manner, almost like little universes in themselves, so that numerological allusions (seven princesses recalling the seven planets) also serve to bolster the structure of the work within the conceptual framework of the microcosm-macrocosm relationship.

NSH > And there's also often a moral in them, isn't there?

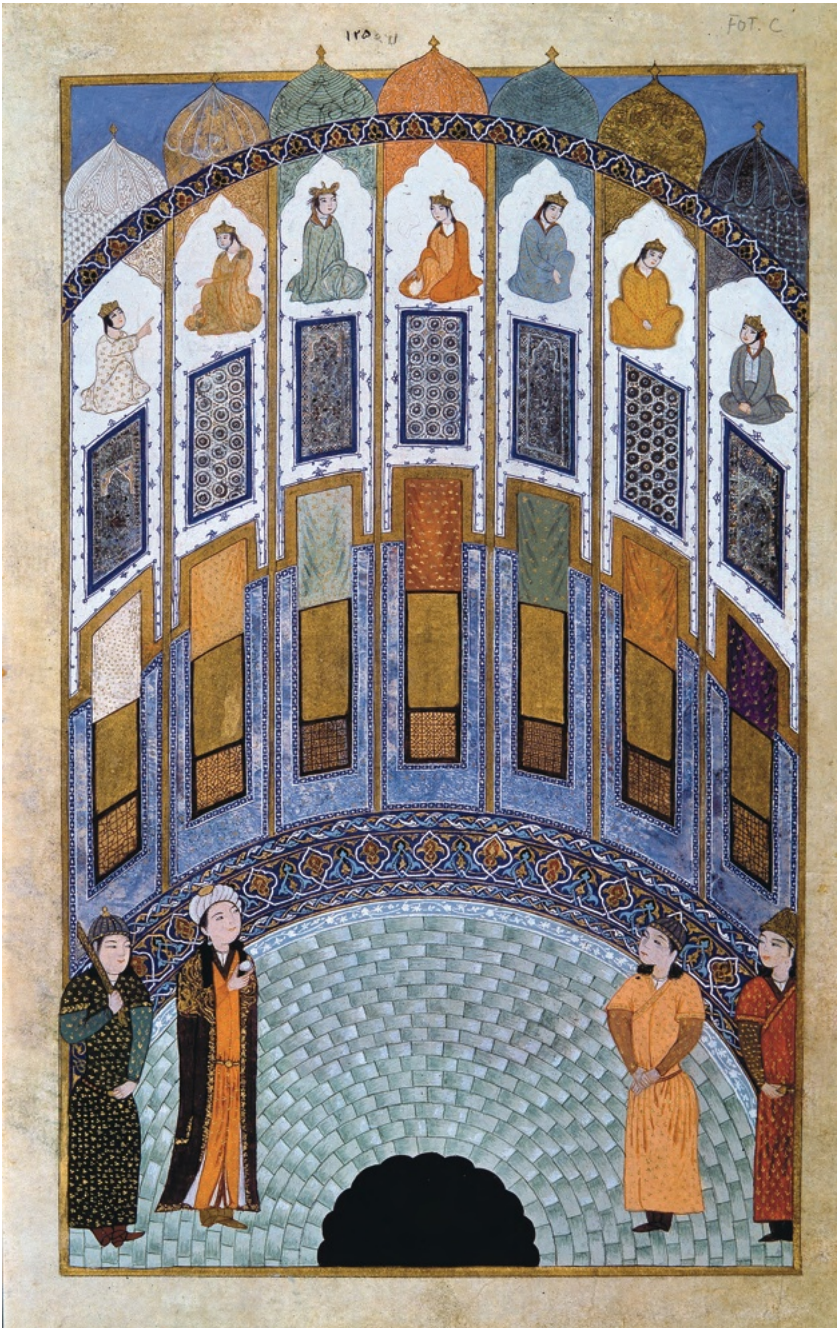
< OP Definitely. That is the main objective.

NSH > Yes, Bahram disappears at the end, doesn't he?

< OP He disappears—

NSH > —into the image?

< OP He is led into a cave while hunting and, mysteriously, he never returns; nor are his remains found. By that point he has already learned many lessons from the seven princesses and other experiences; therefore he's a different person than he was in the beginning of the story, when he was merely a happy prince. At the end he's a sort of evolved human being, and he enters a different plane, I believe. One of the things that I talk about in "A World unto Himself" is this idea of "perfectibility": the potential of humans to perfect their faculties. Some do and some don't, but if one does reach that ultimate level of perfection, then one reaches this



intermediate status, like the Prophet. We don't consider the Prophet as God. It's not about being divine; it's something which is conceived as progress on a universal continuum. It's almost like evolution, even going beyond what is considered "being human," because one has become so perfected. In a way, God gave this potential to all humans, but some will develop it and some won't.

NSH > And the perfection lies in the conduct?

< OP Yes, in conduct and in knowledge. My thesis develops the idea of perfectibility as having two bases: conduct—ethical conduct—and knowledge, meaning the pursuit of knowledge. The two of them are alternative, or dual, paths to perfection, and that level of perfection is actually what this little excerpt (the quote from Nasir al-Din Tusi) is about. When you reach that level, you're perfect. Then you begin to reflect all of creation within yourself, because you develop all of your faculties as God intended.

NSH > But it's the perfection of the microcosm, of something that is basically a part of creation and therefore limited. One can only reach the perfection embedded in this microcosmic realm—to realize a potentiality as set by God. Any other view than this would give rise to an anthropocentric belief that man can become God Himself.

< OP No, that would of course amount to heresy, which would cause all sorts of problems. Also, people didn't necessarily have to ask that question, because an average outlook of piety accepts that God is really beyond everything. He's everywhere and very close to you, but He's also beyond anything that you can imagine. Maybe you're getting closer to God in this kind of Sufi conceptualization: As you become a better Sufi, you get closer to God. You become one of God's friends, but it doesn't

mean you become God. You just get closer; you advance and enter a higher plane. The idea of Sufi spirituality is another thing that surfaced as I was writing “A World unto Himself.” It is quite easy to say, “Oh, that’s a mystical image,” or “That text, that poem is mystical.” However, what is mysticism, or what is Sufism? All of its imagery comes from the same language; it always uses the same images. Everything it uses is metaphor. Everything! But of course it channels that into a kind of experiential, spiritual regime that one is obliged to follow. So that’s what makes it mystical. However, if you’re simply looking at the image or the language, then you need to understand its context and its purpose; it doesn’t have to be mystical. Mysticism is one path where you can combine good conduct and knowledge with this experiential knowledge, which is something else than book knowledge possessed by scholars and judges. The Sufis actually went through the experience of all that knowledge; this experience would also be considered as a way of entry into that higher plane of perfection.

NSH > As we’ve already established, an important element in stories like the Haft Paykar or Khusraw and Shirin is the gaze. Interestingly, in Greek mythology the gaze is perceived as something potentially dangerous. You need to avoid Medusa’s gaze, otherwise you turn into stone.¹¹ But in the Haft Paykar and other stories, a seduction is triggered by the gaze, and with the seduction an involvement starts that leads to transformation. A friend told me that one of the unwritten rules for looking is that the first look is innocent; with the second look the gaze is already a sin: you get involved. Bahram Gur sees the depictions of the seven princesses and falls in love with them. Having seen their images, he decides he needs to find them and marry them. Bahram visits a different princess every night, and each princess tells him a story which matches the mood of

their respective names and colors. Bahram's transformation commences with a gaze and opens his heart for the stories the princesses are about to tell. I think in Greek mythology there is even an understanding that an eidolon, an astral double of a living being, enters your eyes when looking at something or someone.¹² It creates an element of involvement. It seems to me, also as you talk, that this knowledge through experience also comes through the gaze, as if the gaze were a dangerous yet necessary encounter that you must risk; and you gain access to the experience by being seduced by the gaze to enter a sphere where this experience changes you and creates knowledge.

< **OP** Yes, and it does change you. The idea of the gaze, as you describe it, is also linked to the concept of wonder. You see and look, and the reaction is described as wonder, or *ajâb*. This in itself leads to a whole category of discourse, this kind of amazement and wonder which really penetrates. It's not like you're just sitting at your desk and all of a sudden you have an epiphany. It is the experience of encountering whatever you're seeking, whether you're Sufi or a scholar or just a regular person. Crucial is your encounter in the world and your ability to see it as a wondrous sign. It's very central to the way that human development is considered. You need to have that wonder, that ability to say, "Oh my God." This will push you to your next level. Sometimes it can be a dream which visits you with certain images. You may wake up and you may have gone one step ahead, assuming you understand what the dream means. Also, as in reality, you may encounter a statue or an amazing architecture.

NSH > The concept of falling in love seems to be central for the one who is seeking: wonder, or *ajâb*, creates an emotional affection toward the thing one encounters.

زده بر ماه خنده بر نصب در	بر لب و بان نصب پوشان	سایه نیم رغبت می نمودند	بندرج ایکن ایکن می خورد
چو در بازی شد ندان لبان	ز غنا نکره دست بازیغان	و کرباره چو شیرین چو کم کرد	در آن مثال روحانی نگرد



بی و از آنرا آمد مرغ جاست	ز دوست از من کمن رباب	بود پرست را خواهی گفت	کل نم دیدم را آن گفت
بیا روان باکند بر ز دین دست	عاطیه کرد خود اگر نیان	بسر زان سه سرو او نمود	کر آن صورتی سبیا و ز نود
برفت آن شخص از آن صورتی	بکل خورشید پیمان چو کمان	بگفت این در پر کمانی کشید	بر میان زمین سبسی بازی می نماید
ز آنی زخت بر بستند جاس	ز کلهما سبزه را بستند جاس	شما لاجم کمن عشق می خرد	سگم پر کوه ازین یکدانه بیوت
برشت اجزک آرام کرد	بوشانوش می در جام کرد	بود آن حس را زود نمشد سر	رایجین ز بر باد و باد در دست

Witnessing and being amazed by the beauty and wonder that God creates makes you fall in love, and you fall in love so strongly that it overpowers you. You have to follow it, whatever hardship this might entail.

< **OP** Yes, it sort of evades your control. The experience compels you.

NSH > The metaphor of seeing as access to knowledge and the notion of realization through experience connects as much to philosophical questions as to religious ones. It brings me back to our question of terminology. Is there a discussion in your field about the use of terminology? More specifically, are there people who look for ways of talking about these artworks or poems outside of the framework of Islamic tradition, something outside of calling them Islamic art? We have been struggling with these categories. It's not that it feels wrong, but—to stick to the logic of seeing—the denotation “Islamic” might block the view for a wider and perhaps deeper understanding of the questions raised by these works.

