

GUGGENHEIM

NEWS RELEASE

Rem Koolhaas and AMO Explore Radical Change in the World's Nonurban Territories in the Guggenheim Exhibition *Countryside, The Future*

Exhibition: *Countryside, The Future*
Venue: Solomon R. Guggenheim Museum, 1071 Fifth Avenue, New York
Location: Rotunda
Dates: February 20 through August 14, 2020

(NEW YORK, NY—February 19, 2020)—From February 20 through August 14, 2020, the Solomon R. Guggenheim Museum presents the exhibition *Countryside, The Future*, organized in collaboration with architect Rem Koolhaas and Samir Bantal, director of AMO, the think tank of the Office for Metropolitan Architecture. To coincide with the opening of the exhibition, the book *Countryside, A Report* (Guggenheim Museum and Taschen, 2020) has been published.

Countryside, The Future is organized by Troy Conrad Therrien, Curator of Architecture and Digital Initiatives, at the Solomon R. Guggenheim Museum, in collaboration with Rem Koolhaas and Samir Bantal, Anne Schneider, Alexandr Zinoviev, Sebastian Bernardy, Rita Varjabedian, Yotam Ben Hur, Valentin Bansac, with Ashley Mendelsohn, Assistant Curator, Architecture and Digital Initiatives, at the Guggenheim.

In June of 2014, the UN released *World Urbanization Prospects*, a report that announced that half of all humankind now lived in cities, and stated that “managing urban areas has become one of the most important development challenges of the twenty-first century.” This heralded a global focus on sustainable urbanization that ignored the other half of the world’s population living in rural conditions—neglecting not just their challenges but also exciting and innovative solutions to modernity.

This exhibition is an attempt at rectification, and its content is drawn from a large consortium of collaborators representing diverse global geographies and a broad range of expertise. A unique exhibition for the Guggenheim Museum, *Countryside, The Future* contests the assumption that ever-increasing urbanization is inevitable, exploring radical changes in the rural, remote, and wild territories

collectively identified here as “countryside,” or the 98% of the Earth’s surface not occupied by cities.

A central thesis of the exhibition is that our current form of urban life has necessitated the organization, abstraction, and automation of the countryside at an unprecedented scale. Data storage, fulfillment centers, genetic engineering, artificial intelligence, robotic automation, economic innovation, worker migration, and the private purchase of land for ecological preservation are in many cases more actively explored and experimented with in the countryside than the city.

The impact of global warming on specific countryside conditions underlies much of the show. In Siberia, the thawing of permafrost is dramatically transforming the landscape and releasing increasing amounts of methane with potentially catastrophic consequences.

Rem Koolhaas: “In the past decade, I have noticed that while much of our energies and intelligence have been focused on the urban areas of the world, the countryside has changed dramatically under the influence of global warming, the market economy, American tech companies, African and European initiatives, Chinese politics, and other forces. This story is largely untold, and it is particularly meaningful for AMO to present it in one of the world’s great museums in one of the world’s densest cities.”

Richard Armstrong, Director of the Solomon R. Guggenheim Museum and Foundation: “*Countryside, The Future* marks a turn in trajectory for Rem Koolhaas following a career-long focus on cities, presenting the curious encounters, stories, phenomena, conditions, fears, and hopes that he and his colleagues discovered on their travels through rural areas around the world. With this bold exhibition, the Guggenheim carries forward its legacy of risk-taking, addressing urgent global concerns with a project that goes beyond cultural matters into political, anthropological, scientific, technological, and philosophical territory.”

Samir Bantal, Director of AMO: “This is a collection of new and old ideas that aims to rediscover the dynamics of the countryside. A place many of us think of as stable and slow-moving is revealed as an incredibly agile and flexible realm, even more than any modern metropolis.”

Troy Conrad Therrien, Curator of Architecture and Digital Initiatives at the Guggenheim Museum and organizer of the exhibition: “*Countryside, The Future* isn’t so much a culmination as a reveal, the wholesale delivery of a decade of insight into the marketplace of ideas and opinion on what’s to come. The exhibition begins the way the accompanying book ends: with a tapestry of questions, almost a thousand in total, that simultaneously declare the thoroughness of the investigation and a still-unsated curiosity for the countryside, or what Rem Koolhaas calls an ‘ignored realm.’ Ignored by whom? Rem, for one. The declaration isn’t hubris, it’s a challenge for us all, countryside inhabitants and experts included, to think anew about what may seem foreign or familiar.”

Overview of *Countryside, The Future*

As the exhibition unfolds, it addresses questions about the development and role of the countryside over time: What was the countryside historically, what did the major political figures of the twentieth century prepare for us, what is the current condition, what needs to be done for the future, and in what ways could this take shape?

Histories and transformations of the countryside are illustrated along the six levels of the rotunda's ramp, each level with its own theme. Designed by AMO/Koolhaas and graphic designer Irma Boom in collaboration with the Guggenheim's exhibition and graphic design staff, this mix of imagery, films, archival materials, wallpaper graphics, a printed curtain, objects, text, and reproduced artworks, and robotic sculptures presents an unfolding narrative of case studies contextualized by a broad array of voices.

Exterior: Outside the museum entrance on Fifth Avenue, a hermetically sealed industrial grow container cultivates tomatoes under pink LED lights and a finely tuned microclimate. Also positioned at the entrance to the museum is a high-tech, state-of-the-art Deutz-Fahr tractor used in industrial farming.

Rotunda: On the publicly accessible street-level floor of the museum are cut-outs, objects, and extracts in the style of an ancient Roman unswept floor. Suspended above the fountain in the rotunda is a small imaging satellite, an industrial-size bale of hay, and a COTSbot—a predatory starfish-killing underwater drone—is paired with a reproduction Roman sculpture of a fisherman.

Level 1 and High Gallery: Introduction

Koolhaas's essay, titled "?," composed of questions related to the countryside, is featured on the wall of the High Gallery alongside an animated map that identifies the geographic scope of the project. Also introduced on Level 1 is the "Semiotics Column," created by journalist Niklas Maak with students at the Harvard Graduate School of Design, in which one of the few vertical elements of the Guggenheim Museum building is plastered with a matrix of images from advertisements, fashion campaigns, toys, and country music to illustrate fantasies and stereotypes of rural life.

Level 2: Leisure and Escapism

A 180-foot-long, full-height, fully saturated curtain takes over this section to tell a punctuated story of leisure in the countryside. Using visual and textual collage, the curtain begins with early Roman and Chinese cultures and cuts forward in time through episodes in Europe and America, from Marie Antoinette to hippie counterculture, to the current global wellness industry that profits from a natural world conditioned for corporate retreats and curated adventure.

As Koolhaas notes in the exhibition text: "Before Christ was born there existed a moment of global consensus on the countryside; the Romans and the Chinese, thousands of miles apart, developed intricate and coherent treatises on the countryside as a space of creative and idealized existence. Today's 'Wellness,' a 4.5-trillion-dollar industry, has abandoned such cultural and creative dimensions. An 'elevated' form of consumption has transformed whole sections of the countryside. In Italy, abandoned villages are converted in their entirety into luxury spas; in Andermatt, Switzerland, a huge new hotel is an extruded 'stretch-chalet'; and in China, authentic villages are remodeled into wellness resorts."

Level 3: Political Redesign

Through a series of eight case studies focused on the twentieth century, this section provides representative examples of "political redesign," the application of political will and vision to the transformation of the countryside at territorial scale. Such acts, proposed and effected by various political regimes, are profiled, from dictatorship to democracy. Case studies include a prototype of a

nineteenth-century commune, efforts to recondition the landscape of the Soviet Union in the twentieth century, and a food security program put into effect in Qatar in 2017.

As Koolhaas notes in the exhibition text: “Driven by need, ambition, ideology, and new political structures all through the twentieth century, a number of massive proposals for radical redesigns transformed large sections of the globe. Authoritarian and democratic states alike took colossal risks attempting to increase productivity and food security, and remake society. Success or failure, famine, or overproduction... We live in a world still deeply marked by these Promethean efforts.”

Level 4: (Re-)Population

This section considers the countryside as a frontier for experimentation. A carousel of photographic evidence, paired with firsthand texts and stories by and from locals, it presents a panoramic view of new social structures from China, Africa, Europe, and the US. Among the examples featured are European villages revitalized by welcoming refugees; Chinese villages focused on a form of twenty-first-century rural life; and innovation and development in Southern Kenya.

As Koolhaas notes in the exhibition text: “As soon as we leave the urban condition behind us, we confront newness and the profoundly unfamiliar. What we collect here is evidence of new thinking—in China, in Kenya, in Germany, France, and Italy, in the US: new ways of planning, new ways of exploring, new ways of acting with media, new ways of owning, paying, renting, new ways of welcoming, new ways in which the countryside is inhabited today.”

Level 5: Nature/Preservation

Featured on ramp 5 are complex case studies that counter accepted notions of nature through the lens of its preservation: in Uganda, the unintended consequences of conservation success with the mountain gorilla; in Siberia, the global and local impact of thawing permafrost; in Patagonia, large-scale land acquisitions by wealthy individuals and private conservation organizations.

As Koolhaas notes in the exhibition text: “Since Rachel Carson’s *Silent Spring* (1962), 15% of the Earth’s surface has been preserved, but much more will be needed to compensate for the adventure of modernity. Currently, scientists are developing models in, broadly, two versions. The first, ‘Half Earth,’ is based on E. O. Wilson’s 2016 manifesto. It implies a drastic separation between an almost pristine nature on the one hand and human habitation and cultivation on the other. The second, ‘Shared Planet,’ proposes a more intensive mixing of all our territories. Both approaches imply radical changes in food production, ideology, and agricultural techniques. They will also require the intense collaboration of all spheres, and all political factions that are barely on speaking terms today—and the collective mobilization of tools and technologies that have been spoiled by their unquestioned dominance.”

Level 6: Cartesianism

The street grid, an imposition of mathematical abstraction on varied terrains and unruly human affairs, has been seen as the hallmark of urban rationalism. In this section, at the top of the museum’s spiral, the exhibition explores such Cartesian rationalism in the countryside. Large hanging panels featuring images and projections are paired with contemporary agricultural equipment from the field and lab. Throughout, robotic sculptures roam the ramp, turning the fixed objects into a backdrop for surprising juxtapositions. Among the case studies are a look at high-tech indoor farming in the Netherlands; large-

scale precision farming in the US; a machine designed to measure photosynthesis; and fish farming on land.

As Koolhaas notes in the exhibition text: “Can we prove that René Descartes could only have invented his mathematical methodology because he was living in the hyper-orthogonal landscapes of the Netherlands—dedicated to produce vegetal and artistic abundance in increasingly artificial ways? Can we treat the ocean like a new countryside? Can we prove that Japan is the site where demographics of aging will mobilize robots to sustain ‘life’ in the countryside; that certain corporations now operate revolutionary structures that accidentally invent a ‘new architecture,’ focused on machines not on humans; that plants no longer need daylight or earth (and a lot less water) to grow, that they can influence and take care of each other better than our current monocultures allow them to, showered with pesticides; that nuclear energy is not a finished chapter, but that fusion is around the corner; that all these phenomena create new dreamlike images, promises, and conditions...”

Exhibition Team

Countryside, The Future is organized by Troy Conrad Therrien, Curator of Architecture and Digital Initiatives, at the Solomon R. Guggenheim Museum, in collaboration with Rem Koolhaas and Samir Bantal, Anne Schneider, Alexandr Zinoviev, Sebastian Bernardy, Rita Varjabedian, Yotam Ben Hur, Valentin Bansac, with Ashley Mendelsohn, Assistant Curator, Architecture and Digital Initiatives, at the Guggenheim.

Key collaborators include Niklas Maak, Irma Boom, Federico Martelli/Cookies, Janna Bystrykh, Stephan Petermann, Clemens Driessen, Lenora Ditzler, Kayoko Ota, Linda Nkatha, Etta Mideva Madete, Keigo Kobayashi, Ingo Niermann, James Westcott, Jiang Jun, Alexandra Kharitonova, Sebastien Marot, Fatma al Sahlawi, Vivian Song, and additional faculty and students at the Harvard Graduate School of Design; the Central Academy of Fine Arts, Beijing; Wageningen University and Research, Netherlands; Design Academy Eindhoven, Netherlands; and the University of Nairobi.

Book

Countryside, A Report, a 350-page pocketbook accompanies *Countryside, The Future*, presenting personal accounts and interpretations of the exhibition topics, with an extended preface and epilogue by Rem Koolhaas, a foreword by Richard Armstrong, and a curator’s introduction by Troy Conrad Therrien. Contributing authors are Samir Bantal, Janna Bystrykh, Lenora Ditzler, Clemens Driessen, Louise Fresco, Linda Nkatha Gichuyia, Alexandra Kharitonova, Keigo Kobayashi, Niklas Maak, Etta Mideva Madete, Federico Martelli, Ingo Niermann, Stephan Petermann, Johannes Refisch, and Anne M. Schneider. Designed and set in an original typeface by Irma Boom and edited by James Westcott, the volume is copublished by the Solomon R. Guggenheim Museum and Taschen.

Public Programs

Details for various programs offered in conjunction with the exhibition are available at guggenheim.org/calendar. Additional programs will be added.