< **OP** We do have this terminological problem which creates certain unsound categories and parameters; we just haven't found a good solution yet. If I knew a solution, I would definitely tell you. Islamic art history is relatively young compared to other fields of art history. If you look at the Western scholarship from the end of the nineteenth century, it's called Muhammadan art. Why? Because Europeans conceived it in relation to, say, Buddhist art—Buddha, Buddhist art: Christ, Christian art. They wanted to conceive of it in that light, as Muhammadan art. There was also Saracenic art, which is a little bit more loaded; but they dropped that very quickly. Then there was, of course, a period in the twentieth century in which nationalist sentiments and ideologies gave birth to categories such as Turkish

Art, Iranian/Persian Art, and Arab art. Then other scholars came who sort of pulled back, saying Islamic is still better than all this nationalist discourse, which is problematic in the perspective of history. None of that got resolved; all of this discourse is still there. There is the nationalist way of looking at it. I'm not saying that it's even wrong in many cases to talk about Iranian or Persian art. It's not, but it's problematic if you exclusively use that term all the time; if you do, then you've built a parameter by other means. It becomes even more of a problem with so-called Turkish art, because we can't even establish its moment of inception. And Arab art is a whole other thing, especially regarding painting and the book arts. There is talk about Persian painting and Arab painting, and sometimes Ottoman painting. Persian painting versus Arab painting—it becomes like, "Yes, the painting is in the book, in which the language is Persian." Yes, there is a stylistic continuity and affiliation with all of these things that we categorize as Persian painting; though the term Persian, when applied to painting, derives from Persian linguistically, as is the case with Arab painting. It's such a problem. I think there are only a few people who have questioned this. It's very difficult to offer an alternative when you want to deal with a large corpus of works. The problem kind of disappears when you go onto the micro-level and talk, for example, about one place, ten years, or three manuscripts. When you want to discuss more generally, it becomes difficult and problematic as regards the terminology. An American historian named Marshall Hodgson, who was one of the best—I would say—historians of medieval Islam, wrote a three-volume book called *The Venture of Islam*.¹³ He died fairly young after finishing it, but it's the most reflective account of Islamic history. He introduced—and I think he was also trying to deal with this terminological problem—the term *Islamicate*. Now, it doesn't sound good, but he was

trying to differentiate between cultures and their products and affiliations. Islamicate was a more open and loose umbrella term that was intended to incorporate non-Muslim elements as well. The intention with Islamicate was good; but it didn't catch on, and the problem remains. Supposing you don't use Islamic anymore, are you going to go the route of these national categories?

NSH > Or geographical categories.

< OP Geographical categories will change with the period you're looking at. Sometimes one country is part of a certain human geography, and in another time it's part of a different one. If you think of Iran, you can think of greater Iran from Central Asia to Iraq. That's fine, but then at other times those things get divided: Iraq becomes Ottoman, for example. Is it still greater Iran? So it's very difficult, unfortunately, and the only thing you can do is get people to be sensitive to the problem in hopes that another way of conceptualizing things will come along, one that we're just not ready for yet. Maybe we don't have the conceptual tools yet.

NSH > I wonder how we should deal with it if there are not even solutions in the academic field. In a funny way it reminds me of football. There is football and then there's women's football. Just recently a left-wing German newspaper suddenly introduced a new structure on their sports page—they divided the page and headlined the two sections with "Men's Football" and "Women's Football." I think it was an attempt to stimulate discussion of a terminology that is taken for granted.

< OP So they actually say "men's football"?

NSH > Yes, it just sounds so funny, men's football.

< OP But that's good!

NSH > It makes you aware of how funny it is to say “women’s football.” I guess it parallels the problematic use of terminology in art history, at least in the European tradition: they talk about “art history,” and then suddenly there’s “Islamic art.” Nobody ever cares to mention “Christian art.”

< OP Yes, there is a major imbalance in perception. When scholars in this field develop a title for an article, sometimes—a lot of times—the word Islamic will go into that title. So now I’m currently experimenting with titles where I don’t use the word Islamic. Why do I have to qualify it? Why do I have to say, “Islamic architecture”? Can’t I just say, “twelfth-century architecture”? Of course, it will be apparent what part of the world I’m talking about, so why do I have to use this term? But I’ve only begun to question it after all these years. It’s a slow process.

NSH > I wonder how we can overcome the comparative mode that this kind of terminology establishes. Take, for example, Hans Belting’s studies on the dual perspective.¹⁴ The theory of seeing and the image theory are valuable contributions to the discussion on the history of the image, but the way he dichotomizes these two theories into an Arab theory of seeing and a European theory of image is problematic. Basically, he is saying that Ibn al-Haytham’s *Book of Optics* was translated and appeared in medieval and Renaissance Europe. He further describes how the theories of Ibn al-Haytham, who had developed perspective and the camera obscura in order to understand the process of seeing, were appropriated by Brunelleschi and Alberti to develop their version of perspective as a method of construction in painting, a method that introduced a geometric point—this point being the eye of the

viewer—as the central point from where the world unfolds and from which Renaissance painting is constructed. Here, the eye of the viewer is a central symbolic form of the Western world. Belting’s point is that Ibn al-Haytham has been forgotten as a source and that the history of painting has to be corrected accordingly. The other example of his establishing this dichotomy is the window. He says that in the European tradition the window is a symbolic form—here we have the symbol again—that stands for the gaze into the world and for the making of images. It is a fundamental part of the self-conception of the individual. The painting is an open window through which the individual sees the world. According to Belting, it is a symbol of the highest order in Western culture. Then he goes on to describe the window in Arab architecture, which for Belting has a function which is opposite to the window in the West. Light enters the interior through the window and allows the person in the interior to participate in the exterior. And as the light enters through the *mashrabiya*, a geometrical grid that gives the Arab window its shape and ornament, it is introducing the idea of a tamed gaze. Belting describes geometry as a method to tutor or discipline the gaze and sees the window in Arab architecture as a representation of this domestication. I found his descriptions very thought-provoking, but I wonder if there are ways to approach a theory of seeing and a theory of the image without dichotomizing and without establishing or reestablishing the notions of “us” and the “other culture.” He literally uses the term the other culture.

< **OP** This kind of dichotomy is prevalent. In a way, you kind of expect him to do this. I find it difficult to fault a senior scholar like him who looks at this field, the Islamic field, and sees it as introverted. Whatever the people in the Western field are able to extract from it

indeed comes to them in that form of the “other.” For younger scholars I would be less forgiving, because, yes, I think they should be more flexible and their thought processes should be more open and malleable. But I think there is, likewise, the responsibility on our end not to be so introverted or categorial. Islamic art has divided everything. It derives from this past of connoisseurship, where you divide everything because you’re going to sell it or because you’re going to put it into a museum; but what this amounts to is a reduction of everything. It’s a very reductionist activity and process; and still we deal in these distorting categories of Persian painting or Arab architecture, or with people who look at ceramics while they don’t look at metalwork because it’s “another category.” We need to break these categories down; and once this field has dissolved them and reformed them in completely different ways, I think the dialogue will turn into something more naturalized rather than dichotomized. The effort has to come from both sides; and I think the younger generations of scholars don’t necessarily subscribe to this idea of division. However, they’re still a bit handicapped, because they don’t possess all the information about this field in this kind of open manner. It comes to them in this quite categorial way. It’s hard for them as well. It will change, hopefully. Considering, also, that Islamic art history is such a huge field in terms of material, geography, and period, the number of people working in it is quite small.

NSH > It’s good to know that it exists as a question or as a problem in the field. Maybe you don’t need to have immediate answers. It’s something that has to be put out for discussion.

< **OP** Yes, this topic needs to be fed by good scholarship, and a different kind of scholarship as well, one which

should not be sacrificed for anything. There will be a consensus of sorts eventually, I'm not sure how. As I said, the most we can do for the time being is to acknowledge the problem and become sensitive. Can this happen to people, like Hans Belting, who have such an important place and who have contributed so much, even though they still subscribe to these categories? Does one fight against that, or does one just point it out and move on? I think it's the latter. The engagement across this apparent divide is happening, albeit slowly; and the gap is quite large and unbalanced in terms of accumulation. You have all this accumulation in the West, but not so much here.

NSH > Accumulation of knowledge?

< OP Knowledge and scholarship, and ways of looking at publications, and formats of teaching. Here we are still covering ground that has never been covered before. I think we have this tendency to always look at the West and notice this gap or dichotomy, though the Islamic phenomenon—whatever you want to call it, the Islamic world—sits in the middle of all these cultures and certainly overlaps in many instances. There is also an Asian component, and that hasn't even been tackled. It's as though we need this engagement with the West, perhaps because a lot of Islamic scholarship happens in the West. And yet, the connections of the Islamic world with China, with India—they're extensive and complex. But tackling some of these areas is a great challenge and requires a great deal of investment—learning new languages, being able to travel and access sites, collections, and institutions. Practically speaking, it requires a lot of foresight, patience, energy, and assets, and at the end you still need some luck! I'm not even mentioning political obstacles. What makes this Islamic field so interesting, ultimately, is its dynamic position at the

midpoint of everything. It fostered a long period when all of these things came in, went out, came again, left again, and so on. You can explore it on a material level, as well. Just look at the influence of Chinese ceramics on Islamic ceramics. That's a whole field in itself. People recognize it, but it shouldn't be limited to just one medium. It should be understood in a wider sense. It's a big challenge for any single person.

NSH > But then again, it can create situations where you encounter a wonder much more easily, even if it's a wonder of something you don't understand—just to come back to this sense of perfection we talked about earlier. It seems like this accumulation of knowledge and scholarship in the West can also be a handicap in terms of everything already being known, understood, dealt with.

< OP There is, seemingly, nothing to be discovered, only to be reassessed.

NSH > This accumulation creates a certain blindness towards what you are seeing, but it also creates an inability to have an experience. It's this reassessment of known things which is so problematic. I think that is why we felt attracted to the idea of unlearning; clearing the field and saying, "Let's start from scratch." It seems like something exciting in the field of so-called Islamic art or Islamic studies, the fact that there is so much ground that has not been covered, so much undefined territory that invites one to ponder and question methodology from scratch.

< OP That is one of the reasons why I chose this field. Also, on a practical level, there is more freedom and there is more excitement. I think if you ask most Islamic art historians, they would tell you that the reason they chose to pursue or remain in this field is because

it is exciting. You can go into these jungles that no one has been to. Everybody knows there is this jungle there, but nobody has dealt with it. It's also good for teaching and for generating enthusiasm among students who come to it with a fresh perspective and are intrigued by its possibilities and implications.

Istanbul, June 2010

- 1 See Oya Pancaroğlu, "Signs in the Horizons: Concepts of Image and Boundary in a Medieval Persian Cosmography," in: *Res: Anthropology and Aesthetics*, vol. 43, Spring 2003, pp. 31–41.
- 2 Hans Belting, *Likeness and Presence: A History of the Image before the Era of Art*, transl. Edmund Jephcott, Chicago: University of Chicago Press, 1994.
- 3 The German term "Bilderverbot" literally translates as "prohibition of images." Such a prohibition is first stipulated in the Ten Commandments, handed down to Moses by God on top of Mt. Sinai in the form of two stone tablets: "You shall not make for yourselves an idol, nor any image of anything that is in the heavens above, or that is in the earth beneath, or that is in the water under the earth: you shall not bow yourself down to them, nor serve them" (Exod. 20:4–6). This command was adhered to by Judaism, Christianity, and Islam, all of which made different interpretations as to what constitutes idolatry and how it can be prevented. Idolatry, in brief, can be defined as the worship of things (such as trees, rocks, animals, stars, or other humans) and/or the worship of a representation of a deity (in the form of a statue, image, or figurine). Here Pancaroğlu uses the term "Bilderverbot" to underline an ongoing misconception surrounding visual practices in a context usually framed as "Islamic art." It refers to the art historical convention established by some Western scholars of the nineteenth and twentieth centuries that designates Islamic art as generally prohibitive of all instances of images and image making, holding that Islamic art is innately iconoclastic. Incidences of iconoclasm, a practice in which images, monuments, and representations of likenesses are deliberately defaced or destroyed, usually with a religious, political, or ideological motive, are known throughout Islamic history. But the attitudes they represent lack historical consistency. The art historian Finbarr Barry Flood writes: "Medieval Islamic attitudes to figuration varied from individual to individual and could change over time, or with the advent of new political regimes with different cultural values" (Flood, "Between Cult and Culture: Bamiyan, Islamic Iconoclasm, and the Museum," in: *Art Bulletin*, vol. 84, no. 4, 2002, pp. 641–659, here p. 644). Another translation of "Bilderverbot" is "aniconism." It implies the conscious choice to avoid figural representation. In the context of Islamic art history, aniconism refers to a Bilderverbot in the realm of religious art only. Unlike iconoclasm it is seen as a consistent attitude among makers and consumers of religious art.
- 4 The *Book of Optics* (Arabic: "Kitab al-Manâzîr") is a seven-volume treatise on optics, physics, mathematics, anatomy, and psychology, written by the scientist Ibn al-Haytham (born ca. AD 965, in Basra). It was originally written in Arabic and was later translated into Persian, Latin, and Italian, over the course of the next several centuries. Ibn al-Haytham explained that

vision is created by rays of light traveling in a straight line from each point on a visible object to the eye. Through a number of experiments involving reflection and refraction with lenses, mirrors, and the camera obscura, he proved his theories. His findings refuted both Euclid and Ptolemy's emission theories (that vision was caused through the eyes' emission of light) as well as Aristotle's theory (that a physical form emanating from the object enters the eye and causes vision). He was the first scientist to explore the psychology of visual perception and to argue that vision takes shape primarily in the brain. For him, vision and perception are subjective; personal experience has an effect on what and how people see. The eye simply senses the object, perceives its size, shape, transparency, and motion, while the mind pieces this information together to form a mental image based on judgment, recognition, and inference. The *Optics* of Ibn al-Haytham, books 1–3, *On Direct Vision* (Studies of the Warburg Institute), trans. A. I. Sabra, 2 vols., London: Warburg Institute, University of London, 1989.

5 Cosmography is a science that maps the general features of the universe, describing both the heavens and the Earth. It attempts to categorize and describe the diversity of phenomena and materials present in the known world. Any cosmography is, however, influenced by the predominant models of cosmology, astronomy, geography, and other scientific viewpoints of its time. The medieval Islamic world derived its cosmological understanding from, and debated this understanding through, the works of Aristotle, which had been extensively translated into Arabic. In his *Physics*, Aristotle describes three fundamental aspects of the natural world: the universe is a whole composed of material parts, and these material parts are caused by, and are in relation to, the four elements (fire, water, earth, and air); the parts of the universe engage in physical relations of motion to form the whole of the universe. Aristotle, in *On the Heavens*, goes on to discuss celestial bodies, whose material is of a substance other than the four elements and whose motion is perfect and eternal. For

the neo-Aristotelians, God was eternal and uncreated; the eternity of the world was, however, created and therefore not absolute. A concentric order to the cosmos was accepted; however, philosophers such as Ibn-Rushd (known as Averroës in Europe) emphasized interconnectedness between the realms of the universe, since the motion of materials was bound up with laws of attraction, forming a scientific basis for the idea of gravity. Furthermore, the creation of man was of pivotal importance for Ibn-Rushd, who believed that the dualism between a created eternity and God's absolute eternity found itself expressed in the two souls of man—the created, finite soul that gives man life, and the eternal, singular soul of mankind, whose parts will be united into a whole at the end of Creation. Man, gifted with an absolute soul, was a wonder in his ability to develop knowledge about the order of the cosmos around him. See *The Basic Works of Aristotle*, ed. Richard McKeon, New York: Random House, 2001; *The Cambridge Companion to Arabic Philosophy*, ed. Peter Adamson and Richard C. Taylor, Cambridge: Cambridge University Press, 2005.

6 Muhammad b. Mahmud b. Ahmad-i Tusi's *Ajā'ib al-makhlūqât* presents many different stories about the nature of images and their effects, at times wondrous, revelatory, and even destructive. One story widely disseminated during Tusi's time is the legend of a locked tower in the city of Toledo in Spain, which generations of kings had added locks to, following the generally accepted prohibition of ever opening this tower. Roderic, the last Visigoth ruler, decides to open the locks and see what the tower contains; shortly thereafter, the Arabs conquer the city and kill its king, establishing the kingdom of Andalusia over all of Spain. Muhammad b. Mahmud b. Ahmad-i Tusi, *Ajā'ib al-makhlūqât* [Wonders of creation], ed. M. Sotude, Tehran: Tehran University Press, [1345] 1966. Interestingly, the Argentinean writer Jorge Luis Borges recounts this legend in detail in his collection of short stories *A Universal History of Infamy*, from 1935, focusing on the objects in the tower itself: "Entering, [the king] found within the tower figures of Arabs

on their horses and camels, habited in turbands hanging down at the ends, with swords in baldric-belts thrown over their shoulders and bearing long lances in their hands. All these figures were round, as in life, and threw shadows on the ground; a blind man could identify them by touch, and the front hooves of their horses did not touch the ground yet they did not fall, as though the mounts were rearing. These exquisite figures filled the king with great amazement; even more wonderful was the excellent order and silence that one saw in them, for every figure's head was turned to the same side (the west) while not a single voice or clarion was heard. ...

... Carved on [the] far wall, [he] saw a terrible inscription. The king examined it, and understood it, and it spoke in this wise: 'If any hand opens the gate of this castle, the warriors of flesh at the entrance, who resemble warriors of metal, shall take possession of the kingdom.'

These things occurred in the eighty-ninth year of the Hegira. Before the year reached its end, Tarik ibn Zayid would conquer the city and slay this King after the sorriest of fashion and sack the city and make prisoners of the women and boys therein and get great loot. Thus it was that the Arabs spread all over the cities of Andalusia—a kingdom of fig trees and watered plains in which no man suffered thirst." Jorge Luis Borges, transl. Andrew Hurley, *Collected Fictions*, London: Penguin, 2004, pp. 55–56.

- 7 Oya Pancaroğlu, "A World unto Himself: The Rise of a New Human Image in the Late Seljuk Period (1150–1250)," PhD diss., Harvard University, 2000.
- 8 Nasir al-Dīn al-Tūsī, *The Nasirean Ethics*, transl. G. M. Wickens, London: Allen and Unwin, 1964.
- 9 Ibn Miskawayh, *The Refinement of Character*, transl. Constantine K. Zurayk, Beirut: American University of Beirut, 1968.
- 10 *The Haft Paykar* (Seven beauties) is a Persian romance written in verse by the poet Nizami Ganjavi, in 1197. The central narrative is that of the Sassanian king Bahram Gur and his seven brides, princesses from the Seven Climes of the

Zoroastrian-Islamic world. One day while wandering through the palace of the Arab king Nu'mān, he enters a room containing seven portraits of seven beauties. Bahram Gur orders his architects to build seven pavilions in seven different colors while he travels the world to find the princesses and bring them back to his court. Once this is accomplished, Bahram Gur visits one of his new brides on each day of the week. Each princess recounts a tale to the king, highly sensuous stories related to the mood of the color she represents. While the king loses himself in the tales, his minister seizes power over the realm, destabilizing Persia and causing neighboring enemies to consolidate their forces in preparation for an invasion. Bahram Gur realizes what is happening, disposes of his minister, quells his enemies' belligerence, restores justice, and converts the seven pavilions of the princesses into Zoroastrian fire temples. At the end of the poem, Bahram Gur goes hunting and mysteriously disappears. Through symbolism, complex metaphors, and rich, vivid imagery, the poem presents the tale of Bahram Gur as an allegory of the path towards human perfection through the cultivation of knowledge, good character, and virtue: "Take not apart the good pearl from the string; from him who is of evil nature flee. An evil nature acts consistently: have you not heard that Nature does not err? The evil-natured man keeps faith with none; the erring nature does not fail to err. The scorpion since it is by nature bad—to let it live's a fault, to kill it, good. Seek knowledge, for through knowledge you effect that doors to you be opened and not closed. He who shames not at learning can draw forth pearls from the water, rubies from the rock. Whilst he to whom no knowledge is assigned—that person (you will find) ashamed to learn. How many, keen of mind, in effort slack, sell pottery from lack of pearls (to sell)! How many a dullard, through his being taught, becomes the chief judge of the Seven Climes!" Nizami Ganjavi, *The Haft Paikar* (The seven beauties), transl. C.E. Wilson, London: A. Probsthain, 1924, pp. 000.

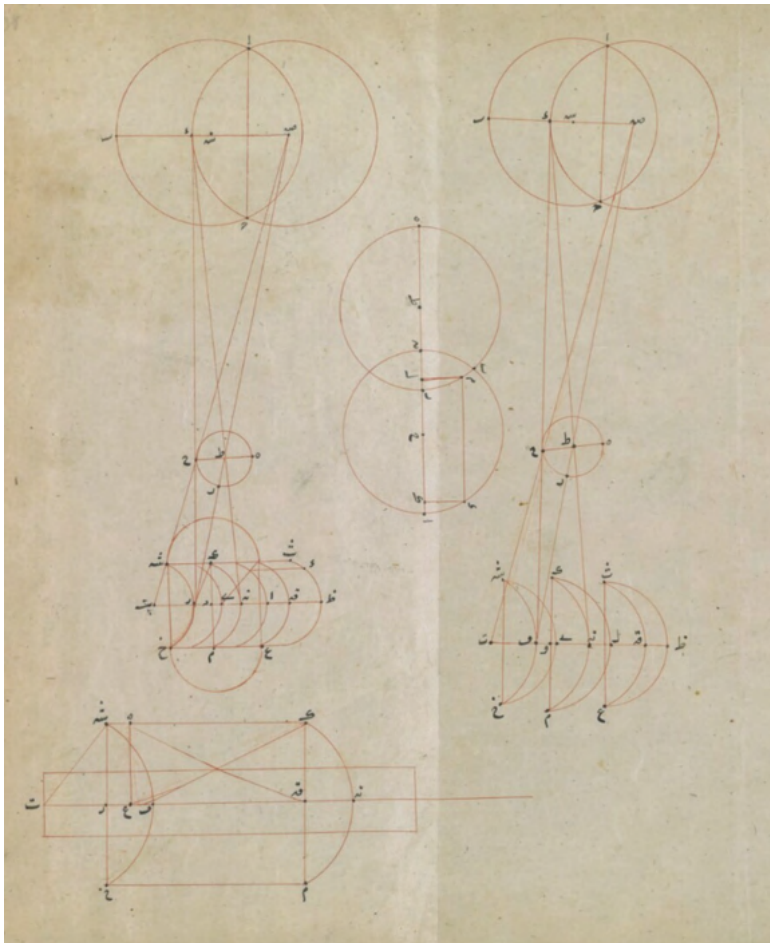
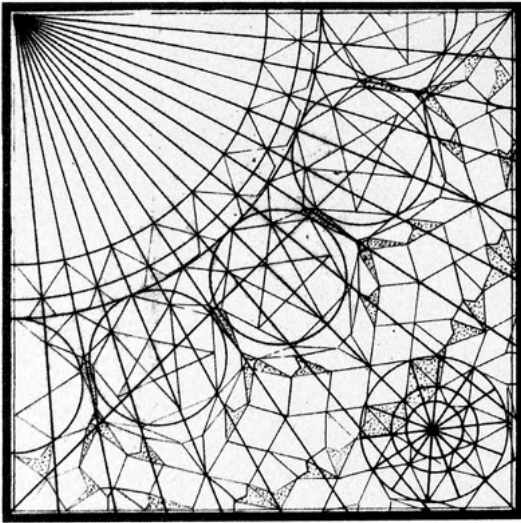
- 11 Medusa was the name of one of three sisters, a female monster belonging to