Conversations
Countryside, The Present
Friday, March 13, 7 pm

Peter B. Lewis Theater

Join architect Rem Koolhaas, director of AMO Samir Bantal, other contributors to *Countryside, The Future*, and invited respondents for this overnight program exploring the implications of the research presented in the exhibition. Conversation topics will be organized around the main themes of the show: how the earth is modeled and surveilled, the countryside as a place of escape and cultural production, territorial scale political projects, the countryside as a frontier for social experimentation, nature through the lens of preservation, and the questions and potential futures for managing the countryside as a resource for urban life. More information, including a lineup of presenters, forthcoming.

\$25, \$20 members, \$18 students. Tickets will become available later in February 2020 and include access to the exhibition *Countryside: The Future* for the duration of the event, as well as a reception in the Guggenheim's iconic rotunda.

Support for this program was provided in part by a grant from Carnegie Corporation of New York.

Project for a New Decade: From City to Countryside

Friday, April 24, 6:30 pm

Solomon R. Guggenheim Museum

Join architect Rem Koolhaas, director of AMO Samir Bantal, and Sarah Whiting, Dean and Josep Lluís Sert Professor of Architecture, Harvard Graduate School of Design, for a panel discussion of topics related to the exhibition *Countryside, The Future*. The conversation will be moderated by Troy Conrad Therrien, Curator, Architecture and Digital Initiatives. The program concludes with a book signing of the exhibition catalogue with Rem Koolhaas and a reception in the Guggenheim's iconic rotunda.

\$15, \$10 members, free for students with RSVP. Ticket includes same-day museum admission. Same-day admission tickets may also be presented at the door for free entry to the event as space allows. Schedule subject to change. For more information and tickets, visit guggenheim.org.

This program is co-organized with the Harvard Graduate School of Design.

Exhibition Support

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The Leadership Committee, chaired by Dasha Zhukova, is gratefully acknowledged for its support, with special thanks to the Blavatnik Family Foundation, Rachel and Jean-Pierre Lehmann, Naomi Milgrom AO, The Durst Organization, Robert M. Rubin and Stéphane Samuel, and an anonymous donor.

Additional funding is provided by Creative Industries Fund NL, the Dutch Culture USA program of the Consulate General of the Netherlands in New York, and the Netherland-America Foundation.

In-kind support for the exhibition is provided by NethWork, Infinite Acres, Deutz-Fahr, 80 Acres Farms,

Priva, Planet Labs, Inc., Ministry of Foreign Affairs of the Kingdom of the Netherlands, Volkswagen, Gieskes-Strijbis Fonds, and AMO B.V.

About Rem Koolhaas

Rem Koolhaas (b. 1944, Rotterdam) founded the Office for Metropolitan Architecture (OMA) in 1975 together with Elia and Zoe Zenghelis and Madelon Vriesendorp. He graduated from the Architectural Association in London and in 1978 published *Delirious New York: A Retroactive Manifesto for Manhattan*. His 1995 book, *S,M,L,XL*, summarizes the work of OMA in “a novel about architecture.” In 2001 Koolhaas published with his students two volumes of the Harvard Project on the City, *The Harvard Design School Guide to Shopping* and *Great Leap Forward*. In 2011 he wrote, with Hans Ulrich Olbrist, *Project Japan: Metabolism Talks* on the Metabolism movement in 1960s Japan. His built work includes the Axel Springer HQ (2020), the Qatar National Library (2017), Garage Museum of Contemporary Art in Moscow (2015), Fondazione Prada in Milan (2015), the headquarters for China Central Television (CCTV) in Beijing (2012), Casa da Música in Porto, Portugal (2005), Seattle Central Library (2004), and the Embassy of the Netherlands in Berlin (2003). Koolhaas also designed the Guggenheim Hermitage Museum in Las Vegas, open from 2001 to 2008. In 1978 the work of the Office for Metropolitan Architecture was featured in *The Sparkling Metropolis*, an exhibition on the top ramp of the rotunda of the Guggenheim in New York. Current projects include the Taipei Performing Arts Center and the Factory in Manchester. Koolhaas is a professor at Harvard University and in 2014 was the director of the 14th Venice Architecture Biennale, entitled *Fundamentals*.

About AMO

Cofounded by Rem Koolhaas in 1999 and now directed by Samir Bantal, AMO is the think tank of the Office for Metropolitan Architecture (OMA). AMO applies architectural thinking to domains beyond building, often working in parallel with OMA’s architectural projects to fertilize building with intelligence from an array of disciplines. AMO has worked with Prada, the European Union, Universal Studios, Amsterdam’s Schiphol airport, Condé Nast, Harvard University, the Hermitage, and Virgil Abloh’s Off-White. It has produced exhibitions including *Expansion and Neglect* (2005), *The Gulf* (2006), *Cronocaos* (2010), *Public Works* (2012), and *Elements of Architecture* (2014) at the Venice Architecture Biennale; *When Attitudes Become Form: Bern 1969/Venice 2013* (2013), *Serial Classics*, and *Portable Classics* (both 2015) at Fondazione Prada, Milan and Venice; *Virgil Abloh: “Figures of Speech”* (2019); and *Making Doha* (2019). AMO published *The Harvard Design School Guide to Shopping* (2001) and *Great Leap Forward* (2001) with the Harvard Graduate School of Design, and *Content* (2004), *Al Manakh* (2007), *Al Manakh: Gulf Continued* (2007), *Project Japan: Metabolism Talks* (2011), and *Elements of Architecture* (2014 and 2018).

About the Solomon R. Guggenheim Foundation

The Solomon R. Guggenheim Foundation was established in 1937 and is dedicated to promoting the understanding and appreciation of modern and contemporary art through exhibitions, education programs, research initiatives, and publications. The international constellation of museums includes the Solomon R. Guggenheim Museum, New York; the Peggy Guggenheim Collection, Venice; the Guggenheim Museum Bilbao; and the future Guggenheim Abu Dhabi. An architectural icon and “temple of spirit” where radical art and architecture meet, the Solomon R. Guggenheim Museum is now among a group of eight Frank Lloyd Wright structures in the United States recently designated as a UNESCO World Heritage site. To learn more about the museum and the Guggenheim’s activities

around the world, visit guggenheim.org.

Visitor Information

Admission: Adults \$25, students/seniors (65+) \$18, members and children under 12 free. Open daily from 10 am to 5:30 pm; Tuesdays and Saturdays until 8 pm. Admission is pay-what-you-wish on Saturdays from 5 to 8 pm. Visitors may learn more about the exhibition using the museum's free Digital Guide app, Bloomberg Connects, available on-site or from the Apple App Store or Google Play.

For publicity images, visit guggenheim.org/pressimages

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#1587

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PRESS IMAGES

Countryside, The Future

February 20–August 14, 2020

Solomon R. Guggenheim Museum

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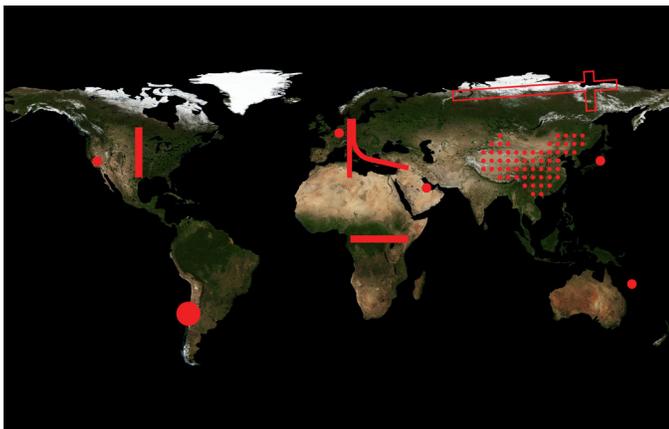
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Installation views are also available.



AMO's selection of unique and highly specific conditions distributed over the globe serves as a framework for their research and represents where the world is headed.

Image: Courtesy of OMA



NEW NATURE

Highly artificial and sterile environments are employed to create the ideal organic specimen. Today's glass houses contain all the essential ingredients of life but none of the redundancies: sun, soil, and water are emulated, optimized, and finally automated.

Photo: Pieter van Velden



RIGIDITY ENABLES FRIVOLITY

The frivolity of urban life has necessitated the organization, abstraction, and automation of the countryside at a vast and unprecedented scale.

Left: Mishka Henner, *Feedlots*, 2013. Right: Queen Elizabeth Olympic Park, London, 2018.

Photo: Luca Locatelli



Rem Koolhaas; Troy Conrad Therrien, Curator of Architecture and Digital Initiatives, Solomon R. Guggenheim Museum; Samir Bantal, Director of AMO.

Photo: Kristopher McKay © Solomon R. Guggenheim Foundation, 2020.

OUTDOORS, GROUND FLOOR, COLUMN, CEILING, AND RAMP 1

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Outdoor Objects

2019

Deutz-Fahr 9340 Warrior TTV tractor

PFG America, Dacula, Georgia

Presented as part of *Countryside, The Future*

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2020

Indoor Grow Module

Infinite Acres, Delft, Netherlands

This 700-square-foot (65-square meter) grow module enables governments, grocers, and farmers to grow clean, pesticide-free food anywhere in the world using less natural resources like fresh water, land, and nutrients. During its six months at the Guggenheim Museum, the module will grow over 50,000 tomatoes, all of which are being donated within the New York City community.

Presented as part of *Countryside, The Future*, courtesy of Infinite Acres, 80 Acres, and Priva, with Open Architecture, Hortilux, Rijk Zwaan, Grodan, Nethwork, Roelands Plant, Koppert, and Metazet/Formflex.

Rotunda Floor

Curatorial Introduction

As Rem Koolhaas asserts, “This is not an art show.” It’s also not an architecture exhibition or a science exhibit. This is something else.

An architect who has spent a lifetime investigating, writing about, theorizing, planning, and designing for cities, Koolhaas—founding partner of the Office for Metropolitan Architecture (OMA)—began to increasingly turn his attention to the other 98% of the earth’s surface just as over 50% of the world’s population had become urban, about a decade ago. The same forces that he had previously tracked as an

urbanist had simultaneously arrived in the rural Swiss village that he had long used as a retreat. The modernization and globalization of the countryside confronted him with even more drastic transformations than those he had observed in cities. Via his in-house think tank, AMO—now led by Samir Bantal—Koolhaas mobilized an international crew of close collaborators, including the faculty and students of multiple universities, to visit, document, interrogate, analyze, visualize, research, and revisit selected pockets of the global countryside. *Countryside, The Future* presents the results.

Each level of the museum's rotunda is dedicated to an overarching topic, comparing and contrasting episodes displaced in time, space, and culture. Developed closely with the Guggenheim's expert staff, the exhibition is a truly collaborative effort yet distinctly driven by Koolhaas, Bantal, and AMO, from content to design and didactics. The text throughout, with the exception of this introduction, is written by them and their collaborators, a deliberately heterogenous mix of authors and voices that shift register in relation to the content as much as the text itself responds to the contours of the building.

All of the canonical art works that you will encounter are copies. Authenticity is instead dedicated to actual farming equipment, archival footage, original interviews, documentary photography, and an imaging satellite suspended over the installation. Real and reproduced, new and old, near and far: Categories that typically organize museum exhibitions are secondary, present but subservient to the crafting of a provocative narrative, a provisional story of stories that unfolds along the spiral.

Provisional because while this is a project many years in the making, it's just the beginning. Rather than proposing design solutions, it continues to raise questions, roughly a thousand on one of the walls of the introductory gallery alone. As the research has progressed, the questions have proliferated, the product of a process that is as intentional as it is intuitive. *Countryside, The Future* is an exploration of a future that's already here, lurking in unexpected and neglected corners, revealing itself to those who ask enough of the right questions. Koolhaas and AMO's method isn't big data, it's big curiosity. The result isn't a comprehensive map but a pointillist portrait of a mutating territory sketched by an ever-growing armada of diverse inquisitors.

—Troy Conrad Therrien, Curator, Architecture and Digital Initiatives, with Ashley Mendelsohn, Assistant Curator, Architecture and Digital Initiatives

Rotunda Floor label

2020

Unswept Floor

AMO after Sosos of Pergamon

The *asàrotos òikos*, or unswept floor, was a common decorative motif in ancient Greek and Roman dining rooms. The remains of a lavish and indulgent feast, rendered as a mosaic in colored squares of marble and glass, lay strewn on the floor: oyster and lobster shells, walnut husks, ginger, figs—the imported bounty of a vast and voracious empire. *Countryside's* unswept floor contains the remnants of an intellectual feast—objects and extractions—an overabundance of material from the ramps of the rotunda.

Semiotics Column (floor to ceiling)

Countryside Semiotics

From the moment we learn to walk, we see toys and children's books, magazines, films, and advertisements telling us what the countryside is and how it differs from the city. This highly ideological imagery, a phantasmagoric invention of rural fantasies, abounds with problematic assumptions about gender, race, identity, and role models.

Magazines

While the circulation of daily newspapers in the US decreased to almost half the number recorded 20 years ago, the magazine *Better Homes and Gardens* reaches over 7.5 million readers alone, and *Country Living* more than 1.4 million. Celebrating “the changing seasons, a slow pace of life and original craftsmanship” in “a world where the sun shines and the grass is always greener,” the dream of the countryside still sells well—mostly to urbanites.

Toys & Books

The smallest toy farm or police squad or children's book reveals more about the fears and hopes of a society than many sociological studies. They teach children from a young age that the countryside is green, bright, and simple, while the city, rendered in bluish darkness, is complex and dangerous: "Country Life" vs. "City Action."