the race of Gorgons, terrifying creatures with snakes for hair and a horrifying gaze that would turn any onlooker into stone. In Greek mythology, the hero Perseus, with the help of the gods, was able to kill Medusa by donning a cape of invisibility, entering her chamber unnoticed, and cutting off her head while looking at the reflection of her face in his shield. In his book *Remnants of Auschwitz*, the philosopher Giorgio Agamben analyzes the figure of the Gorgon and its representation in ancient Greek literature, vase painting, and sculpture. In fact, the Greek word for face—*prosopon*—indicating that which stands before the eyes or presents itself to vision, was never used for the Gorgon's face. Rather, *antiprosopon* was used to convey the prohibited face whose sight produces death. Curiously, the Gorgon's mode of representation in Greek art breaks with the iconographic tradition in which human faces are drawn in profile, instead always presenting her as a flat, full-frontal face, an absolute image. Agamben concludes that this convention displays a Greek understanding of the problematic of the direct gaze, something that is impossible yet inevitable to look upon, whose sight produces clear-cut consequences. See Giorgio Agamben, *Remnants of Auschwitz: The Witness and the Archive*, transl. Daniel Heller-Roazen, New York: Zone Books, 1999, pp. 53–54.

- 12** The Ancient Greeks believed that at the moment of death the soul took the shape of an astral double as it freed itself of the physical body. This spirit was called the eidolon. Not only could the eidolon feel pain, it longed to return to life. Homer described the eidolon as a thing as terrifying as it was intangible, a mere image with no weight. The term eidolon, along with *eidos*, *eikon*, and *idea*, stems from the Greek root for “to see” (*idein*) and is therefore related to a

concept of form. A mute image of the dead, the eidolon was a shadow. Plato would write that an object is a form and that visual phenomena are mere shadows that fleetingly portray an essential form. Plato's object referred to forms as diverse as dogs, humans, mountains, and colors, as well as concepts such as love, courage, and good. For Plato, a universal form was distinct and singular, manifesting itself in particular, plural representations as either an object or a visual phenomenon. Triangles occur as pyramids, mountains, or flower petals, but these all share the core form of “triangularity.” Knowledge, according to Plato, was the ability to mentally grasp the world of forms. Although eidolons were immaterial, *eikona* were material images or likenesses. The term idolatry is concerned with the senses conveyed by both eidolon and *eikon*; the idol, representative of a greater spirit, is materially represented by the icon. See Plato, *Complete Works*, ed. John M. Cooper and D. S. Hutchinson, Indianapolis: Hackett, 1997.

- 13** Marshall G. S. Hodgson, *The Venture of Islam: Conscience and History in a World Civilization*, 3 vols., Chicago: University of Chicago Press, 1974.
- 14** Hans Belting, “Afterthoughts on Alhazen's Visual Theory and Its Presence in the Pictorial Theory of Western Perspective,” in: *Variantology 4: On Deep Time Relations of Arts, Sciences, and Technologies in the Arabic-Islamic World and Beyond*, ed. Siegfried Zielinski and Eckhard Furlus, in cooperation with Daniel Irrgang and Franziska Latell, Cologne: Verlag der Buchhandlung Walther König, 2010, pp. 43–52; Hans Belting, *Florenz und Bagdad: Eine westöstliche Geschichte des Blicks*, Munich: C. H. Beck, 2008.



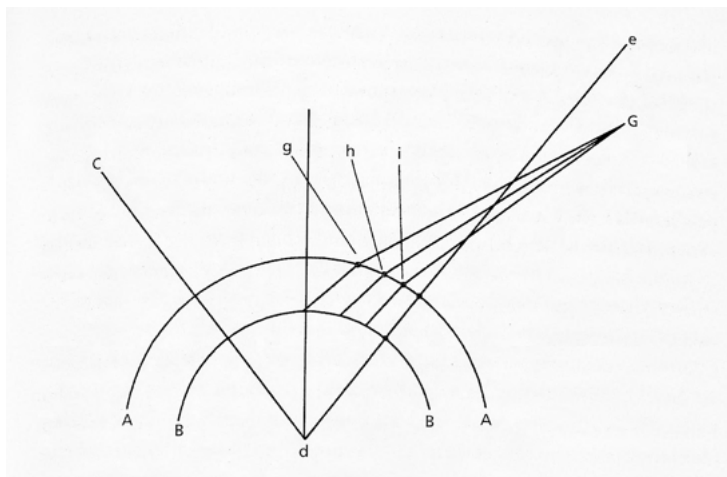






Fig. 44.

similar

“Nobody wants to go on vacation to a garbage dump,” wrote Robert Smithson in 1972, and it sounded more like a plea, a call to actually go. His text “Cultural Confinement” was first published as a protest note in the documenta 5 catalog in place of his participation in the exhibition.¹ He declared: “Parks are finished landscapes for finished art. ... When a finished work of 20th-century sculpture is placed in an 18th-century garden, it is absorbed by the ideal representation of the past, thus reinforcing political and social values that are no longer with us.” He called for a dialectics, a process that seeks a world outside confined, curated places, in the wrecked infernal regions—the slag heaps, the strip mines, the polluted rivers.

Forty years after Smithson wrote “Cultural Confinement,” I find myself in the very gardens of the Karlsaue Park, in Kassel, that Smithson referred to.² Yet underneath large parts of the gardens that Smithson declared a finished landscape, I find heaps of rubble from World War II buried beneath the flowerbeds and arrays of bushes and trees. The landscape started to move. Underneath a pictorially composed re-creation of a lost paradise of Eden lay the very dumpster that Smithson saw as the site for actual process, the wreckage of a society entangled in fatal, delusional political and economic ideas, and very literally of a city wedded to arms manufacturing.

Maybe nothing ever really goes away. In its own time it reappears, changed in form, in expression, in utterance, driven by the winds

changing direction and intensity. Maybe nothing is ever really finished, either. Take caesium-137, which makes up most of the radioactivity left from the Chernobyl nuclear accident twenty-eight years ago. Caesium-137 has a half-life of 30.17 years.³ But that does not mean that it will have completely decayed after 60.34 years. No, as we had to learn, some things have several half-lives and their decay can take several hundreds or thousands of years. Nevertheless, the life span of the concrete sarcophagus that encases the Chernobyl reactor is in fact thirty years (Chernobyl, of course, being one of the fantastic achievements in scripting vital forces).

Something finished. You assumed you buried something, or someone, for that matter, and they just keep coming back. The half-life of polonium-210, the radioactive poison that might have been used to kill Yasser Arafat, is 138 days, but other substances that polonium-210 leaves behind are traceable for much longer.⁴ How many lives does a human being have? Arafat escaped assassination attempts on a number of occasions. But now Arafat's exhumed bones are scattered over several countries in a battle over the narrative of his death. The half-life of a radioactive chemical element does not follow the scripts or timescales that other life cycles propose. The life span of a human being, the life span of a political conflict, the life span of a piece of technology follow confusingly different rules, creating confusingly different mortalities. Hence a recent activity in this situation is the minute deciphering and decoding of decay and its agents, thereby controlling the way death is told or declared. Forensics reverses the burial; it exceeds damage control; it takes control over the narrative of all that is mortal, with the promise that once all decay, including nuclear decay, is estimated, cases can finally be put to rest.

But some agents are idle and therefore hard to detect or decode—until they wake up. A fungus known as *Ceratocystis fimbriata* f. sp. *platani* causing the so-called canker stain in plane trees came to France in US army munitions crates when they arrived in Marseille in 1944 as part of the liberation of the country. On its arrival,

Ceratocystis fimbriata f. sp. *platani* went into hibernation for over sixty years—roughly two half-lives of caesium-137—before it suddenly woke up, in 2006, to start its conquest of France and most likely of Europe. So far it has reached the Canal du Midi, the grand 17th-century Cartesian construction project and a true magnum opus of modernity—canalizing movements and flows of goods and wealth by connecting trade routes from the Atlantic Ocean to the Mediterranean Sea. Under Napoleon, 42,000 plane trees were planted along the canal, establishing a monoculture. Now that the fungus is conveniently using the features of this planned environment to advance, the priority measure seems to be damage control—another form of confinement. The plane trees are all being cut down. Not only do the infected trees have to be cut down, but also seven healthy trees on either side, because the ropes of the boats constantly damage the trees' bark and the fungus is passed on. In some spots only two or three trees remain, creating an awkward sight, so they are also felled. The felled trees then have to be burned, including the sawdust, and the equipment and people involved in the operation have to be carefully cleaned so that no spores are carried to other places. Such uncontrollable and apparently unforeseen forces exceeding their scripted movements seem to be on the increase. If we want to try to maintain the environments we have created, we may have a lot of burying, confining, containing, and cutting ahead of us.

In the light of some of the lives and half-lives, some of the processes, some of the agents that modernity's regimes of canalizing, accumulating, and policing movements, flows, and energies failed to take into account, the simple event of a large branch falling off a majestic plane tree on a late summer's day in the park surrounding the Maison d'Art Bernard Anthonioz seems utterly insignificant, almost droll. A hot summer had caused its leaves to close their pores and, as a consequence, the water circulating through the tree gathered in the branch and made it very heavy. At the end of the summer it fell down. It was still lying right where it had dropped when I found it during a stroll through the park. In sharp contrast to its green and vital surroundings, its leaves had turned unseasonably brown and dry due to abrupt separation from its lifeline. It looked very dead

and displaced in this composed landscape; in fact, it looked as if it had fallen out of the composition of the picture.

Now we were both waiting for what would happen next. It had been part of a tree for more than two hundred years in this very orderly park, so it had seen many branches come and go. There are different names for dead wood on the floor: traditionally it's referred to as debris, but since it is now valued for its various positive effects on the habitat it is referred to as down woody material or as lying dead wood (LDW). Climate-action groups call LDW a carbon pool and advocate that it should be left in place as carbon storage.⁵ Depending on temperatures, rainfall, and other factors, log fragmentation in the branch would occur over twenty-five to eighty-five years, eventually leading to physical breakdown and biological decomposition.

Examining the surroundings, I concluded that the branch would certainly not be left to biodegrade, to slowly decompose and return into compounds of energy flows—speaking of which, a paper towel takes approximately two to four weeks to biodegrade, a tin can fifty to hundred years, and the cap of a coke bottle about four hundred years. If the branch were to biodegrade, carbon, the fourth most abundant element in the universe, would be liberated with the help of numerous detritivorous species such as bacteria, fungi, and other decomposers, and it would seek to become part of other organic compounds or life-forms, for carbon is the chemical basis of all known life. It makes up about 50 percent of wood by dry weight, and in terms of mass it is also the second most abundant element (18 percent) in my body. It constitutes the hardest naturally occurring substance—diamond—and one of the softest known substances—graphite. It likes to bond with other small atoms, resulting in almost ten million different compounds, including coal, petroleum, and natural gas.