Country Music

Since its inception, American country music has blended musical traditions, from Irish folk songs to the Blues, with instruments and aesthetics from a variety of cultures and continents. The earliest known banjo, source of that quintessential country twang, originated in Haiti by way of West Africa. The iconic American cowboy emblazoned on album covers got his hat and boots from the *vaqueros* of Mexico. Despite its hybrid origins, country music has mistakenly, and until very recently, been considered a mostly white form of music. A repository of global influences, country music is a global export, popular in Latin America and Africa, India and Europe. Imprisoned on Robben Island in apartheid South Africa, Nelson Mandela played "Jolene" for his fellow inmates. In China, we witnessed high-ranking generals shedding tears over covers of "Take Me Home, Country Roads" sung in Mandarin. Has country music become the lingua franca of our time, a global language understood everywhere in the world?"

Not Country

"Old Town Road" is a song by American rapper Lil Nas X released in December 2018. The song reached number 19 on the *Billboard* Hot Country Songs chart but, according to *Billboard*, was removed for not embracing "enough elements of today's country music." Its exclusion sparked a debate on racism in the country genre. *Billboard* later stated that the decision had nothing to do with the singer's race.

Country

When Lil Nas X recorded a remix of "Old Town Road" with Billy Ray Cyrus, a legendary country music singer, there was no question left of whether this song was country or not. Both versions rewrote country music's history: Staying at number one on the

Billboard Hot 100 chart for 19 weeks, Lil Nas's "Old Town Road (Remix)" became one of the most successful songs of all time.

Cars

Car design and car ads are an indicator of a society's desires, anxieties, values, and changes. Billions of dollars are spent on psychological research, car design, and commercials. Historically addressing farmers and city people with very different vehicle typologies, and promises ranging from dependability and fuel-savings to fun and escapism, car design has resolved into two dominant forms—the SUV and the truck—which represent a collective state of mind.

... Rolling Coal

Rolling coal is a practice where a diesel engine is modified to have the capacity to emit large amounts of black smoke. Some truck drivers "roll coal" to annoy drivers of electric or hybrid vehicles ("Prius repellent"); some put their own heads into the smoke. For others, rolling coal is a symbolic expression of power (the practice has its origins in truck pulls, where pickup drivers compete to pull a heavy sled), confidence, and wealth (when the smokestacks are smoking, there is work and prosperity). Often, it is a violent, malign expression of anger over "rampant environmentalism." In 2014, the US Environmental Protection Agency stated that the practice was illegal, as it violates the Clean Air Act and road traffic safety. New Jersey was the first state to explicitly ban rolling coal, in 2015, while, according to the *Denver Post*, "Colorado lawmakers, facing anxieties in agricultural areas, wrestled with legislative proposals and twice killed them" before finally passing the bill in 2017.

The Doris Day Show

In *The Doris Day Show*, broadcast on CBS from 1968 until 1973, Doris Day plays Doris Martin, a widowed mother who moves with her sons back to her father's ranch, where she enjoys the beauty of rural life while mastering its challenges. In the fourth season, Day's character becomes a single career woman based in San Francisco. The change

was the result of a strategic shift in CBS's programming philosophy, which replaced shows targeted toward a rural audience with those set in urban locales.

Women's Land Army

The Women's Land Army (WLA) was created during World War I. Its primary role was to ensure the continued production of essential foodstuffs, for humans and animals, when male farmers and their horses were redeployed into the armed services. During World War II, women's land armies were established in the USA, Canada, New Zealand, Australia, and Britain. Government recruitment campaigns aimed to entice women living in cities to move to the country (which many had never even visited) by extolling the restorative and redemptive qualities of the land (to the women) and appealing to their seemingly "natural" capacity to nurture (as opposed to destroy). The land girls, as they were called, worked long and unregulated hours, undertook hard physical work, and were often isolated geographically and socially.

In 1941, there were 20,800 land girls working in England and Wales; the number reached 80,000 for the bumper harvest of 1943. Between 1939 and 1945, 50,000 male agricultural workers were recruited into the armed forces.

The distinctive breeched uniform of the land girls—loose-fitting pants, tapered at the calf, worn with green sweaters—shaped their identities and influenced broader perceptions of them. The women were often ridiculed for wearing what was considered overtly masculine clothing while displaying a stereotypically "feminine" squeamishness toward country life and animal reproduction. The land girls might have replaced male laborers, but society continued to value (male) military prowess over (female) rural labor, and gender hierarchies remained. —Amy de la Haye

Fashion Photography

Historically, fashion photography served as a reservoir of all the idyllic images of a premodern country life that has long since disappeared from other disciplines. In contemporary fashion photography, though, interesting changes can be observed: In these images, women seem to enjoy the countryside while male models look increasingly lost, dazed, and confused when exposed to nature.

Ceiling Text

If you live in cities, you don't live in the most beautiful parts of the world... What happens to the world becomes remote—you experience the suffering of nature second- or thirdhand... Tourism doesn't help—it imports urban values to the heart of vulnerable ecosystems. You also miss rural creativities—new ways of paying, driving, sharing, planting, resting, living—that might enable you to lead a more productive, happier life. When you live in cities, you are mostly exposed to one species, humans, with all their splendors and miseries; if you live in the countryside, the species multiply—there are plants, animals, intricate ecologies even in the desert. In the countryside, the positive side of the digital revolution is more evident than in cities—technologies let us connect and reach others across vast distances, instead of alerting urban surveillance systems to our mistakes and transgressions. If you try to imagine certain people, certain professions, certain activities in the countryside, they wouldn't last for a second, even if they dominate in our cities. The countryside is not pure, but at least its struggles are more “real.” In cities, you cannot be alone; in the countryside, you can be anything, including yourself. There are things you don't need to do or know in the countryside. The countryside is where our largest threat—warming—is most visible. How relevant can our insights and opinions be if they barely enter the arena where the confrontation takes place?

Access Ramp Light Boxes

Prelude

Over the past 10 years, I have been collecting information and material about a currently deeply neglected subject—the countryside. It started in a small village in the Engadin valley in Switzerland, which I observed mutating in surprising ways...

Growth Through Decline

When I first went there 20 years ago, the village was small. Since then, the inhabitants left, but the village grew. It's now three times bigger... How can a village empty and grow at the same time?

Arrested Development

This was the authentic architecture of the village. An entrance for human beings, but also for cows and machines. Age made it only more beautiful.

Radical Modernity

Today, you find this house next door, a barn renovated in a "traditional" style. It follows all the rules of preservation but no longer fits. Expensive minimalism cannot save authenticity. It constitutes a new type of modernity that wants to blend in but can't hide its true nature.

Inhabitants: Urbanite Escapism

What seemed an authentic Swiss farmer was in fact a dissatisfied nuclear scientist from Frankfurt...

Hay Making

Did the Swiss still maintain their own country? Nothing was what it seemed... The countryside was deeply unstable...

Bay 14: What Happened?

This is a picture of Russia in 1905. The countryside is a stable environment where everyone—man, woman, child—knows their place. There is a pride in costume and products. One hundred years later, three women from faraway cultures on a Swiss village green...migrants maintaining houses, pets, and sometimes children... What happened in between these two pictures?

Bay 12: 50/50

This is not an art show; it is an effort to explore the contours of a “new” countryside.

In 2007, the United Nations launched a statistic that had far-reaching consequences. It proclaimed that humankind was now equally divided between urban and rural populations, and suggested that the proportion of urban dwellers would increase to between 70 and 80% by 2050.

Are we really heading for this absurd outcome, where the vast majority of humanity lives on only 2% of the Earth’s surface, and the remaining 98%, inhabited by only one-fifth of humanity, exists to serve cities?

The 50/50 moment became the pretext for an almost exclusive focus on the city in terms of publications, research, exhibitions, and other forms of discourse—and for an equally pervasive neglect of the countryside. This neglect has had profound effects, of which perhaps the emergence of populism and the apparent waning of globalism are only the most obvious.

Cities only grow bigger; the countryside is losing population, but it cannot shrink. By definition, that condition MUST be more interesting than mere—or more—urbanization. As soon as we leave the urban behind us, we confront profoundly unfamiliar conditions.

Countryside—a glaringly inadequate term for all the territory that is not urban, 50 times bigger than all our cities combined—presents a selection of radical changes. Given the countryside’s enormity, this portrait can only be pointillist. We collect evidence of “progress” in the countryside—even within the gloom of global warming—but also raise alarms that have never even reached the city.

Bay 11: Cartesian Claim

Rigidity Enables Frivolity

Large sections of the countryside have been reduced to a massive back-of-house, converted to accommodate the needs of the city and to expand the huge physical infrastructure that sustains the virtuality of the digital age, outside our view. Our current form of urban life has necessitated the organization, abstraction, and automation of vast territories... The more we extend our demands for consumption, entertainment, comfort, and capital, the more the countryside becomes a hyper-organized realm of production.

To keep the city shapeless, the countryside has to become more and more orthogonal and Cartesian—a futurism without manifesto.

HIGH GALLERY

CONTENTS:

Map extended label

?s

Map extended label

Only 2% of the world's surface is urban...the rest we are calling "countryside" for the purposes of this exhibition, knowing that it is not the right name for wilderness, desert, or the Himalayas.

You can understand and describe individual cities but countryside cannot be understood or documented in the same way. This exhibition is conceived as a collection of zooms—into areas and phenomena in the US, Europe, Africa, the Middle East, Russia, China, Japan, and Australia—that together describe a "new" countryside and its actors. The sites are vivid illustrations of radical change—some for the worse, some for the better. Many highlight ingenious ways of addressing familiar issues. Through these highly specific episodes, global trends in food production, energy, digital consequences, and climate change are revealed in spite of their remoteness.

?s

Where did the cows go ?

And when did they leave ?

Could we no longer tolerate the smell ?

Did China find a way to exploit the connections of internet also in a physical way ?

The sound of their bells filled the valley like a tangible substance ?

When did "old" disappear ?

Why did the nuclear scientist become a farmer ?

Where are the inhabitants ? Do they live elsewhere ?

Are there inhabitants ?

Why are the gardens unused ? When was the last barbecue ?

Who maintains the unused ?

Does grass always need cutting ? Why don't they invent grass that doesn't grow ?

Is hay still relevant ?

What happened in the last 100 years ? How did we evolve from costume to jeans ?

Definitive clothing ? The outward sign of a new me ?

How did the Romans live in the countryside?

And their contemporaries, the Chinese ? What made them happy ?

Who thought of free time ?

Singing in the stream, reciting poetry...

Since when did we sell entire villages ?

Work or Wellness ? Can tourism be real ? Is massage a new duty ?

Dung or Design ?

How close to heaven are satellites ? Do they reach heaven ? Do they know everything ?

Can we hide ?

What happened between the moment when everyone knew their place and now ?

Did they stop suffering in silence ? Was the countryside unbearable ?

Was humankind once better ?

Why did we produce whole generations that have never touched the teat of a cow ? That only know milk ?

That have never stepped on a shovel, don't know the scale of a pig, the strength of a sheep ?

Who ordered this exodus ?

Was it a plan or did it just happen ?

Could they have stopped it ?

Was it under duress ?

Where did they go ?

Where did they recruit the replacements ?

Did the new ones meet the old ones ?

When did they abandon their costumes ?

Yesterday ? Did they wear veils ?

What did the men wear ?

Can you recondition / rehabilitate / remodel / refurbish / rebuild / repair history ?

How do you learn farming ?

Why do they always convert what is abandoned?

Should architects design for disoccupation ?

Can only what is abandoned be converted ?

Why do new occupants use interior designers ?

Who produces the cushions ?

Locally ? Internationally ? Internet ?

Did anyone regret leaving ? Come back ?

Do they still communicate now that they are dispersed ?

Did they sell or rent ?

Do they own or rent ?

Does renting mean a potential return ?

Is selling definitive ?

When are they there ?

12 days a year ?

What percentage of the days are they there ?

Are they all from one big city?

Milan ? Paris ? Riyadh ? Amman ?

Can you base a culture on absence ? Or is it the new culture of absence ?

Are their children still rural ?

What binds them together ?

Nationality ? Politics ? Dissatisfaction ?

Is there a connection between satellites, the sky, and the beyond ? Are they the beyond ?

What is the difference between the Cassini Orbiter and God ?
Can they see everything now ?
Is everything seen ?
Is seeing believing ?
Are we a new cast performing the same old play or does every cast imply a new play ?
What happens when the snow melts ? Disappears ?
Dark Swiss or white chocolate ?
Will white xmas turn into brown xmas ?
Can we order snow like a carpet ? Roll it out ?
Should we remove white from all paintings ? To visualize what is going to happen ?
Is architecture always for humans ? Can architecture serve other species ?
Animals ?
Robots ?
Do objects have something to say to each other ?
Do architects know how to address things that are not alive ? Know how to please "things" ?
Do we have to find a new name for emptiness ?
A new form of policing ? What happens to an alarm that nobody hears ?
How should we "clad" it ?
Vegetation ?
Do we bother to mow, trim, cut... the landscape ? Or tile it ?
Asphalt ?
What do you call a public domain from which the public has been drained ? A domain ?
Can a condition be urban without people ?
Who will control the animals ? The wild horses ?
Beyond the factory, the safari ?
Does living require courage ?