I linger, in order to keep the branch company before measures are taken. In this moment of suspension, I speculate on what else could become of it. My thoughts wander. I rule out some ideas, such as the one where the branch becomes part of a Total SA share—after some estimates I figure it won't become fossil fuel anytime soon, such

processes typically taking millions of years. But I play with the idea that it could end up as bark mulch, spread around the trees framing the Tour Total in La Défense, or else in the gardens surrounding the villa of Christophe de Margerie, the chairman and CEO of Total SA. Incidentally, he was recently acquitted of all charges in the corruption affair linked to the UN Oil-for-Food program, which was devised in order to keep the Iraqi population from starving during sanctions but ended up feeding into other projects. Food, by the way, also contains carbon.

To keep track of the lives and half-lives of all agents in this story, I should say that the building now housing the Maison d'Art Bernard Anthonioz and its park were built around the same time as the Canal du Midi. It changed ownership many times before it eventually became a retirement home for elderly artists of all kinds a year before *Ceratocystis fimbriata* f. sp. *platani* arrived in France. It provided studios for its residents, who were on average fifty to sixty years old at the time. One half of the Maison was turned into an art center in the year *Ceratocystis fimbriata* f. sp. *platani* woke up from hibernation, leaving the other half of the building for the nursing home, with most resident artists being eighty years old or more and for the most part unable to continue their practice. I wonder where I'll be when I'm old.

1 Robert Smithson, "Cultural Confinement," in: *documenta 5*, exhibition catalog, Kassel, 1972; reprinted in: *Artforum*, vol. 11, no. 2, October 1972, pp. 000–000.

2 My project for *DOCUMENTA* (13), 2012, was a trail. See www.d13trail.de.

3 "The time taken for the radioactivity of a specified isotope to fall to half its original value. The time required for any specified property to decrease by half." *Concise Oxford English Dictionary*, Oxford University Press, 2008, s. v. "half-life."

4 See Eyal Weizman, "Arafat's Tomb," in: *London Review of Books*, January 9, 2014, www.lrb.co.uk/v36/n01/eyal-weizman/short-cuts.

5 See Alexander M. Evans and Mark J. Ducey, "Carbon Accounting and Management of Lying Dead Wood," in: *Climate Action Reserve*, November 2010, www.climateactionreserve.org/wp-content/uploads/2010/12/Carbon_Accounting_and_Management_of_Lying_Dead_Wood-Forest_White_Paper.pdf.

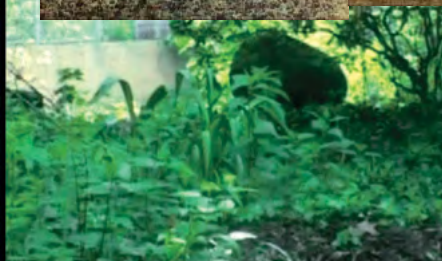
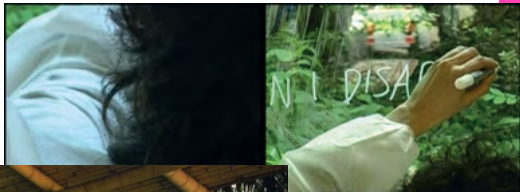












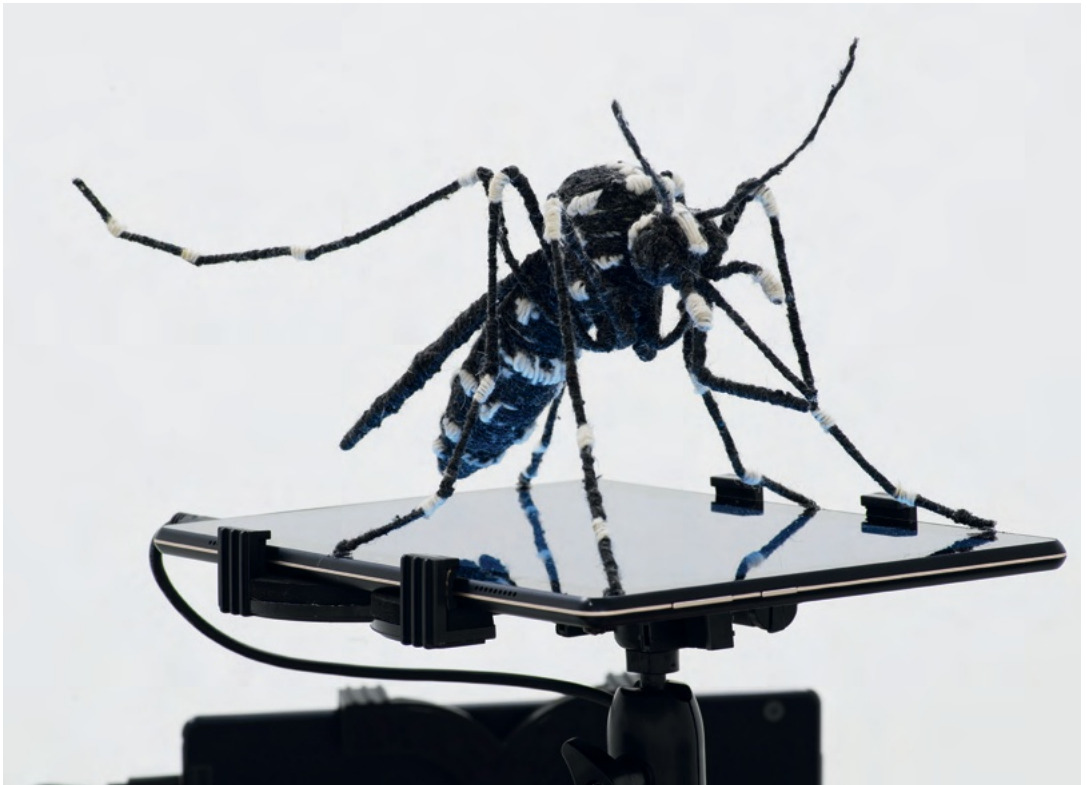
grzimek 1 tries to shoot the tiger, grzimek 2 shoots grzimek 1 and the witnesses and grzimek 3 takes photos from the distance.







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Foto: a. Ang. 1 19-02-1944 ca.















Captions for section four: **BEYOND IMAGES**



The folio from the *Falnama* manuscript depicts 'Ali the first Shi'i imam, shown with a face veil and a flaming halo. He leads a camel with a coffin carrying his own body to the grave while his sons Hasan and Husain watch from behind a hillside.

♦ Ja'far al Sadiq, *Coffin of Imam 'Ali*, folio from the *Falnama* (Book of omens), mid-1550s–early 1560s,

Iran, Safavid period (1501–1722), ink, opaque watercolor, and gold on paper, 56.7 x 42.8 cm. Collection of the Metropolitan Museum of Art, New York. Photo: Natascha Sadr Haghghian



Eye Model, *Book of Optics*, Ibn al-Haytham, 1083



"thinking model" for the artist talk "Anthropomorphise my capital!" at the 3rd Herbstsalon, Maxim Gorki Theater, Berlin, November 18, 2017

♦ "Anthropomorphise my capital!" | Künstler*Innengespräch mit Natascha Sadr Haghghian on YouTube, November 18, 2017, www.youtube.com/watch?v=6_mw2aGoO3s. Discussion partner: Ashkan Sepahvand. Diagram: Natascha Sadr Haghghian



Filmmaker and zoo director Bernhard Grzimek and his son Michael try to catch a zebra as part of conservation work in Serengeti, Tanzania. The film *Serengeti Shall Not Die* (1959), produced during this trip, is a vivid expression of Grzimek's belief that you have to show endangered animals in order to protect them. The film won an Academy Award in 1960 and was key to creating the Serengeti National Park.

♦ Film still from the motion picture *Serengeti Shall Not Die* (*Serengeti darf nicht sterben*), 1959, directed by Bernhard Grzimek. Photo: Prof. Bernhard Grzimek / OKAPIA



Natascha Sadr Haghghian, *onco-mickey-catch*, 2016 (detail), exhibition view at Neuer Berliner Kunstverein ♦ Photo: Natascha Sadr Haghghian



trail was a footpath built for *DOCUMENTA* (13) on a slope in Kassel's Karlsaue parallel to the Ehrenmal, a military monument commemorating German soldiers. The slope was made of debris from World War II. On the trail, onomatopoeic animal sounds in different languages emanate from the bushes and trees as the visitor descends to the park. The work on site was accompanied by a web project (www.d13pfad.de) providing contextual materials on the rubble.

♦ Natascha Sadr Haghghian, *trail*, 2012. Curator: Carolyn Christov Barkargiev. Photo: Nils Klingner



The sound installation *tribute to whistle* was part of the project *Ankersentrum* (*surviving in the ruinous ruin*), 2019, German Pavilion at the Venice Biennale. It combined six musical contributions for whistle into a forty-eight-speaker installation. The contributions came from Jessica Ekomané, Maurice Louca, DJ Marfox, Jako Maron, Tisha Mukarji, and Elnaz Seyedi.

♦ Exhibition view at *Im Rücken die alte Ordnung* (*he she they walked*), 2019, Galerie für Zeitgenössische Kunst Leipzig. Curator: Franciska Zólyom. Photo: Alexandra Ivanciu



Illustrations from Caroline Furness Jayne, *String Figures and How to Make Them: A Study of Cat's-Cradle in Many Lands*, with an ethnological introduction by Alfred C. Haddon, New York: Charles Scribner's Sons, 1906



Hand holding a mobile phone (stock photograph) ♦ Screenshot from 123RF.com, Yaroslav Gavryliuk, "Deux mains tenant grand écran téléphone intelligent, le chemin de détournement", fr.123rf.com/photo_45859323_deux-mains-tenant-grand-%C3%A9cran-t%C3%A9l%C3%A9phone-intelligent-le-chemin-de-%C3%A9tourage.html



Man in virtual-reality glasses zooming the virtual screen ♦ Stock photo from dreamstime.com



String-figure workshop during the book launch of *How to spell the fight* with publishers Kayfa ta. The workshop took place during the Abu Dhabi Art Fair 2018 at the cultural center Manarat Al Saadiyat. ♦ Photo: Ala Younis



LaGuardia High School student presenting a string figure, probably "Flying Fox," ca. 1980s. The photograph is part of Robin Moore's series *LaGuardia Student Portraits*. James R. Murphy, a math teacher at LaGuardia High School, New York, has been teaching mathematics to sixth-grade students since the early 1980s. He used string figures to acquaint students with abstract and systematic thinking. Robin Moore was a student at La Guardia at the time and documented the students presenting their string figures for the camera. ♦ Photo: Robin Moore



LaGuardia High School student presenting a string figure, probably a variation of "Ten Men," ca. 1980s ♦ Photo: Robin Moore



LaGuardia High School student presenting the string figure "Representation of a Mat," ca. 1980s ♦ Photo: Robin Moore



LaGuardia High School student presenting a string figure, ca. 1980s ♦ Photo: Robin Moore