Will it make sense to abandon time in the future ?
Night and day ?
Will robots keep us from sleeping ?
Should we adopt a new system to meet the needs of machines? To plan when to coincide ?
What is their measure of achievement ? Not to break down ?
Will they produce equally ? Maintain it ?
Where will one machine end and another begin ?
If machines take care of animals, infrastructure, the world—on whose terms ?
Could there ever be a new anarchy ?
Was the world safer ?
When China represented 1/3 of humankind ?
Would you say no if China offered to pay for your infrastructure ?
To connect the coast and the most remote places inland ?
Or to create a Y-shaped system that opens up your entire country like a crowbar ?
Is it helpful that they not only loan, but that they also construct ?
If this is not “aid,” is it help ? Post-colonial collaboration ?
Are their train stations Chinese ? Welcome to your own country ?
Chinese TV shows interaction between two populations, even the outbreak of love... where is the equivalent on the African side ? Is there love ?
In media, on the ground ?
Is it fun being Chinese in Africa ? All you see are sterile encampments covered in slogans—“Don’t violate regulations is equal to cherish your life” or “Cherish your life, say no to violations” ?
Just another challenge ?
Globalization is sharing ? And now we forgot how to share ?
Since when are we against sharing ?
Is humankind’s interest in knowing each other distributed equally ? Is curiosity about the other a given ?
Or is curiosity a one-sided aspirational claim ?

Is the airline system a symbol of our constantly expanding curiosity, or a never-ending search for ownership ?

Why are African countries barely connected to other African countries ? Self-sufficiency ?

That you have to fly via Paris if you want to go from Kenya to Nigeria ?

Would that attitude, exported to the rest of the world, lead to a significant increase in global serenity ? or exacerbate tensions ? gains for sustainability ?

How paralyzing is our current connectedness ?

Re: vanishing cows: was it a plan or just a result ?

For every cow that disappeared, a new second home ?

Suddenly new, ungraceful cows appeared from the mists... new species, emphasizing meat at the expense of their heads ? The bovine equivalent of microcephaly , imported from where ?

Can art replace life ?

At what scale ?

How much art does Switzerland need to remain "alive" ?

Four artists per village ?

If artists show in former farms, should farmers show in museums ?

Can our schools produce enough artists ?

To fulfill the quota ?

Does AI offer help ?

Will Artists recognize A.I.tists ?

Will they compete or collaborate ?

Will the profits of A.I.tists be shared with poor Artists ?

How will we recognize A.I.tists ?

Can there again be art without CV, biography, context ? As in Lascaux ?

Do good intentions count for sustainability ?

LEED ? BREEAM ? DGNB ? HQE ? GBL ?

Can acronyms save the world ?

Bronze, silver, gold, platinum ?

What is beyond ? Holiness ?

Would it be exciting to try holiness ?

And for After ?

Is it me or are sections of Switzerland—and maybe much larger sections of the world—living a new form of afterlife ?

Manicured like a cemetery ?

Maintained by newcomers—artists, expats, and owners—who can only focus on “essence,” on how it was, once ?

Is now still the same ?

What did they mean by afterlife ?

Who thought of the word ?

Could we dwell on it for a moment?

Dwell in it ?

Can we liberate art from the obligation to remember ?

To fabricate nonexistent pasts ?

Do people realize that certain parts of countryside died ?

Do we even remember it was alive ?

Stinking, messy, chaotic, unfriendly ?

Will we find an alternative to death ?

Why do we avoid death ? Can we celebrate death ?

Is it ironic that Switzerland needs to be kept alive artificially while its elevation alone is its most effective defense against heat ?

After the winter onslaught of skiing, orchestrate a summer offensive of mountain bikes ?

Will there be a huge confrontation between what is flat and what is sloped—flat for machines, sloped for humankind ?

Will entire populations be adopted officially by cold climates ?

Twin countries ?

Can nations be doubled ?

A winter and summer population ?

Are we only experiencing the beginning ?

Will they have to pay ?

Or rent ?

Will flat and sloped combine ?

Japan with the Midwest ? Chile with Holland ?

Does anywhere layered—like a city—need sensors ?

And anywhere open air—like countryside—need satellites ?

Because it can be inspected only from above ?

The city is censored, the countryside supervised... godlike from the sky ?

Culture = sensor ?

Nature = satellite ?

“We” = sensor ?

“It” = satellite ?

Are satellites for viewing the spaces that are natural, uninhabited, sparsely populated ?

If you feel God is following you, you are a believer; what are you if you know that satellites are following you... an actor ?

Is each of us (inadvertently) the subject of a movie ?

If a panopticon is an all-seeing eye that surveys, from the center—is earth now itself the captive of a surrounding Sensorsphere that captures any event on its surface ?

Is it a coincidence that, at the very moment surveillance techniques have reached a superhuman precision, “fake” has become the category we obsess over ?

When the UN launched its famous 50/50 subdivision of humanity into urbanites and remnants in the countryside, was it actually true ?

Did they amalgamate as many definitions of “urban” as the UN itself has members ?

Equate Denmark’s density with China’s ?

Can we begin to correct it ?

Was it premature ? Self-fulfilling ?

50/50 sounds reassuring; did it mask a massive imbalance ?

Was it a warning, a reassurance, science, or a polemic ?

If they were only indicating a trend, are we doomed to obey ?

To what point ?

70/30 ?

80/20 ?

Even 90/10 ?

Did the UN condemn the countryside to perpetual (and ever-increasing) backwardness, emptiness, by not defining the meaning of its statistic ?

Would you still recognize cities if everyone lived there ?

Beyond recognition ?

If the UN's announcement just pre-dated the ubiquity of the digital, does digital only accelerate urbanization ?

Or potentially slow it down ?

Do we really want Total City ?

What will be the relationship between the "total city and the "smart" city ?

After working in the city, did Romans come alive in the countryside ?

Where will we come alive ?

Is Otium with mobile phones still Otium ?

Is Canada as a whole the new low-key Otium ?

Otium diluted to a homeopathic dose ?

Do you also have friends who live in houses without any books ?

Do you feel old then ?

(Or did reading keep you young ?)

Do those friends read *Wallpaper* ? *Monocle* ? *The Good Life* ? *Home and Garden*, the new *Playboy* ?

Did you see the issue on the "Smart City" ?

Sidewalk's new global HQ in Toronto ?

How smart is it to build the first prototype of your "Smart City" in the most generic version of the West ?

In anticipation of its eventual "roll-out" worldwide ?

Can we guess in which sequence ?

Netherlands ? Zimbabwe ? New Zealand ? Bhutan ?

Is Google a microcosm of the world or has it belittled the world ?
If it covers the entire spectrum from mysticism to science, what is still lacking ?
Can religion be far behind ?
Is it smart to insist that the total city will be totally middle class ?
To bet on white bread ?
That the smart city does not need “stringent” geometries anymore ?
That it can be informal ?
That we can all have a balcony ?
Will Warming be mitigated, like everything else in Toronto ?
What does it mean that the same organization that promises a future of informal geometries requires acres and acres of meticulous three-dimensional orthogonality to store the data generated by our post-orthogonal lives ?
With the return of wood, what will architects have to unlearn ?
What will be the New Style ?
Holistic righteousness ?
Apple Flintstone, if you’re lucky ?
Are we facing a golden age ? (in the rear view mirror ?)
Can architects give up Sir and Lord in favor of new equalities ?
Why was the metaphor of the treadmill abandoned ?
Since when did we overcome boredom ?
Is the implication of data that ultimately their storage will require more energy than our actual lives ?
Can our cities become village, or souk-like, like the places where the refugees that we refuse came from ?
That you can wear anything, be everything, go everywhere ?
Which political system could deliver that promise ?
Since when did the word vision apply only to cities ?
To urbanization ? To development ?
When did planning abandon the countryside ?
Does living in cities promote ignorance ?
Of the countryside, if not in general ?

Of other species ?

Of the world ?

Of ourselves ?

Of our needs ?

Would it be possible to replace the question mark—with its implied hesitation...—
by another sign ?

A hybrid of exclamation and question ?

And could you vary its size to reflect the depth of uncertainty ?

What does a question mark express beyond uncertainty... ?

Why are there so few of them now ? you'd expect each printed page dominated
by forests of them ?

Are they derived from the sickle ?

Was that the tool most unthinkingly derived from an arm ?

Its strength and authoritative movement ?

Hammer and sickle... is the symbol of communism deep down a combination of
exclamation mark and question mark ?

Can you describe a situation through the questions it raises ?

Is there any other way if you're not really familiar with it ?

Is urgency reason enough to introduce a new subject ? Even if it is not digested ?

Can you choose samples in such a way that together they imply the whole ?

Or can you not generalize ?

Is it that cities are the same and countryside isn't ?

Is pointillism the only way to depict countryside ?

Subjects too rich, too unrelated, too subtle for harsh polemical statements ?

Is a text based on question marks a one-sided dialogue ?

Can you say yes or no to any question ?

Why did we embrace the Market Economy at the exact moment that science
knew Climate Change was upon us ? That science was certain ?

Did we embrace the Market Economy because we did not want to hear the Big
Story ?

Is Warming too Big a Story ?

Or did we stop wanting what was needed after an entire generation had been exposed to the Market Economy ?

Is the point of the Market Economy to undermine the credibility of all intellectual speculation—to make any hypothesis look irresponsible compared to the certainty of the algorithm ?

Will we try communism one more time ?

Can only dictatorship address sustainability ?

Is democracy our undoing or our redemption ?

Will AI restore the Grand Récit (to its rightful place) ?

A.I. or dictatorship ?

A.I. = dictatorship ?

A.I. + dictatorship ?

A.I. ≠ dictatorship ?

Will AI offer us an alibi to be done with humanism once and for all ?

Good riddance or irretrievable loss ?

Is a flight forward also a plan ?

Why are we waiting for confirmation ? From whom ?

If we can verify every day that science is right ?

From different scientists ?

Did the market cause Warming and then make it impossible to undo it ?

What is in store ?

We believed in science, we believed in politics; both were replaced by the market, but the market has no plan, no program, no manifesto, no story... who helps us out of this impasse ?

Are we lost or found ?

If we are lost, who will find us ?

Will Warming make us believe in God ? Help !

Someone like Albert Schweitzer again, behind his organ in Lambaréné ?

There was always an air of unreality in realism; it was a “position,” an ideology—what is it today ?

A depression ?

Is the intermittent habitation of (Persian Gulf) cities a response to Warming that could become universal: leave the city when it overheats ?

Why were cities presented as a condition for mitigating Warming ?

By scientists ? Developers ? Architects ?

Is the earth anything but a homogeneous system ?

Even the sea not a plane but a relief ?

Are we ready, are we not, to welcome our unlucky brothers and sisters... ?

Are we clueless about climate ?

Because we're too smart for big stories ?

Has our own skepticism destroyed the way out ?

Do we know so much that nobody knows ?

In what sequence should we take what steps ?

Which are the low-hanging fruit ?

Is there a method or is hope fading ?

Is it too late to learn from the peoples we murdered ?

"Nomad" was a very fashionable term... why did it disappear ?

Were people on a treadmill not supposed to be susceptible to the call of the nomad ?

Did they not take care of the countryside, their movement subtly coordinated with seasons, growth, ecologies ?

Were there not human beings, hunters, herders, shepherds, even cowboys, who could live without leaving a trail of destruction ?

Or is the countryside a figment of the urban imagination ?

Did they also move to the city ?

Did they stop introducing their children to their traditions ?

Were hippies right ?

Is the commune the future ?

Can we relearn how to play ?

Why did play disappear ?

With the digital ?

Is the Market Economy slavery ?

Did slaves play ?

Do we now ?

Who would have guessed that the future is wood ?

How can we rediscover wood as a building material if we are told at the same time that forests are the most robust response to Warming ?

Will there be any wood left if we start to build with it ?

Is wood our collective security blanket ?

Did countryside have one line of defense, the regional ?

Does "regional" offer a righteous alternative to the city ?

More serious ?

Less fashionable ?

Slower ?

Did critical regionalism suggest a respite, a place for thinking and resistance ?

Can a \$4 million renovation be "critical" ? The remote, luxurious spa ?

Can rich people no longer be right ?

Has the "critical" moved to the wrong side ?

Can we still afford minimalism ? Signifier par excellence of a pampered elite ?

From the monk to the CEO ?

Is the preservation of culture and of nature having similar effects on both ?

Should we even use the same words for both the protection of nature and of culture ?

Preservation, conservation, reservation... what is the difference ?

Is the first an ambition, the second a procedure, the third a precaution ?

How much meaning do preserve and sustain share ?

What is the difference ?

How did two mere verbs each become a movement ?

Does each act of preservation imply the sacrifice of another condition ?

Because it has to absorb the pressure to change that has been averted in the first case ?

As we preserve more, do we sacrifice more ?

Preservation = change (of another site) ?

As shown by the ring of lodges, resorts, motels, shops, crafts, police, guides, NGOs, guards—along the perimeter of the nature reserve ?

Does each impulse to stop change inevitably trigger more change ?

For whom do we preserve ?

Who do we sacrifice ?

How many reserves do we have in the world ?

Is it enough ? to save us ? or the world ?

Is the number of species we exterminated inversely proportional to the number of reserves we have created ?

What is their impact ?

Will they stop the extinction ?

Create privileged species ?

New imbalances ?

Good and bad species ?

Will NGOs propose face recognition for animals to better protect them ?

Social credits ?

What we resent in China we apply to animals ?

What is the collateral damage of good intentions ?

If crisis is any NGO's reason for being, can they still have a real vision ?

What if the crisis disappears ?

Would any NGO be viable if it tried to deal with too many, not too few, with overpopulation instead of extinction ?

Might the Gorilla Doctors on call in the jungle begin to hand out contraceptives ?

What if the preserved areas flourish ? augment beyond their allocated footprint ? evolve beyond their original identity ?

Can preservation save what is average, even in nature ?

Generic nature ?

A cross section, not the exceptions ?

If half of the world—urban, countryside, wilderness—would be subject to preservation, what happens to the other half ? A new 50/50 ?

Is the “whole world” a thing of the past ?

Will the current—random—patchwork of preservation turn out to be too complex, impossible to administer? Will it be simplified? One half of the world? A quarter?

Gridded or pixelated zones for convenience?

A barcode?

Not impossible if you note the growth of countries undergoing regime change?

Can we please preserve Europe? (As a theme park?)

Will the future world be a patchwork of arrested and accelerated development?

Of frozen and melted?

Is the reserve a prototype for civilization 3.0?

If more than half of our territories—both inside “civilization” and outside of it—will be preserved, will the residual become essence?

What do we call the land between reserves?

Countryside?

How to think about Africa?

Do we first need to admit our own role?

Or can we look at it as a current reality?

How did it evolve?

Does our own current confusion enable us to look at Africa not as “parents” but as equals? As an example?

Can you be urban and rural at the same time?

What does it mean if a brand new Chinese railway lands in an African village?

Whose interest is served?

Are China’s abstract encampments in the Kenyan countryside a sign of ultimate rigidity or enviable determination?

Does the new railway create new potentials or does it complete a plunder launched by the colonizer?

Does it establish a communication between capital and remote hinterland that enables a young urban elite to maintain a relationship with their rural communities?

Does each country need to be accessible?

Will the tourists it distributes affect delicate balances, standoffs, traditions ?

Can you do good and do bad at the same time ?

Why is European infrastructure typically planned on the ground and Chinese infrastructure propped up on stilts ?

Domination vs disconnect ?

The first excludes alternatives, the second can coexist with anything—is it therefore more contemporary ?

Is avoiding disaster the last mission of humankind ?

Is the apocalyptic the only rhetorical mode left ?

Is each observation inevitably a fragment of theory ?

Could a situation emerge where there are more theories than species ?

If leapfrogging is skipping seemingly inevitable phases of civilization, will Africa avoid total urbanization ?

Develop a new prototype of the countryside ?

By the sheer diversity of its conditions, make the countryside more desirable than the city ?

What features could we adopt from Africa ?

What would be the equivalent of loyalty to a tribe ?

Can we still imagine unquestioned loyalty ?

Why did we shed that kind of loyalty as a burden ? Where did that get us ?

Would it make us feel better if we could reintroduce it ?

Is populism a nostalgia for the same loyalty or a compensation for its loss ?

What if friendship, support, and affinity were a given, not an effort ?

What if all urban citizens were also citizens of remote areas, not as a form of schizophrenia, but as a way of balancing different obligations, needs, and pleasures ?

Would we know the world better ?

Understand what to do ?

How do you abort a flight forward ?

Can we relearn romanticism ?

Is a romantic someone who sees beauty even where it doesn't exist ?

Can you reframe situations with your brain even if you know “reality” is stubborn and resistant ?

Should you be dressed beautifully in the countryside ?

Is sophistication by definition inauthentic ?

Is the point of education to discover who you are or to create an improved version ?

Can you imagine Jane Austen describing a data center ?

What would Goethe think of a tractor ?

How far can elective affinities be stretched ?

Or are they possible only between similar minds, cultures, environments ?

Do they exist between species ?

Can we relearn to idolize ? Collectively ?

Is beauty a decision ? Does it involve willpower ?

How can we resurrect the picturesque and the sublime ?

The first because it consoles us, the second because it makes us feel humble ?

Do you have to be alone to realize what you feel ?

Are we never alone anymore ?

Is the Sublime a way to combine good and bad ?

Incomprehensible dimensions, contrasts, intensities, the most exceptional ?

Is the contemporary countryside on its way to the Sublime ?

Wind farms, solar farms, storage and distribution centers, factory farms, greenhouses, airports, highways, nuclear test sites, colossal art works, dams, nature reserves—is their advance a good sign ?

Why are they impeccably organized while we are stuck in a perpetual muddle ?

Why does perfection only exist in domains to which we don't seem to have access ?

Could a political party that proclaimed this new world ever win ?

Is nostalgia permanent now ?

Can harsh compounds in lush nature become attractions ?

Are the wild horses in Google's backyard tragic ?

Beautiful ?

Should we plan hotels in our most alienated
landscapes ?
Wellness ?
Pools ?
Supervised by anthropologists ?
Is it too late ?
Is the destruction of the world doomed to remain a minority taste ?
Will the beauty of China's countryside survive our interest ?
Can we invent a minority tourism ?
Why is the poolside lounge chair the emblematic furniture type at the moment of
humankind's greatest crisis ?
Did Baudelaire write that the charms of the "horror" excite only the strong ?
Can we enjoy what the countryside no longer is without the hospitality industry to
maintain the illusion of what it was ?
When did we cease to meander ?
Why do we only bisect spaces now, not turn off or reverse ?
When did the countryside stop being romantic ?
Was the countryside ever romantic ?
Or was that a need we projected on it because we never really knew it ?
You can know a city... can you know the countryside ?
Is the countryside unknowable ?
Does that explain our neglect ?
Have all new typologies emerged from the countryside ?
What is more important for humankind: the Tesla GigaFactory, the Thermae at
Vals, CCTV, or a refugee camp ?
Most of it is rectangular ?
What happened to the blob ?
Do blobs need a public ?
Why is the computer's versatility used in the countryside only to produce
repetitions of the right angle ?
Is the countryside shed becoming a model for all construction ?

Are boxes triumphant in countryside because there is no one left to impress ?
Have we denied the countryside its own evolution? By introducing cheaper
workers, ingenious technologies, a new scale ?

What did we erase ?

Did you ever look from the air at the periphery of any city ?

All you saw were boxes, packed closely together ? Do those boxes need more
space now ?

Are we witnessing the emancipation of the box in the countryside ?

Can we imagine a city of boxes ?

What kept them close to the city ?

Workers ?

Why were those huge parking lots always half empty ?

Do boxes move to the countryside when workers are not needed anymore ?

By how much did human density decline in factories, databanks, distribution
centers... ironically, mostly in "centers" ?

Do you remember seeing the masses on film, in documentaries, in fiction, move
in and out of boxes, exploited, ready at any time to revolt ?

Where did they go ?

To Bangladesh ?

Where did revolt go ?

If factories are now barely inhabited by workers, how many "human" concerns
can we abandon ?

Disabled access ?

Beige ?

Welcome ?

Hygiene ?

AC? Ventilation ?

Light ?

Can robots work in the dark ?

Can robots function in overheated facilities ?

Could we devise “suits” that provide workers with their own individual needs: heat, cooling, food, air, so he or she can “share” space with robots ?

Like divers or astronauts ? Nuclear maintenance crews ?

Could architecture start from scratch ?

Is a futurist someone who forgot history ?

Shouldn't everyone have a future ?

Or do we count on the algorithm ?

Will the countryside prove that there is no inherent connection between population and size ?

That you can have a second Los Angeles but with a fraction of the people ?

A size like Manhattan but with 50, 250, max 1250 inhabitants ?

Is emptiness exciting ?

Will it need a new name?

Inhabited by a race of maintenance people ?

A new name for inhabitants ? Can they be inhabited even ?

Will weather still matter ?

Color ?

Smell ?

Health ?

Survival ?

Where are they recruited ?

What skills do they need to develop ?

Intervene each time algorithms fuck up ?

Obey algorithms ? What is IT anyway ?

Whom do they work for ?

Humankind or the other side ?

Will mathematics still matter ?

Will they want to move to the remote constellations of boxes—or are there too many boxes ? Or are the boxes too big ?

How do you design space if it no longer is for human interaction ?

Does the new “condition” require its own discipline ?

Will architecture schools die of irrelevance at the moment a new architecture is born ?

How do you imagine a new world when it's already there ?

Can we still outrun it ?

Can you leapfrog to a really new vision ? Or are we stuck in evolution... ?

Do we really want slow architecture ?

Were the Baths of Caracalla in Rome as big as Tesla in Reno ?

Are we capable of embracing a new beauty ?

What if we loved more of what we saw ?

Can you will love ?

Why do we accept disappointment ?

Is it easier than love ?

Could we exile humankind to the countryside?

Condemn ourselves to paradise ?

Dismantle the cities and let machines take care of everything else ?

Did TED kill innovation ?

Is innovation equal to progress ?

Is failure endemic to vision ?

Will Warming kill Democracy ?

Can it only be stopped by authority ?

Could Democracy kill Warming ?

Who will beg citizens who don't understand ?

For what breakthrough were we waiting ?

Or did it happen already ?

How did we miss it ?

Will women have answers ?

Did strong men have answers ?

It always ended in tears ?

Why did earlier generations take risks ?

Were their risks more monumental than ours ?

Can a risk-averse generation handle the largest dilemmas ?

Would we have been more alert if we had been more afraid ? To address the accumulated risk of all generations before them ?

Now that we can separate plants from the ground, isolate them from the sun and other "natural" givens, can we not proceed beyond plants ? Why do we still bother with plants ?

With potatoes, tomatoes, spinach ?

Could they merge, become "veg" ?

With milk ?

Does countryside not equal nature ?

Does nature now live in universities ?

Laboratories ?

Bunkers ?

Will it perform better there ?

By eliminating the irregularity of the sun ?

The dirt of the earth ?

Compensate for the absence of bees ?

Treat each plant individually ?

Manipulate light ?

Monitor their efficiency, happiness ? Introduce overwork ? (burnouts ?)

Avoid jetlag ?

Analyze individual stress ?

Should plants live in the equivalent of the smart city ?

Can a plant have its own life in an incubator ?

Can they still exist outside ?

Is Warming also creating new territories and new species ? while it's wiping out many others ?

Can you be natural and artificial at the same time ?

Do the "new" plants grow best when they have fewer experiences, less memory ? Are used to perfection ?

Or do they need challenge ?

Or should they grow next to each other ?

Is there mutual, interspecies benefit ? Is there urbanism for plants ?
Can plants be maintained by swarms of miniature robots ?
Is a gardener nature's helper or tormentor ?
Is a hunter an animal's friend or enemy ?
Did we ever resolve this dilemma ?
If we want to eat, are we the tormentors ?
Or can helpers produce more and better food ?
Is it because we don't go to the countryside (anymore) ?
Can we still go there, unobserved ?
Do those who transformed it beyond recognition not want you to go anymore ?
What do they hide or defend?
Their patents ?
Their copyrights ?
Their scale ?
Their dominance ?
Their impunity ?
Their crimes ?
Their privacy, after they stole yours?
Is the countryside the last hope for privacy ?
Is the countryside now a resort for everything that
is not public, not intended to be public, wanting to become public ?
What explains the appearance, in the 60s and 70s, of suburban HQs—IBM and
General Life in Connecticut, John Deere in Illinois—were they the first to
escape ?
We can fish on land, grow salad on the 10th floor, create single plants that grow
potatoes underground and tomatoes above, we can measure each leaf... Why
do our achievements happen in secret ?
Are we embarrassed about our inventions at the moment we most depend on
them ?
Do patents and copyrights interfere with the proclamation of our most radical
successes ?

Is the code of the start-up the source of our craving for secrecy ?
Do patents hide large sections of intellectual life from view ?
By introducing the notion of intellectual property, did we corrupt intellectual life ?
Secrecy to enable manipulative, market-driven revelation ?
How compatible are science and copyright ?
Shall we copyright the countryside ?
What can you copyright in the countryside ?
Can the farmer copyright the farm ?
Why do farmers have to pay for their own data ?
Their own seeds ?
Does that explain why the countryside feels uncanny now ?
Too many opaque deals ?
What is the most plausible relationship between intellectuals and the countryside ?
The back and forth of Otium ?
Agritourism in Tuscany ? To be “sent” by Mao... ?
What did countryside natives think of the city dwellers visiting their domain ?
How did the import of the intellectuals strike the average villager ?
Were they even told why these visitors came ?
To help harvest or to educate their children ?
What was the real attraction ? Mao ? Revolution ? Authoritarianism ? Rice ?
Could the current countryside produce another Mao ?
Are there still schools, libraries, mentors, books in the countryside ?
Do we know recent intellectuals who have emerged from the countryside ?
Should an intellectual take risks or be smart enough to avoid them ?
Was any time ever better ?
Did the Romans propose an ideal model to shape the difference between city and countryside ?
The city for business, the country for thinking and feeling ?
You worked in the city, and came alive in the countryside ?
Countryside offered you a model for a deeper fulfillment ?