LaGuardia High School student presenting a string figure, probably a variation of "Ten Men," ca. 1980s ♦ Photo: Robin Moore



LaGuardia High School student presenting a variation of the string figure "An Owl," ca. 1980s ♦ Photo: Robin Moore



LaGuardia High School student presenting a string figure, ca. 1980s ♦ Photo: Robin Moore



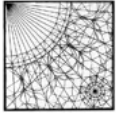
LaGuardia High School student presenting a string figure, ca. 1980s ♦ Photo: Robin Moore



Bahram Gur in the Room of the Seven Portraits, from the *Anthology of Iskandar Sultan*, Shiraz, Iran, 1410–1411 ♦ *Anthology of Iskandar Sultan*, 1410–1411, Iran, Shiraz, Timurid period, ink, color, and gold on paper, Calligraphers: Mahmud ben Ahmad al-Hafiz al-Husseini and Hassan al-Hafiz, 27.4 x 17.2 cm. The full-page miniature shows Bahram Gur in the Room of the Seven Portraits, illustrating the fourth poem ("Haft Paykar") of Nizami's work *Khamsa*. Collection of the Museu Calouste Gulbenkian, Lisbon



Shirin shown a portrait of Khusraw, from the *Khamsa* (Quintet), by Nizami, Shiraz, Iran, 1433–1434 ♦ Ali b. Luftallah al-Sadiq al-Husayni, *Khamsa* (Quintet), by Nizami, 1433–1434, opaque watercolor, ink, and gold on paper; opaque watercolor on lacquered pasteboard, 23.5 x 15.8 cm. Collection of the Arthur M. Sackler Gallery, Smithsonian Institution, Washington, DC



Scroll with architectural drawings, Iran, ca. 1500, Topkapi Museum, Istanbul, from Gülru Necipoğlu, *The Topkapi Scroll: Geometry and Ornament in Islamic Architecture*, Topkapi Palace Museum Library MS H. 1956, Santa Monica: Getty Center for the History of Art and the Humanities, 1995



Maqalah fi surat al-kusuf, treatise on the observation of solar eclipses through a camera obscura, by Abū 'Alī al-Ḥasan ibn al-Ḥasan ibn al-Haytham (ca. 1040). The manuscript was created in 1198 containing four diagrams, which are collected on a foldout. The original is part of the collection of Oriental manuscripts in the British Library, London. ♦ Source: Qatar National Library



seeing studies investigates the ways we learn "to see." Based on a schoolbook published by the Iranian Ministry of Education to teach art in the first year of Iranian public middle school, this bilingual publication (English/Farsi) embarks on a collaborative journey, visiting different "schools of seeing." ♦ The publication project by institute for incongruous translation (Natascha Sadr Haghghighian and Ashkan Sepahvand) was shown in a spatial arrangement designed by Can Altay. *seeing studies* was published in 2011 by Hatje Cantz in conjunction with the institute for incongruous translation, dOCUMENTA (13), and Casco – Office for Art, Design and Theory. Exhibition view at *That's the way we do it. Techniques and Aesthetic of Appropriation*, 2011, Kunsthau Bregenz. Curator: Yilmaz Dziewior. Photo: Natascha Sadr Haghghighian



Natascha Sadr Haghghighian and Ashkan Sepahvand for the institute for incongruous translation, *seeing studies* (spatial arrangement), 2011. Spatial arrangement: Can Altay ♦ Exhibition view at *Galqalah* *قَالَقَالَة*: *Plus d'une langue*, 2020, Centre régional d'art contemporain Occitanie / Pyrénées-Méditerranée, Sète, France. Curators: Virginie Bobin, Victorine Grataloup. Photo: CRAC – Centre régional d'art contemporain Occitanie / Pyrénées-Méditerranée, Sète



Alhazen's theory of the refraction of rays inside the eye, drawing by Hans Belting after A. I. Sabra, in Hans Belting, *Florence and Baghdad: Renaissance Art and Arab Science*, Cambridge/Mass.: Belknap Press of Harvard University Press, 2011 ♦ Photo: Natascha Sadr Haghghighian



Natascha Sadr Haghghighian and Ashkan Sepahvand for the institute for incongruous translation, *seeing studies* (spatial arrangement), 2011. Spatial arrangement: Can Altay ♦ Exhibition view at *Galqalah* *قَالَقَالَة*: *Plus d'une langue*, 2020, Centre régional d'art contemporain Occitanie / Pyrénées-Méditerranée, Sète, France. Photo: CRAC – Centre régional d'art contemporain Occitanie / Pyrénées-Méditerranée, Sète



Four days of presentations, discussions, and screenings as part of the project *seeing studies* at Casco – Office for Art, Design and Theory. The sessions accompanied the release of the publication by Natascha Sadr Haghghighian and Ashkan Sepahvand for the institute for incongruous translation. ♦ Natascha Sadr Haghghighian and Ashkan Sepahvand for the institute for incongruous translation, *seeing studies*, 2011. Photo: Natascha Sadr Haghghighian



Natascha Sadr Haghghighian and Ashkan Sepahvand for the institute for incongruous translation, *seeing studies* (spatial arrangement), 2011. Spatial arrangement: Can Altay ♦ Exhibition view at *Galqalah* *قَالَقَالَة*: *Plus d'une langue*, 2020, Centre régional d'art contemporain Occitanie / Pyrénées-Méditerranée, Sète, France. Photo: CRAC – Centre régional d'art contemporain Occitanie / Pyrénées-Méditerranée, Sète



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After a long, hot summer a giant branch broke off a two-hundred-year-old plane tree in the park of the Maison d'Art Bernard Anthonioz, an exhibition space and nursery home for elderly artists in Nogent-sur-Marne, near Paris. The dead branch became the main protagonist in the exhibition *resemblance* at Maison d'Art Bernard Anthonioz in 2014. ♦ Natascha Sadr Haghghighian, *Resemblance / similar*, 2014. Curator: Natasa Petresin Bachelez. Photo: Natascha Sadr Haghghighian



The painting on the left by Madeleine Smith depicts a plane tree in the park of Maison d'Art Bernard Anthonioz; it was painted in the early twentieth century, while the photograph on the right shows Madeleine Smith sitting on a tree trunk in the same park in March 1883. Madeleine Smith-Champion, untitled, 1900–1920, oil on canvas; photograph of Madeleine Smith, March 18, 1883, both from the collection of the Fonds de la Fondation Nationale des Arts Graphiques et Plastiques ♦ Exhibition view at *Similar*, 2014 (detail), Maison d'Art Bernard Anthonioz, Nogent-sur-Marne, France / *Tales of Empathy*, Satellite 7, Jeu de Paume. Photo: Romain Darnaud / Jeu de Paume



Exhibition view at *Similar*, 2014 (detail), Maison d'Art Bernard Anthonioz, Nogent-sur-Marne, France / *Tales of Empathy*, Satellite 7, Jeu de Paume ♦ Photo: Romain Darnaud / Jeu de Paume



Natascha Sadr Haghghighian, *resemblance / similar*, 2014, HD video, stereo sound, color, 5:30 min ♦ Exhibition view at *Similar*, 2014 (detail), Maison d'Art Bernard Anthonioz, Nogent-sur-Marne, France / *Tales of Empathy*, Satellite 7, Jeu de Paume. Photo: Natascha Sadr Haghghighian



Exhibition view at *Similar*, 2014 (detail), Maison d'Art Bernard Anthonioz, Nogent-sur-Marne, France / *Tales of Empathy*, Satellite 7, Jeu de Paume ♦ Photo: Romain Darnaud / Jeu de Paume



Exhibition view at *Similar*, 2014 (detail), Maison d'Art Bernard Anthonioz, Nogent-sur-Marne, France / *Tales of Empathy*, Satellite 7, Jeu de Paume ♦ Photo: Romain Darnaud / Jeu de Paume



Exhibition view at *Similar*, 2014 (detail), Maison d'Art Bernard Anthonioz, Nogent-sur-Marne, France / *Tales of Empathy*, Satellite 7, Jeu de Paume ♦ Photo: Natascha Sadr Haghghighian



trail was a footpath built for dOCUMENTA (13) on a slope in Kassel's Karlssau parallel to the Ehrenmal, a military monument commemorating German soldiers. The slope was made of debris from World War II. On the trail, onomatopoeic animal sounds in different languages emanate from the bushes and trees as the visitor descends to the park. The work on site was accompanied by a web project (www.d13pfad.de) providing contextual materials on

the rubble. ♦ Natascha Sadr Haghighian, *trail*, 2012. Curator: Carolyn Christov-Barkargiev. Photo: Natascha Sadr Haghighian



In 1955 the slope of debris at the Karlsruhe was covered with soil and flowers for the first horticultural show BUGA (Bundesgartenschau), which coincided with the first documenta. ♦ Natascha Sadr Haghighian, *trail*, 2012. Photographer unknown, source: Stadtarchiv (City archive) Kassel, reproduction: Pola Sieverding



View from trail with military monument Ehrenmal in the background, taken during documenta 13 ♦ Natascha Sadr Haghighian, *trail*, 2012. Photo: Natascha Sadr Haghighian



View from trail with military monument Ehrenmal in the background, taken during documenta 13 ♦ Natascha Sadr Haghighian, *trail*, 2012. Photo: Natascha Sadr Haghighian



present but not yet active was commissioned by Manifesta 4 and took place at the Frankfurt zoo a month before Manifesta's opening. The aim was to not show anything at the exhibition, but instead to propose to the curators to experience together the problems of display and visibility at Frankfurt's tiger habitat. The meeting was documented from multiple viewpoints by three characters named "Grzimeks" (after Frankfurt's famous zoo director and filmmaker Bernhard Grzimek). The resulting video document was shared with the curators after the meeting. ♦ *present but not yet active*, 2002, collective performance and video (13:34 min), Manifesta 4, Frankfurt, 2002. Curators: Nuria Enguita Mayo, Stéphanie Moisdon Trembley, Iara Boubnova. Still from the video



present but not yet active, 2002, collective performance, Manifesta 4, Frankfurt, 2002 ♦ Photo: Ines Schaber



The film *Serengeti Shall Not Die* (1959) was shot during a conservation trip by filmmaker and zoo director Bernhard Grzimek and his son Michael in the Serengeti, in Tanzania. ♦ Film still from the motion picture *Serengeti Shall Not Die* (*Serengeti darf nicht sterben*), 1959, directed by Bernhard Grzimek. Photo: Prof. Bernhard Grzimek / OKAPIA



Serengeti Shall Not Die (*Serengeti darf nicht sterben*), 1959, directed by Bernhard Grzimek ♦ Photo: Prof. Bernhard Grzimek / OKAPIA



present but not yet active, 2002, collective performance and video (13:34 min), Manifesta 4, Frankfurt, 2002, video still



present but not yet active, 2002, collective performance, Manifesta 4, Frankfurt, 2002 ♦ Photo: Ines Schaber



Battle tank VI ("Tiger I") being loaded onto a railroad car in the Kassel Henschel & Sohn plant, ca. 1942–1944 ♦ Natascha Sadr Haghighian, *trail*, 2012. Photo: German Federal Archive, Image 146-1972-064-61