Friends, farming, meditation, and writing as the foundation for happiness ?
Among the locals and slaves ? Did they have any choice ?
Did the Chinese believe in a similar model ?
Was civilization launched from the countryside, not imported from the city ?
Was countryside once flooded with poetry, agricultural knowledge, (terrestrial)
music, mandarins, stories ?
Epicurean bureaucrats ? Literate hedonists ?
What is the regimented opposite of decadence ?
Refinement in the country, provincialism in the city ?
Does anyone still like cities ?
Gentrification, inequality, unaffordability, insecurity, pollution, garbage, too many
problems ?
Or is it too late to critique ?
What comes first, unpleasantness or indignation... ?
Are we destroying the pinnacle of civilization with our apps ?
City of users ?
All of us users ?
Did we spoil it ?
Did we underestimate what it takes ?
To be a citizen ?
How did we become so ungenerous ?
How did we unlearn to coexist, at the exact moment when we all live in cities ?
Coincidence ?
Why is the countryside passive, waiting for plans elaborated in the big centers by
dysfunctional governments, while democracies and other regimes seem equally
stumped ?
Can it make its own plans ?
Or are there not enough people left ?
Where is the MIT for the countryside ? Yale's agrarian studies ? Wageningen
University ? Why are they not more in the foreground ?

Is the countryside reduced to a populist base, a free-floating reservoir of indignation, there for the taking ?

We already blame it for Trump, Brexit, AFD, Salvini, Putin... ? Will "bad" politics make it even more inaccessible ?

Could you connect politics and territory in a new way ?

Not city or countryside but fake or real ?

Communism thought about countryside, the Welfare state too—did neoliberalism simply delete it ? Can it still be found, under "trash" ?

Can we rehearse some what-ifs ?

The car industry had solved the issue of cars ?

Why did they invest all that competence merely in cheating ?

Could they have saved us ?

Is the self-driving car a car programmed only by everything it should not do ?

That it shall not kill ?

Since when did we believe that architecture always was about welcoming humans ?

Make them cohere ?

Since the Renaissance ?

And since when do we accept that it is just as much about exclusion and separation ?

Since Clinton ? Neoliberalism ?

Since Obama ?

When did the "reception" change character ?

How did the "reception" become the ultimate symbol of the urban: pretending to welcome, geared to reject ?

Turn into a mini-investigation ?

Facial recognition, the essence of the city today ?

Are the keycard, the iris scan, the fingerprint, the face the current equivalents of the moat, the drawbridge, the fortification ?

Has military isolation become the model for the coexistence of data, machines, robots, and humans ? Are Nevada's nuclear, military, and digital exclusion zones a new global prototype ?

Are the guards "manning" the elaborate control rooms, the elaborate fencing, the tiny openings in the perimeter walls a new language ?

Their scowls a form of 21st-century mask ?

Or is it simple decoration ?

The illusion of security projected by those who undermine it for all ?

A massive collusion between State & Tech, where the paranoid demands of the first increase the scale of the second in a mutual escalation ?

In the city, we work and live in welcoming, shapeless, undemanding spaces, preferably old, only to produce the harshest, inhuman typologies outside the city ?

Is the demise of WeWork a good sign ?

Will they dominate the countryside ?

Will farmers have to identify themselves with fingerprints ? For animals ?

Will urban citizens in the future be "missed" by their smart homes when they venture into uncharted territory, beyond the last sensor ?

Is the countryside uncharted territory ? Can it become uncharted again ?

Will ultimate surveillance be possible only in cities, because only density makes it affordable ?

Does that offer respite for the countryside ?

Will surveillance be defined by X sensors per person ?

Will the ultimate division of the world be defined by two types of surveillance, from the air and on the ground ?

Do both impose their own values, blindness, systems ?

Their own crimes, dystopias, crises...?

Is our environment defined by sensors that feel or satellites that see ?

What about the other senses—will they soon smell and taste ?

Will artificial organs dictate further differentiations—more radical than the current distinction between city and countryside ? The smell zone ?

Could they lead to new identities ? Separate worlds ?

How disconcerting is it to drive through the definitive “absence” of the Saudis’ Empty Quarter and realize it’s made inaccessible by barbed wire... ? Is that the future ?

To be excluded from emptiness ?

Should we anticipate a new world order based on more radical divisions ?

Between human and machine, for instance ?

Can we think of something more intelligent than the current flourish of neglect euphoria ?

Can we reverse the movement’s priorities ?

Does big data + AI equal infinity ? Or its opposite ?

When did they invent multiple choice in exams ?

Is the name alone a form of indoctrination ?

Did it coincide with Einstein ?

A form of relativity ?

Does multiple choice emphasize choosing over knowing ?

A sign of consumerism ?

The end of decision making ?

Did it prepare us for the Market Economy ?

Is fake news the consequence of a culture of multiple choice ?

Can being wrong be a lifestyle ?

Are data centers more impressive than pyramids ?

Are more secrets buried in their chambers ?

Are we buried alive in them ?

Are our lives buried in them ?

We don’t know the blueprints of either ?

Is it true that the architects of pyramids were killed ? Buried in their own creations ?

How about the millennials that entomb whole generations ? Do they contain treasure chambers ?

Will later archeologists ever unearth them ?

Will they understand ? Develop conflicting theories about their geometries ?
Their purpose, their dates ? Will current materials last that long ?
Will they be unearthed by robots and deciphered by AI ?
Will there be competing theories about how they worked ?
Or just one ?
Who will name it ? Or will it just have a QR code ?
How soon will Reagan, (Clinton ?), Bush, Obama, Trump seem remote as
Egyptian dynasties ?
Did the enormity of the countryside trigger the car ?
Could mobility be reversed ? Where you would not have to go out, but "out"
comes to you ? delivered by self-driving cars ?
Will travel be rationed, soon ?
Is the self-driving car a car full of MCAS ?
When travel is rationed, who will be allocated to the countryside ? to the city ?
Will it still be cheaper ? Cleaner ? Freer ?
If the greenhouse turns vegetables into artifacts, will they become more
expensive in the places where they once grew in abundance for free ?
If robots rule, what will happen with disobedience ?
Will there still be fences ?
Will a chip tell us where and where not to go ?
Will chip implants be as natural as vaccines are now ?
Will you be able to doubt ?
Who will maintain the robots that maintain the land ?
Will you be excluded, unless you are included ?
Will exclusion be the default condition ?
The world as a gated community, everybody protected against everybody else ?
With whom will you argue ?
Was Chernobyl a prototype ?
Did the Soviet Union bestow to the world a preview of its final condition ?
A combination of unplanned preservation and accidental destruction ?
Was the disaster good for nature ? And for us ?

Can words decay ? Why has the word visionary become so banal ?

Can it still accommodate radical insights ?

Why do we cling to modernity when we face something utterly new ?

Can you stop a tradition abruptly ?

Start a new one from scratch ?

Judeo-Christian, Islamic, Confucian... what do they say about current conditions ?

The last one the most ?

Why did religion not simply disappear ?

Delete all that is dysfunctional ?

Could we try to connect them, throw out everything that does not work, and generate a meta-collage of concepts in each that do offer solutions ?

What are we afraid of ?

Is fake news not a new phenomenon but the realization of a black hole in society ?

Do we need 400 monks ? To withdraw until they are done ? The doors of their cloister cemented ?

Mobiles destroyed ? Only one left, for a single text when there's been breakthrough ?

What if there is no contemporary issue that has an adequate description, understanding, solution ?

A great simultaneous unraveling—each side equally spent, a dump of ideas ?

How should we think about earth ?

As a precious ball that should be preserved at all cost, or as a dysfunctional sphere that will not survive without our intervention ?

Are we confusing preservation with sustainability ?

Can we pursue sustainability and preservation at the same time ?

Is sustainability sustainable ?

Why have we imposed intolerable complexities on ourselves ?

Why did we abandon the idea of a way out or a way back ?

Did we colonize the countryside to better abandon it ? Are nature and its most powerful adversary, corporations, engaged in a final confrontation in the countryside ?

Could the corporate switch to repair the earth, when it becomes profitable ?

Will we pay for it ourselves ?

Why don't we pay for it ?

What perverted genius thought of the name "fulfillment center" ?

RAMP 2 – OTIUM

RAMP 2 LEISURE CURTAIN CONTENTS:

Bays 29–25: *Otium & Xiaoyao*

Bay 24: The *Hameau* of Marie Antoinette

Bay 23: Hippies

Bays 22–21: Wellness

Bays 28–25: Otium & Xiaoyao

Before Christ was born there existed a moment of global consensus on the countryside; the Romans and the Chinese, thousands of miles apart, developed intricate and coherent treatises on the countryside as a space of creative and idealized existence.

Otium & Xiaoyao Quotes: First Use

Now if you have a big tree and are at a loss for what to do with it, why not plant it in the Village of Nowhere, in the boundless great wilds, where you might idle by its side, and xiaoyao (lie down in blissful repose) beneath its shade?

And such tree would not be felled by an axe, nor would anything harm it; with nothing as its useful purpose, how could it experience hardship?

—3rd century BCE “Xiaoyao You” (“Wandering in Absolute Freedom”), in the *Zhuangzi* by Zhuang Zhou

“He who does not know how to use leisure has more of work than when there is work in work.”

—190 BCE *Iphigenia* by Ennius

Definitions

Xiaoyao: The idea of *xiaoyao* was first proposed by Zhuang Zhou—one of the founders of Taoism—in the third century BCE as a rejection of the strict hierarchies of Confucianism and court politics. *Xiaoyao* describes the superior liberation of an individual’s spirit, a state of wandering in absolute freedom, of living in tune with nature, and of blissful repose.

Otium: The term *otium* was first used by the Roman poet Ennius in the second century BCE to describe time off from military service. Later, it was used by Roman philosophers to describe time for writing and eventually came to refer to time that one owns, as opposed to *negotium* (negotiation), the business that is the essence of urban life.

AMO - Idealized Pastoral State:

Written during a period of intense unrest, Tao Yuanming’s fifth-century fable

Peach Blossom Spring tells the story of a fisherman who finds paradise by sailing

on a river of peach blossoms to a life of simple rustic pleasures. The villagers he meets explain that their ancestors founded this place many hundreds of years before; they farm in the same manner and dressed in the same way, untouched by the passage of time and political turmoil. In antiquity there were many examples of mythical pastoral states united by a longing for harmonious times, like the Greek Elysium or Golden Age. The Roman poet Virgil set his *Bucolics* in Arcadia, where, like in *Peach Blossom Spring*, farmers, shepherds, and fisherman work the land with pleasure in an idealized past.

Quotes - Idealized Pastoral State:

“Arcadia”

Yet theirs is repose without care, a life that knows no burden but rich in treasures manifold. Indeed the ease of broad lands, caves, natural lakes and cool valleys, the lowing herd, and soft slumbers beneath the trees—are all theirs. They have woodland glades of game.

—29 BCE *Georgia (Georgics)* by Virgil (book 1)

Peach Blossom Spring

In the peach blossom spring there was fertile land, beautiful ponds, groves of mulberry trees and bamboo, with crisscrossing roads and paths for travel; noises of chickens and dogs could be heard. /

Within the spring were people farming and laboring in the fields, men and women dressed exactly the same as those who live outside of the peach blossom spring. /

There were older people, with their hairs turning white and yellow; There were children, with their tufts of hair not yet worn up; /

All seemed natural and joyful.

—429 CE *Peach Blossom Spring* by Tao Yuanming

Leisure in the Countryside:

O true and sincere life! O sweet leisure, honest and more beautiful than almost every business! O sea, o shore, true and secret shrine of the Muses, how many things do you discover, how many you dictate! Therefore you, too, on the first possible occasion leave this noise, the ineffective talking and the many vain laborers, and give yourself up to study or leisure. For it is more profitable, as our Attilius most eruditely and at the same time wittily said, to keep your leisure than do nothing.

—105 CE *Epistulae (Letters)* by Pliny the Younger (book 1, letter 9)

Literary Leisure in the Countryside:

*O when shall I see you, my farm? When will I be free
To breathe the delightful forgetfulness of life's cares,
Among ancient classics, with sleep and idle hours?*

—35 BCE *Satirae (Satires)* by Horace (book 2, satire 6)

Therefore, I abide by my duty to be content, and restrain my ambition, returning to the countryside to build a cottage and plant trees, living a carefree life (xiaoyao)... I wander in the garden full of ancient treatises, longing to follow sages' paces.

—296 CE “Ode to a Quiet Life” by Pan Yue

Orchid Pavilion Gathering + Horace extended label:

The Roman Horace and the Chinese Wang Xizhi, both poets, describe literary gatherings in the countryside. The indulgent pleasures of drinking, eating, and music didn't preclude creative activities: reading, writing, and conversation.

Quotes: Literary Gatherings:

Here are gathered all the illustrious persons and assembled both the old and the young. Here are tall mountains and majestic peaks, trees with thick foliage and tall bamboos. Here are also clear streams and gurgling rapids, catching one's eye from the right and left. We group ourselves in order, sitting by the waterside, and drinking in succession from a cup floating down the curving stream; and although there is no music from string and woodwind instruments, yet with alternate singing and drinking, we are well disposed to thoroughly enjoy a quiet intimate conversation.

—353 CE Wang Xizhi's *Preface to the Orchid Pavilion Gathering*

*Alas, the day's wasted like this, and not without prayer:
 'O when shall I see you, my farm? When will I be free
 To breathe the delightful forgetfulness of life's cares,
 Among ancient classics, with sleep and idle hours?
 When will they set before me beans, Pythagoras' kin,
 And those little cabbages oiled with thick bacon-grease?
 O heavenly night-time dinners, when I and my friends
 Eat beside my own Lar, and feed jostling servants
 On left-over offerings. Each guest drinks as he wishes
 Large glasses or small, free from foolish rules, whether
 He downs the strong stuff, nobly, or wets his whistle
 In more carefree style. And so the conversation starts.
 Not about other men's houses in town, their country
 Villas, or whether Lepos dances well or not: no,
 We talk about things one should know, that matter more:
 Whether it's wealth or character makes men happier:
 Whether self-interest or virtue make men friends:
 And the nature of the good, and its highest form."*

—35 BCE Horace's *Satirae (Satires)* book 2, satire 6

Quotes: Dignified & Literary Leisure in the Countryside:

Leisure without literature is death, and a tomb for the living man.

—65 CE Seneca's *Epistulae Morales ad Lucilium* (*Moral Letters to Lucilius*) letter 82

What is sweeter than leisure devoted to literature?

—45 BCE Cicero's *Tusculanae Disputationes* (*Tusculan Disputations*) book 5

Great and distinguished men should give an account of their leisure no less than of their active hours.

—2nd century BCE Cato the Elder's *Origines* (*Origins*)

Peace with honor.

—63–56 BCE Cicero's *Pro Sestio* (*For Sestius*)

Bay 24: The *Hameau* of Marie Antoinette

The *Hameau de la Reine*, or Queen's Hamlet, built between 1783 and 1786 by French architect Richard Mique, was a place of leisure and intimate retreat for Queen Marie Antoinette inside the vast park of Versailles. The *Hameau* was a working farm with cows, sheep, a dairy, a dovecote, a barn (often used as a ballroom), a mill, vineyards, orchards, fields, and vegetable gardens. Inspired by French landscape paintings the hamlet was a small-scale idyll populated with milkmaids and shepherds. Marie Antoinette dressed with rustic simplicity in a

plain cotton dress, her hair loose around her shoulders. Painted in what amounted to underwear she scandalized France and launched a global fashion trend, driving global cotton sales...and the slave trade.

Quotes:

Here I am myself.

—Marie Antoinette

“I therefore kindly request that you not come in formal attire, but in country dress.

—ca. 1780 Marie Antoinette in a letter to Princess von Hesse-Darmstadt

Rustic life and agriculture offer pleasures rich people cannot know.

— 1760 Jean-Jacques Rousseau’s *Julie, or, The New Heloise: Letters of Two Lovers Who Live in a Small Town*

Bay 23: Hippies

A generation of young (mostly white, mostly middle class) people—hippies and drop outs— rejected cities and went back-to-the-land. The now iconic naked farmers, the Adams and Eves of hippiedom, weren’t doomed to till the soil but free to work the land. “The land and sky diminished our petty concerns, they increased our sense that we were on a glorious mission.

— 2010 Roberta Price's *Across the Great Divide* (University of New Mexico Press), p. 102

Bays 22–21: Wellness

Today's "Wellness," a 4.5 trillion dollar industry, has abandoned the cultural and creative dimensions of *otium* and *xiaoyao*. An "elevated" form of consumption, it has transformed whole sections of the countryside. In Italy, abandoned villages are converted in their entirety into luxury spas; In Andermatt, Switzerland a huge new hotel is an extruded "stretch-chalet"; and in China, authentic villages are remodeled into wellness resorts.

Wellness Quotes

RESCUING ANCIENT VILLAGES: ITALY'S HAMLET HOTELS

—2014 CNN

Brickyard Retreat is a repurposed glazed tile factory. Our 25 rooms and suites all open to vistas of the Great Wall through story and a half window walls. We also offer 11 vacation homes nearby with 2 to 5 bedrooms that were created from village homes.

—2020 Brickyard Matianyu

Is Your Town Nearing Extinction? Try Turning it Into a Resort

—2018 Bloomberg

...Celebrates the spirit of a Chinese village, with stone pathways, shaded courtyards and peaceful abodes

—2019 Amanfayun, Hangzhou, China

Sleep in a medieval tower, within the walls of an ancient castle, an ancient village of shepherds: your holiday can turn into a time travel through these beautiful eco-friendly hospitality.

—2016 Eco BnB

The Borgo of Castelfalfi is replete with secular buildings which were once workshops and homes to craftsmen. From these buildings, the panoramic view of the golf course and the ancient village of Volterra is breathtaking.

—2020 The Borgo of Castelfalfi, Italy

Toscana Resort Castelfalfi takes its visitors on a magical journey through time, from the historical charm of its medieval heritage to the luxury of its modern accommodations.

—2020 Toscana Resort Castelfalfi, Tuscany

Spending time in nature is a shortcut to serenity.

—2020 Calm app

Take a walk without a fixed destination, savor a piece of chocolate on the tip of your tongue, plant a seed, doodle aimlessly, turn off your mobile phone for five short minutes. Smile, breathe, and go slowly.

—2020 Calm app

Let us take the thinking out of it for you...

—2020 Gaia Retreat, Australia

RAMP 3 – POLITICAL REDESIGN

RAMP 3 CONTENTS:

Bay 39: Political Redesign

Bay 38: Fourier and Godin

Bay 37: Atlantropa and Others

Bay 36: Germany

Bay 35: USA

Bay 34: USSR

Bay 33: Mao

Bay 32: Europe

Bay 31: Qatar

Bay 39: Political Redesign

Intro

The future of the world prepared in smoke-filled rooms by mostly white men... their last hurrah? Driven by need, ambition, ideology, and new political structures all through the 20th century, a number of massive proposals for radical redesigns transformed large sections of the globe. Authoritarian and democratic states alike took colossal risks attempting to increase productivity and food security, and remake society. Success or failure, famine or overproduction... We live in a world still deeply marked by these Promethean efforts.

BAY 38: Fourier and Godin

Sidewall Text: Microcities in the Countryside

The French social theorist and utopian thinker Charles Fourier (1772–1837) disliked the city as much as he hated the village. An ardent critic of the exploitation of workers and farmers in the early era of capitalism, he argued that the nuclear family home

contributed to the oppression of women, and that the collectivization of farming would emancipate farmers from the confines of small-scale agriculture.

Fourier wanted to reconstruct society through a new typology of collective buildings that would radically reshape the countryside: his “Phalansteries” were designed to house around 1,600 people, working together for mutual benefit in agricultural communities. In Fourier’s vision, the whole country would be reorganized by a network of Phalansteries, microcities in the countryside, where all members would live together and share the benefits of their production. Jobs would be assigned based on interests and desires, unpleasant work would either be automated or higher paying. A precursor to modern network theories, Phalansteries would communicate, via light or telegraph signals, their needs concerning food or workforce from one community to the next.

Apron Text: A Versailles for the People

The Phalanstery was more than a collective farm. Also called the Social Palace, or Harmony, by Fourier, it was a revolutionary countermodel to the farmer’s and worker’s state of exploitation, and a fundamental critique of the fragmentation of the working class in nuclear-family homes. The Phalanstery was a fantasy that made every worker and farmer a Sun King: With a central part and two lateral wings, the design of the Phalanstery evokes a *Versailles for the people*, where everyone would have access to the formerly exclusive joys of a privileged aristocratic elite: to education, childcare, collective dinners, feasts, and the “liberation of human passions” (Fourier).

Liberated Passions

These “liberated passions,” rather than capitalist efficiency, should be the foundation of work and relationships, Fourier claimed. The Phalanstery was also an attack on the moral hypocrisy of an emerging bourgeoisie. In many respects, it was visionary: Credited with coining the word “feminism,” Fourier was among the first to demand the right to work for women, and wages for reproductive work. He criticized the nuclear family for its oppressive and exploitative character, for engrossing women “in the

complicated functions of our isolated households,” and he demanded that all sexual preferences, including androgyny and homosexuality, be lived out unless others would be abused. He also predicted modern dating apps: In the Phalanstery, a card index would propose suitable men or women for erotic encounters.

Fourier irritated his readers with fierce attacks against any form of trading, often with anti-Semitic undertones, and with his interest in the possibility of desalinating the oceans in order to turn them into an underwater countryside with docile and helpful aquatic farm animals. He also fantasized about a “citric acid” that, added in large amounts into the oceans, would “give the sea the flavor of Lemonade.”

Rural Utopians

Fourier’s writing—most notably *The Theory of the Four Movements* (1808) and *Treatise on Domestic Agricultural Association* (1822)—inspired a whole movement of Fourierists who tried to realize his ideas in intentional communities and agricultural settlements all over the world, turning the countryside into a utopian field of experimentation and freedom beyond the social, moral, and economic confines of the city.

The Familistère de Guise

The most successful and enduring Fourierist experiment is the Familistère in Guise, France. Jean-Baptiste André Godin (1817–1888), a manufacturer of cast-iron stoves and fervent admirer of Fourier, developed this rural Phalanstery next to his factory, which he converted to cooperative ownership. Godin embarked on building his own Social Palace in 1856 to improve the living conditions of his workers, and turn his factory into a laboratory for a different form of communal dwelling.

Welfare Capitalism

Each family had a three-room apartment—a luxury at the time. Education was free, and hot water from the factory filled a public swimming pool. Children were taken care of in two Kindergartens, an “infant school” for toddlers and children up to age four, and a *bambinat* for children ages four to six, allowing their mothers to work. Each of the three building blocks had a roofed courtyard where children could play in all weather;

gatherings, concerts, and festivities could take place all year long (an old obsession of Fourier's, who lived in an overheated Paris apartment stuffed with tropical plants). Produce was sold at cost in a shop run by workers.

Co-Op Countryside

By 1872, 900 female and male workers and their families were housed in the Familistère; in 1880, Godin turned it into a cooperative society owned by the workers. The Familistère remained operational until 1968, when, years after the takeover of the factory by another manufacturer, the cooperative association for the Social Palace was dissolved, and the apartments were sold. Today, the building complex, which is still partly inhabited, is protected as a historic monument and open to visitors.

American Efforts

Between 1842 and 1858 more than forty phalanxes were established in the USA. The American phalansteries demonstrated a propensity for flooding and fires. Those that weren't destroyed by catastrophe fell victim to mundane details; lack of money, lack of experience (many were European intellectuals poorly equipped to farm), and general disorganization. Only three lasted more than two years.

Quotes by Fourier

“The edifice occupied by the Phalanx bears no resemblance to our urban or rural buildings.”

“There is no idea more novel, more surprising, than that of associating three hundred families of different degrees of fortune, knowledge, and capacity.”

“The possibility of associating two or three hundred families in agricultural and manufacturing industry depends upon a system so entirely different from what now exists that it will open to the reader a new social world.”

“Instead of the chaos of little houses which rival each other in filth and ugliness in our towns, a Phalanx constructs for itself a building as perfect as the terrain permits.”

“Love in the Phalanstery is no longer, as it is with us, a recreation which detracts from work; on the contrary, it is the soul and the vehicle, the mainspring, of all works and of the whole of universal attraction.”

Quotes on Fourier

“The possibility of associating two or three hundred families in agricultural and manufacturing industry depends upon a system so entirely different from what now exists, that it will open to the reader a new social world.”

“Instead of the chaos of little houses which rival each other in filth and ugliness in our towns, a Phalanx constructs for itself a building as perfect as the terrain permits.”

“Love in the Phalanstery is no longer, as it is with us, a recreation which detracts from work; on the contrary it is the soul and the vehicle, the mainspring, of all works and of the whole of universal attraction.”

“Fourierist life is one immense party. At three-thirty in the morning on the summer solstice (little sleep is needed in Harmony), societary man is ready for the world: engaged in a succession of “roles” (each one being the naked affirmation of a passion) and subject to the combinative (meshing) rules of these roles: this very exactly is the definition of mundanity, which functions like a language: the mundane man is someone who spends his time citing (and in weaving what he cites). The citations Fourier employs in blissfully describing the worldly life of societary man are drawn paradoxically (paragrammatically) from the repressive lexicons of the Civilized regime: the Church, State, Army, Stock Exchange, Salons, the penitentiary colony, and Scouting furnish the Fourierist party with its most felicitous images.”

—Roland Barthes, 1971

“The architecture of Godin was clearly intended for the freedom of people. Here was something that manifested the power of ordinary workers to participate in the exercise of their trade. Yet no one could enter or leave the place without being seen by everyone—an aspect of the architecture that could be totally oppressive. But it could only be oppressive if people were prepared to use their own presence in order to watch over others. Let’s imagine a community of unlimited sexual practices that might be established there. It would once again become a place of freedom.”

—Michel Foucault, 1982

“The idea of libidinal work relations in a developed industrial society finds little support in the tradition of thought, and where such support is forthcoming it seems of a dangerous nature. The transformation of labor into pleasure is the central idea in Fourier's giant socialist utopia.”

—Herbert Marcuse, 1955

“In Fourier's system of Harmony all creative activity including industry, craft, agriculture, etc., will arise from liberated passion . . . The Harmonian does not live with some 1600 people under one roof because of compulsion or altruism, but because of the sheer pleasure of all the social, sexual, economic, ‘gastrosophic,’ cultural, & creative relations this *association* allows & encourages.”

—Hakim Bey, 1991

Bay 37: Atlantropa and Others

AMO would like to acknowledge Heba Y. Amin’s contribution to this story; we’re indebted to her research and insights.

Herman Sörgel (1885–1952), a German architect and engineer, devoted his life to the planning of a mega-engineering project he called Atlantropa. Begun in the late 1920s, Atlantropa was a proposal to join Africa and Europe into a single new continent as a way to answer both the potentials and the needs of each, so that, combined, Atlantropa could assert its rightful place between Asia and the Americas, as one of “three A’s”...