A model of the *Aedes albopictus* (tiger mosquito) sitting on a tablet, as a central element of the installation *passing one loop into another* (2020). The tiger mosquito, native to the subtropical regions of Southeast Asia, is a carrier of pathogens and diseases such as the Zika virus. It was first sighted in Italy, in the early 1990s, a time marked by major global changes like the collapse of the Soviet Union, the deregulation of world trade, and increasing signs

of global warming. ♦ Natascha Sadr Haghighian, *passing one loop into another*, 2020, exhibition view at Neuer Berliner Kunstverein. Curator: Anna Lena Seiser. Photo: Jens Ziehe



Tiger habitat. "No harm, he just wants to play. And also, there is still the glass separating the tiger from caretaker Hans Caver." The Frankfurt zoo became famous for its inventive displays. After

the zoo was destroyed in World War II, zoo director Bernhard Grzimek rebuilt the cages without bars, using glass or moats instead. He also developed display forms for nocturnal animals. ♦ Screenshot from Katharina Iskandar, "Auge in Auge mit der großen Katze," in: FAZ, September 2, 2009, www.faz.net/aktuell/rhein-main/frankfurt/im-portraet-raubtierpfleger-auge-in-auge-mit-der-grossenkatze-1857138.html. Photo: Daniel Nauck



Memorial to the Panzerkorps Großdeutschland on the lower terrace of the Ehrenmal in Kassel, depicting what might be a battle tank VI ("Tiger I") or V ("Panther"), both made by Henschel & Sohn in Kassel. A new reef was recently laid by the German army. ♦ Natascha Sadr Haghighian, *trail*, 2012. Photo: Natascha Sadr Haghighian



The Leopard 2A7+ prototype at the Eurosatory arms fair 2010. The Leopard 2A7+ is a German battle tank specially designed and optimized for pacification of uprisings, protests, and unrest in urban areas. It is produced by German arms manufacturers Krauss-Maffei Wegmann and Rheinmetall Defence in Kassel and Munich. ♦ Photo: AMB Brescia, via Flickr / Wikimedia Commons (CC-BY-SA-2.0)



pssst Leopard 2A7+ (2013–) is a demilitarized, farcical copy of the Leopard 2A7+ battle tank. The platform, composed of pallets covered with Lego tiles, has exactly the same footprint as the battle tank. In place of turret and canon it features sixty headphone jacks that can be used to access an ongoing sonic study, addressing the open secrets around this battle tank that carries the name of an animal predator. Visitors can sit on the platform and choose a sound file while reading through an accompanying leaflet. ♦ Exhibition view at Forum Expanded exhibition, 66st International Berlin Film Festival / 46st International Forum of New Cinema, 2016. Photo: Kay Strasser [Asked for photo copyright](#)



Natascha Sadr Haghighian, *pssst Leopard 2A7+*, 2013–, sound installation ♦ Exhibition view at *Accentisms*, 2017, Taxispalais Kunsthalle Tirol. Curator: Nina Tabassomi. Photo: Günter Kresser



Natascha Sadr Haghighian, *study group*, 2020, from the group of works *Beyond Repair* (2019–), digital drawings, archival pigment print on Canson Photographique ♦ Exhibition view at Neuer Berliner Kunstverein, 2020. Photo: Natascha Sadr Haghighian



Natascha Sadr Haghighian, *Landscape (study group)*, 2019 (detail) ♦ Part of the project *Ankersentrum (surviving in the ruinous ruin)*, 2019. Exhibition view at *Im Rücken die alte Ordnung (he she they walked)*, 2019, Galerie für Zeitgenössische Kunst Leipzig. Photo: Alexandra Ianciu



Captions for OPENING SECTION



One of twelve drawings depicting bird silhouettes, based on decals designed to prevent birds from flying into window glass. ♦ Natascha Sadr Haghighian, *wrong approach*, 2004, pencil drawing



LaGuardia High School student presenting an "owl" string figure, ca. 1980s. The photograph is part of Robin Moore's series *LaGuardia Student Portraits*. James R. Murphy, a math teacher at LaGuardia High School, New York, has been teaching mathematics to sixth-grade students since the early 1980s. He used string figures to acquaint students with abstract and systematic thinking. Robin Moore was a student at La Guardia at the time and documented the students presenting their string figures for the camera. ♦ Photo: Robin Moore



Traffic light, GE Holophane "Spiderweb" lens used in the 1940s ♦ Photo: Monte Castleman



"Every duke and earl and peer is here / Everyone who should be here is here" (from the song "Ascot Gavotte"). Gentry watching the horses at the Ascot Racecourse, film still from the motion picture *My Fair Lady* (1956) ♦ Courtesy: CBS Broadcasting Inc.



"Algerian President Abd al-Aziz Bouteflika giving a speech through skype!" ♦ Post by Egyptian journalist Kareem Nasser (@_KareemNasser) on Twitter on election day, April 17, 2014, 7:59 a.m., twitter.com/_kareemnasser/status/456778865700921344



Performative proposition for Night School Public Seminar 9: *Sleepwalking in a dialectical picture puzzle*, New Museum, New York, organized by Anton Vidokle ♦ Natascha Sadr Haghighian, *40 minutes between the boards*, 2008. Still from video documentation



John Dee Performing an Experiment before Queen Elizabeth I. John Dee of Mortlake was an alchemist who worked as the Queen's "secret eyes" while devoting his hermetic studies to black magic. The painting hangs in the lobby of the Wellcome Trust in London. Henry S. Wellcome, the founder of the pharmaceutical company Burroughs Wellcome, bought the painting in Northern Ireland in the late 1900s. ♦ Henry Gillard Glindoni, *John Dee Performing an Experiment before Queen Elizabeth I*, late nineteenth century, oil on canvas, 152 x 244.4 cm. Photo: Natascha Sadr Haghighian



After a long, hot summer a giant branch broke off a two-hundred-year-old plane tree in the park of the Maison d'Art Bernard Anthonioz, an exhibition space and nursery home for elderly artists in Nogent-sur-Marne, near Paris. The dead branch became the main protagonist in the exhibition *ressemblance* at Maison d'Art Bernard Anthonioz in 2014. ♦ Natascha Sadr Haghighian, *ressemblance / similar*, 2014. Curator: Natasa Petresin Bachelez. Photo: Natascha Sadr Haghighian



trail was a footpath built for *DOCUMENTA* (13) on a slope in Kassel's Karlsaue parallel to the Ehrenmal, a military monument commemorating German soldiers. The slope was made of debris from World War II. On the trail, onomatopoeic animal sounds in different languages emanate from the bushes and trees as the visitor descends to the park. The work on site was accompanied by a web project (www.d13pfad.de) providing contextual materials on the rubble. ♦ Natascha Sadr Haghighian, *trail*, 2012. Curator: Carolyn Christov Barkargiev. Photo: Natascha Sadr Haghighian



A taxidermy of what could be the dorsal part of an oversized mouse carries back-to-back monitor screens, each equipped with videoconferencing software and the gaze-correction application CatchEye ♦ Natascha Sadr Haghighian, *onco-mickey-catch*, 2016, exhibition view at Neuer Berliner Kunstverein. Curator: Marenka Krasomil. Photo: Natascha Sadr Haghighian



3D rendering as part of a digital simulation of secret-service agent Andreas Temme's field of view while Halit Yozgat lies fatally wounded behind the counter of his Internet café on April 6, 2006. In 2016 Forensic Architecture carried out an investigation, commissioned by the People's Tribunal "Unraveling the NSU-Complex," into the presence of Andreas Temme at the time of the murder, attributed to the neo-Nazi terror group NSU (National Socialist Underground). Forensic Architecture's investigation was presented at documenta 14, as part of the Society of Friends of Halit at Neue Neue Post. ♦ Forensic Architecture, *Investigation into the murder of Halit Yozgat*, 2017. Image: Forensic Architecture



failed handshake. During the official opening ceremony of the German Pavilion at the 2019 Venice Biennale, foreign minister Heiko Maas reaches out for a diplomatic handshake with the artistic position Natascha Süder Happelmann. Due to divergence in the field of vision the gesture is not returned. ♦ Natascha Süder Happelmann, *Ankersentrum (surviving in the ruinous ruin)*, 2019, German Pavilion, Venice Biennale. Photo: Xander Heinel / photothek.net



Natascha Süder Happelmann standing in front of the Ankercenter Ingolstadt Manching ♦ Natascha Sadr Haghighian, *social media series - Location: Max-Immelmann-Kaserne, Manching*, 2019. Part of the project *Ankersentrum (surviving in the ruinous ruin)*, 2019. Photo: Jasper Kettner. Exhibition view at *Im Rücken die alte Ordnung (he she they walked)*, 2019, Galerie für Zeitgenössische Kunst Leipzig. Curator: Franciska Zolyom. Photo: Alexandra Ianciu

layers, margins, entanglements
Marius Babias and Anna Lena Seiser

Most intense, however, are presumably those times when the pull of the byways impels us to change the royal road, or rather to discover it where we previously had not recognized it. At that moment, the disorientation of chance lets the real substance of the road, its fundamental orientation, become manifest.

Georges Didi-Huberman, "Erscheinungen, disparat" (Apparitions, disparate)

First published in 1884 under the pseudonym "A. Square," the British mathematician, writer, and schoolmaster Edwin A. Abbott's (1838–1926) satirical novella *Flatland: A Romance of Many Dimensions* gives an account of life in a two-dimensional world. Flatland is a boundless surface, usually covered with fog yet also bathed throughout in a bright light emanating from an unknown source.¹ The Flatlanders' bodies are geometric, with their various shapes determining their position in a rigidly hierarchical caste system.² Having only one eye and knowing neither spatial perception nor perspective, Flatland's inhabitants, when they meet, appear to each other only as flat lines. That is why they require a series of techniques of recognition in order to correctly categorize one another. In order of ascending complexity, these are the acoustic perception of voices; the "Art of Feeling," which, though widespread, is regarded as uncivilized by the higher classes; and seeing, described by the first-person narrator as the most reliable yet also most demanding technique: gradations of lightness and clarity allow for differentiation of another Flatlander's lines, whose vertex or edge closest to the observer will be most distinct, while any other beholder-facing sides will be shrouded in fog to a greater or lesser degree depending on the angle between two sides. Inhabitants who are not adequately proficient in this complex and error-prone "Art of Sight Recognition" are at risk of social ostracism, and so learning and mastering the different ways of identifying one another is fundamental to life in two dimensions.

In Flatland, what eludes sight, fading into the fog, provides at least as much information about the object as that which presents itself to the eye. In our world of stereoscopic perception, by contrast, cognition is essentially tied to visibility and understood to be a given qualification of the beholder. Fog, on

the other hand, is a state of affairs that brings the contingency of our visual perception to our attention. As refraction and reflection disrupt the passage of waves of light between the world of objects and our visual apparatus, the presence of dense fog is comparable to a condition of temporary blindness; we reflexively adapt by moving gingerly and extending our arms and hands, relying on the other senses—above all, the sense of touch—to help us find our bearings in our surroundings and identify any obstacles early on.

Seeing and Knowing

Removing the topmost layer of an LCD screen, the polarization film, produces a similar effect: little more remains of the flows of images that incessantly gush from our radiant electronic devices than a bright white surface.³ When the interface between us and the digitally mediated world goes blind, the device comes to the fore as such, and although utterly familiar, a constant companion that is almost always in our hands or on our desks, it now raises many questions.

This book by Natascha Sadr Haghghian ventures to do what to the inhabitants of Flatland seems impossible by nature and is even forbidden under penalty of law: she trains her eye on the strata of reality that lie beneath the surface and probes the structures and processes that shape visibility and invisibility. The selection of writings, interviews, materials, and pictures of works of art by Sadr Haghghian gathered here spans roughly fifteen years. What ties the various formats and elements together is the artist's sustained curiosity and the multifaceted research it spurs into techniques of seeing and technologies of visibility. "Looking awry," a practice that pays attention to what is seen from the corner of one's eye, that seeks out the margins of the images and pursues the visual byways, is its chosen method. To train oneself in this technique is to disengage from acquired perceptual schemas that feel like second nature, to undertake a critical analysis of both the process of seeing and that which manifests itself in it, and to redirect attention to those areas and interconnections that are invisible at first sight and elude the direct gaze. Sadr Haghghian scrutinizes objective and subjective elements alike, questioning the physical, technological, and material arrangements that, like the LCD polarization film, determine what becomes visible in the first place and constitute the intangible or immaterial layers and media and political narratives that inform our perception of what

we see. She re-embeds the flat (on-screen) representations in the world of bodies, anchoring them in its complex ensemble of ecological resources, technical and economic infrastructures, and political agendas.

Like this complication of the nexus of seeing and knowing, of visibility and invisibility, the inquiry into the beholder's role and position is a defining feature of Sadr Haghghian's work. Seeing, the artist argues, is a form of witnessing, a form of contact with and fundamental complicity in what is seen: "I quarry for the contact zones between my figure and other figures, my body and other bodies, my eyes and visual events, to seize the world-making entanglements that might constitute this other depth. Becoming worldly is a form of striving, an acknowledgement that looking is participating, that touching is in fact an entanglement."⁴

It is the act of contemplation that completes the process of representation; only witnessing endows a visual event with reality—and all producers of imagery take it into strategic consideration. This understanding of seeing as participation implies an awareness that the beholder's role, which is often perceived or framed as passive, is an active involvement. In an interview with Thomas Keenan, Sadr Haghghian, discussing the photographs of torture at the Abu Ghraib prison that circulated worldwide in 2004, asks: How can we respond to such visual events that make us witnesses (whether willing or unwilling) or take us "hostage," that involve us? How can we counteract the dominant narratives and the performative power of representation?⁵

Instead of looking away or blocking out the visual event and remaining passive, Sadr Haghghian proposes, we can learn to "look awry," to employ a peculiar, subversive reading strategy. This way of seeing deliberately aims past the center of the picture, shattering the composed image of its subject as though considering it in a distorting mirror or through a diffracting prism, and brings the outer margins into focus.

Typically using her own phenomenological observations as points of departure, Sadr Haghghian has in the present book compiled examples of this technique of seeing and thinking that illustrate its varied application. "Looking awry" is an approach that pursues a range of objectives: On the one hand, it serves to throw into relief various lines of fracture and incongruence in what is generally taken to be objective reality, in order to uncover a momentum of incompatibility between diverging perspectives on the same object. The Japanese philosopher Kojin Karatani, one of Sadr Haghghian's

influences, has coined the label “parallax gap” for the reality of such irreducible contradictions within the picture, challenging us to think with and through it.⁶ It is an instant in which the basis of our perspectival vision, the principle of parallax—in which two images produced from two vantage points are synthesized—is no longer viable.⁷ On the other hand, shifting the angle of view can yield a new overall depiction composed of what at first appear to be unrelated elements.

Intertwined Thinking

In the second part of *Flatland*, A. Square receives an unexpected visit from Sphere, a resident of Spaceland, that poses a challenge to his understanding of the world and his self-conception. It takes numerous demonstrations by Sphere before Square grasps the existence of a third dimension from which the entirety of Flatland can be observed. Only the physical experience of a nudge in his inside—easy to perform for Sphere from the third dimension—compels him to rethink his conception of reality. When Sphere finally takes him on a tour of the land of three dimensions, Square has to learn stereoscopic vision. Stacking up individual planes (playing cards) atop one another finally makes him understand that what appear to be shapeless outlines in his two-dimensional perspective are actually solid three-dimensional bodies.⁸

The interplay of thinking and lived experience, the bonds that tie the mind to the body and to hand gestures, its “being worldly”: these constitute another major reference in Sadr Haghghian’s work. Donna Haraway, in her book *Staying with the Trouble: Making Kin in the Chthulucene*, proposes the abbreviation “SF” for this mode of thinking, storytelling, and picturing, which operates “across differences of historical position and of kinds of knowledge and expertise.”⁹ “SF” stands for “science fiction, speculative fabulation, string figures, speculative feminism, science fact, so far.”¹⁰

In string figures, an abstract, multistep movement sequence involving fingers and a string tied in a loop results in an image. “Passing one loop into another,” the title of both Sadr Haghghian’s show at Neuer Berliner Kunstverein and a central work in it, quotes a key directive from the game, a necessary and constantly repeated intermediate step that is vital to the formation of the image. In Haraway’s telling, string figures are both figura-

tion and process; visual pattern, tactile archive, and multinodal network as well as (algorithmic) problem. The game can become highly complex when more than two hands become entangled in it or, as Haraway would have it, when it acts as a form of thinking and storytelling involving other species, life-forms, or actors.

“The Trap” is a string figure in which, after several “loops,” the hands of another person are caught in the tangle of threads and briefly “implicated” in the figure. This book and Sadr Haghghian’s works similarly encourage readers and viewers to become actively involved and tease out correlations and interconnections between individual elements or images. Discovering points of friction and discontinuity as well as unsuspected analogies, they inevitably become practitioners of the technique of “looking awry.” In the writings collected in this book, Sadr Haghghian intertwines and disentangles diverse threads in order to expose the contradictions and sources of friction within visual representation. She ventures out into uncharted terrain, exploring byways and uncovering layered strata and complex networks that extend between politics, biology, art, natural science, historiography, and their various actors.

When the artist learned that she had won the Hannah Höch Förderpreis, she decided to realize her long-held ambition to gather these works and her extensive research in a compendium. Sadr Haghghian’s creative practice, which encompasses performances, installations, sound and video works, and objects, has garnered international acclaim. However, audiences have had comparatively little opportunity to engage with her writings, which must be seen as a distinctive component of an intertwining practice. This book invites readers to discover a plethora of affinities, methodological correspondences, and shared concerns and research interests that link her writings to her works of visual art and enhance both.

We are grateful, first and foremost, to Natascha Sadr Haghghian, who has labored tirelessly to realize the exhibition at Neuer Berliner Kunstverein and design the present volume; working with her has been an inspiration. Brian Kuan Wood, who has been a close observer of her work and reader of her writings for many years, teamed up with the artist to give the book its singular form and contributed an essay that charts a unique approach to the volume and her oeuvre. We would like to thank Michaela Richter, head of communication and public programs at n.b.k., for the extraordinarily

diligent editorial supervision, and Stephen Twilley for his meticulous copyediting and valuable suggestions. Special thanks go to the Zoff collective for the well-wrought design and the patience and precision with which they have helped chaperone this project from first idea to printing press.

By awarding the 2020 Hannah Höch Förderpreis to Natascha Sadr Haghghian, the State of Berlin has made the production of this comprehensive overview of the artist's oeuvre possible, giving a prominent platform to an outstanding voice on the Berlin and international art scenes. We are most grateful to Senator of Culture Dr. Klaus Lederer and to Lilian Engelmann and Veit Rieber at the Senate Department for Culture and Europe.

- 1 "Windows there are none in our houses: for the light comes to us alike in our homes and out of them, by day and by night, equally at all times and in all places, whence we know not." Edwin A. Abbott, *Flatland: A Romance of Many Dimensions*, London: Seeley, 1884, online at www.geom.uiuc.edu/~banchoff/Flatland .
- 2 All women are line segments, and all isosceles triangles serve as workmen or soldiers. With the higher-ranking equilateral triangles (tradesmen) and squares (professionals), male offspring gains one side per generation; the more sides, the higher the social standing. Circles form the top tier of society (the priestly caste) .
- 3 See Natascha Sadr Haghghian's discussion of an article on how to build a 'stealth' computer display in "Disco Parallax," in the present volume, p. xx .
- 4 Sadr Haghghian, "Disco Parallax," p. XX.
- 5 See Natascha Sadr Haghghian, "Sleepwalking in a Dialectical Picture Puzzle, Part 2: A Conversation with Thomas Keenan," in the present volume, p. XX .
- 6 Kojin Karatani, quoted in Slavoj Žižek, "The Parallax View," in: *New Left Review*, no. 25, January–February 2004, pp. 121–134; see also "Disco Parallax," in the present volume, p. XX .
- 7 See Natascha Sadr Haghghian, "Disco Parallax," in the present volume, p. XX: "Parallax is the reason why we have a perception of depth, why we see in 3D. It occurs when a thing is viewed or screened from two positions, like the position of our eyes. But what if the positions are further apart than our own eyes?"
- 8 The novella's first-person narrator comes to a tragic end. Having fully comprehended the principle of the third dimension, Square realizes that there are likely also a fourth and even more, higher, dimensions (an idea that Sphere, for his part, curtly dismisses as absurd). When he returns home and tries to share his experiences and insights with his fellow Flatlanders, the authorities sentence him to life in prison in order to silence him.
- 9 Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene*, Durham/N.C.: Duke University Press, 2016, p. 7.
- 10 *Ibid.*, p. 2.

Greeting

Klaus Lederer, Senator for Culture and Europe

The Hannah Höch Preis and the Hannah Höch Förderpreis (Advancement Award) are the only awards issued by the State of Berlin to visual artists. The Förderpreis, first awarded in 2011 as well as every two years since then, is awarded exclusively to female artists. The Hannah Höch Förderpreis recognizes the previous work of established, mid-career artists and supports their artistic development with the aim to raise the artist's profile within the cultural landscape.

Natascha Sadr Haghghian was selected as the award winner for 2020 by the jury members Kathrin Becker, Britta Schmitz, and Selda Asal. The award enabled the realization of an exhibition of Natascha Sadr Haghghian's work at Neuer Berliner Kunstverein (n.b.k.) as well as the production of this book. From June 12 to July 31, 2020, she presented her work in the n.b.k. Show-room under the title *passing one loop into another*.

For the jury, the decisive factor was that Natascha Sadr Haghghian addresses socially relevant themes such as representation, technology, identity, and solidarity in unique, compelling aesthetic installations, sculptures, and performances, which resist simple messages in favor of illustrating ambivalences and the complexity of social relationships and structures. Drawing on current and historical events, she tackles the question of how our scopes of action, ways of seeing, and, ultimately, our thinking are formed. She reveals the complex interconnections and interpenetration of technology, politics, value systems, and the biological, and calls into question our anthropocentric self-understanding.

At the award ceremony in June 2020 I had the pleasure of meeting Natascha Sadr Haghghian, which makes me all the more pleased to dedicate this greeting to her. I warmly congratulate her, thank her for her impressive commitment, and wish her continued success. My thanks also go to the jury for their selection, as well as to Marius Babias and the team of Neuer Berliner Kunstverein for their excellent cooperation.

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