Only coupled in a single entity, the exchange of goods, technologies, and labor could be organized at the right scale. In the plan, the level of the Mediterranean would be lowered by 328 feet (100 meters): New land would be cultivated on the north and south coasts, hydroelectric dams would generate huge amounts of energy at Gibraltar and Suez, and water from the lowered sea would be used to restore the fertility of the Sahara. A suspension bridge between what is now Tunisia and Italy, with an intermediate landing on Sicily, would initiate the necessary flows of circulation in both directions.

Only four years after Sörgel's death, his idea of filling the so-called Qattara Depression, a huge zone located below sea level in what is now Egypt, was seriously investigated by the CIA in 1956.

Parts of his ambitious design were implemented in Muammar al-Gaddafi's Great Man-Made River, a colossal and successful irrigation effort that consumed Libya between 1984 and 2007.

Today, the African Union's proposal for the Great Green Wall, a shelterbelt of trees spanning the African continent, would halt the creep of desertification and transform the climate of 20 countries.

Qattara Depression Project extended label

1927–1981, QATTARA DEPRESSION PROJECT In 1927, the English geologist John Ball discovered the Qattara Depression, a colossal area of sunken desert in what is now Egypt. He proposed to channel water from the Mediterranean to the depression to create a new inland sea and utilize the flowing water for hydroelectricity. Since then, the potential to reanimate the surrounding desert has been a source of continual fascination: Feasibility studies were done by the CIA in 1956 and the Arab Republic of Egypt in 1981, culminating in a proposal by the US's Project Plowshare to excavate a canal from the Mediterranean to the Qattara depression using 181 nuclear explosions—to transform the climate and bring peace to the Middle East.

"This memorandum proposes a project to bring peace to the middle east through engineering the flooding of the Qattara depression in the Northwest terrain of

Egypt...The proposal calls for a series of large canals or tunnels being excavated, ranging from about 55 to 100 kilometers (34 to 62 mi) depending on the route chosen to the Mediterranean Sea to bring seawater into the area. Or otherwise a 320 kilometer (200 mile) pipeline north-east to the freshwater Nile River at Rosetta.”

—1956 “The Qattar Depression Project,” Memorandum by the CIA from “Operation Sunken Sea” by Heba Y. Amin

Great Man-Made River extended label

1984–Present, Great Man-Made River

The largest irrigation project in the world started with the accidental discovery of massive fossil-water reservoirs under the Libyan desert in 1953. Looking for oil, international petroleum companies instead found water. Former Prime Minister Muammar Gaddafi did what Sörgel and the CIA were unable to do—make the desert bloom. Water, transported through 1,750 miles (2,820 kilometers) of pipes, reached 6 million people with the goal of irrigating almost 400,000 acres (160,000 hectares) of desert. Known within Libya as the “eighth wonder of the world,” the system was crippled during the country’s civil war in 2011.

The Brega Pipe Factory, one of two such manufacturers in Libya, was bombed by the North Atlantic Treaty Organization (NATO). A second explosion, perpetrator unknown, was a direct hit to the pipeline, creating a geyser in the middle of the desert. With Gaddafi, the main supporter of the project, gone, its future is uncertain.

“We are forcing water northward for thousands of kilometers. This is our vision. When the pipelines link up we’ll have the largest irrigation network the world has ever seen.”

—Muammar al-Gaddafi, 1991, via 2013 *Pipeline to Paradise (Gaddafi's Gift to Libya)* by Winfried Spinler, Youtube

Great Green Wall extended label

1952–Present, Great Green Wall

During an expedition in the South Sahara desert in 1952–53, Richard St. Barbe Baker, an English biologist, botanist, and environmental activist first had the idea to fight back against the desert. He called it the Green Front, a 4,700-mile-long (7,500-kilometer) line of vegetation running east to west across the entire continent of Africa. The idea resurfaced in 2007 as the Great Green Wall, an ambition of the African Union – a continental assembly of 55 African countries modeled on the European Union (EU). Spanning 20 African countries, it is backed by the EU, the Food and Agriculture Organization, the United Nations, and the World Bank. By 2016, 15% of the plan had been executed. It is expected to be completed by 2030. This man-made forestation project promises to reclaim land, combat desertification, boost food production, and, in any case, act as a massive job-creator targeted at preventing economic migration.

Bay 36: Germany

Web Wall Section Text

The Nazis fetishized the *countryside*—the second part of their *Blut und Boden* (Blood and Soil) motto. In the quasi-idyllic 1939 publication *Strassen und Bauten Adolf Hitlers (Streets and Buildings of Adolf Hitler)*, the German autobahn system, subsequently interpreted as an efficient network on which to roll out future war machinery, was presented to the German public as a network of landscaped motorways that would offer unlimited access to the beauty of “their” countryside.

Only five years later, US Secretary of the Treasury Henry Morgenthau Jr. prepared a memorandum for President Franklin D. Roosevelt proposing what the US should “do with” Germany when America won the war. The text of the Morgenthau Plan, later published as *Germany Is Our Problem*, reads like political science fiction: Disarm, eliminate all industrial activity, get rid of all urban infrastructure, and condemn the entire territory to a reverted state of perpetual countryside. Hitler’s idea of an agrarian utopia became America’s punishing dystopia within a decade...

Deutsche Erde extended label:

1933

Deutsche Erde

Werner Peiner

No longer extant

Reproduction: Collection of Rem Koolhaas

Blut und Boden (Blood and Soil) was the slogan of the Reich's Minister of Food and Agriculture that bound race and countryside together in a single formula. *Deutsche Erde* (German Earth) by Werner Peiner depicts agrarian heroism: A farmer tills the soil despite an approaching storm, secure in his belief in Germany's future—a Nazi celebration of rural labor. *Deutsche Erde* was first displayed in 1934 at the 19th Venice Biennale, and then the city of Mechernich presented it as a gift to the "Honorary Citizen Adolf Hitler." The painting hung in his office until it disappeared in 1945. Only reproductions remain.

Strassen und Bauten Adolf Hitlers, Georg Fritz extended label:

PASTORAL PROGRESS Under the Nazis, the countryside became the core of the "real" Germany, and the rural peasant the "real" German. Highly ideologized, the Autobahn, begun in 1929, was presented through film and other media as a system that would enable every German to gain access to the natural treasures of the Reich. The media machine hailed it as the "the greatest single masterpiece of all times and places," "the eighth wonder of the world," and "greater than the Great Wall of China."¹

Underpinned by the philosophies of *Blut und Boden*, which celebrated farm life and the farmer; *Lebensraum* (Living Space), Nazi territorial expansion and resettlement into the rich agricultural lands of the east; and rural work programs like the *Reichsarbeitsdienst* (Reich Labor Service), the countryside was idealized and politicized at the same time.

1945, Germany Is Our problem, Henry Morgenthau Jr. extended label:

¹ 2010 Quoted in Blain Taylor, *Hitler's Engineers: Fritz Todt and Albert Speer; Master Builders of the Third Reich* (Philadelphia: Casemate), p. 58.

PASTORAL PUNISHMENT *Germany Is Our Problem*, with a foreword by President Roosevelt, outlines a 14-step plan to “prevent Germany from starting a World War III.” In addition to complete demilitarization, the book proposed redrawing the boundaries of a smaller Germany, partitioning it into two states and an “international zone” governed by a UN-appointed organization. The Agrarian Program would have divided up large estates among “peasants” and all industrial infrastructure would have been completely dismantled and sent to Allied nations as restitution. Within Germany, by Reich Minister of Propaganda Joseph Goebbels used the plan to scare the demoralized population, warning them of the consequences of the American vision: “Germany is to be turned into a potato field. German youth of military age is to be compulsorily deported abroad as slave labor and reparations are to be paid.”² Morgenthau’s plan for a pastoralized Germany was never implemented. In August 1945, at the Potsdam Conference, postwar Germany was divided up among the four victors—the US, Great Britain, France, and the Soviet Union. Agriculture and economy suffered until 1948, when Germany became part of the less punitive Marshall Plan to reconstruct Europe.

Bay 35: USA

How the West was surveyed, settled, saved, and sold: President Thomas Jefferson’s grid is America’s creation myth. A cartesian projection onto land that was already inhabited, it subdivided the “savage wilderness” into 640-acre squares of fertile farmland for settling by self-reliant and virtuous homesteaders. Manifest Destiny’s unstoppable progress increased demand, increased farm size, and increased mechanization, exhausting the Great Plains. Farmers fled drought, dust storms, and black blizzards, but the grid remained: a flexible matrix as suited to developers and profiteers, to big banks and big business, as it was to agrarian democracy. Emptied out and optimized, any feature of the land that didn’t contribute to increased yields or profit was erased. The yeoman farmer of Jefferson’s dream moved to the city and the suburbs, as a nation of producers

² **2013** Quoted in John Dietrich, *The Morgenthau Plan: Soviet Influence on American Postwar Policy* (New York: Algora Publishing), p. 77.

became a nation of consumers.

1872 *American Progress*, John Gast extended label

East Coast civilization illuminates the darkness of the vast western territories. Increasingly advanced modes of transportation and infrastructure make their way westward: ships, suspension bridges, trains, carriages, caravans of settlers, and plows. Columbia, the personification of Manifest Destiny and the steady march of progress, presides over the scene, carrying with her a telegraph line, installing technological advancement in her wake.

1785 Land Ordinance / Jefferson extended label

How the West was surveyed: The Land Ordinance of 1785 divided the area west of the Appalachian Mountains, north of the Ohio River, and east of the Mississippi into a 6-mile survey grid. A speculative armature for future settlement and land sales, Jefferson's grid parceled the vast expanses of the western territories sight unseen into 6-square-mile townships, 640-acre parcels, and 160-acre lots. It unfurled westward, the tool of that expansion, patterning the territory acquired in the Louisiana Purchase of 1803 and eventually 75% of the United States.

“Cultivators of the earth are the most valuable citizens. They are the most vigorous, the most independent, the most virtuous, & they are tied to their country & wedded to its liberty & interests by the most lasting bonds.”

— Thomas Jefferson in a letter to John Jay, 1785

1862 Homestead Act / Lincoln extended label

How the West was settled: The Homestead Act of 1862, which remained in effect for over 100 years, enabled the settlement and population of the vast western territories. By 1934, the act had distributed 10% of the land west of the Mississippi, over 209 million

acres—an area larger than the state of Texas. Waves of settlers, 1.6 million in total, headed west, among them landless eastern urbanites and European immigrants, many of them inexperienced and inept as farmers.

“And that claim is by the right of our manifest destiny to overspread and to possess the whole of the continent which Providence has given us for the development of the great experiment of liberty and federated self-government entrusted to us.”

—John L. O’Sullivan, writer and newspaper editor, arguing the US has rights to claim the whole Oregon Territory, in the *New York Morning News*, 1845.

1911 Advertisement Offering "Allotted Indian Land" for Sale image caption

Under the Dawes Act of 1887, signed by President Grover Cleveland, Native Americans were brutally dispossessed of their tribal lands, which were subdivided and sold to make way for homesteaders.

Dust Bowl Extended Label

In the early 20th century, “lured by record wheat prices and powered by new gasoline tractors, farmers overplowed and overgrazed the southern Plains. The wheat fields replaced the shortgrass prairie that once anchored the topsoil, and the land was defenseless against the winds. The Great Plains was the most dramatic occurrence of American agriculture being maladjusted to the natural environment.” In a matter of 50 years, humans destroyed a delicate ecosystem and created one of the worst ecological catastrophes in American history.³

“Today we see foothills shorn of timber, deeply gullied, useless or rapidly losing their fertile soil under unwise cultivation; where once the grass was rank, cattle nibble it to the scorched roots; the water of streams and the ground waters too often irrigate poor land, leaving the richer thirsty; the plough ignores Nature’s ‘Keep Off’ signs; communities, for all the courage

³ Sarah Thomas Karle and David Karle, *Conserving the Dust Bowl: The New Deal’s Prairie States Forestry Project* (Baton Rouge: Louisiana State University Press, 2017), pp. 25, 2.

of their people, fall into decay, with poor schools, shabby houses, the sad cycle of tax sales, relief, aimless migrations.”

—“The Great Plains of the Present,” in *The Future of the Great Plains* report, US Great Plains Committee and Morris Llewellyn Cooke (1936), p. 18.

1934 Drouth Stricken Area, Alexandre Hogue extended label

The Dust Bowl (1930–1936) is synonymous with ecological disaster, economic depression, and mass displacement: 2.5 million people were forced out of the Plains states, and 35 million acres of farmland destroyed.

Shelterbelt Extended Label

How the West was saved: Under President Franklin D. Roosevelt, 223 million trees were planted between 1934 and 1942. A designated shelterbelt zone was 100 miles wide and ran from the Canadian border to Texas. Within this expanse, indigenous trees were planted along the property lines of Jefferson’s grid to form windbreaks that would restore land destroyed by mechanized overuse. The project was an initiative of the New Deal, which envisioned a future that included relief, reform, and recovery—socialism and environmentalism weren’t always dirty words in America’s heartland—a future that was never realized.

“The land may bloom again if man once more makes his peace with Nature... Careful planting will give him back the foothill trees; a wise use of the land will restore grass for controlled grazing; fewer and larger farms on scientifically selected sites may yield under the plough a comfortable living; moisture held in the soil by scientific methods of tillage; by such means the life of man on the land may be made happier, more prosperous, more secure. The sun, the wind, the rain, the snow can be friends of man, not enemies.”

—“The Great Plains of the Future,” in *The Future of the Great Plains* report, US Great Plains Committee and Morris Llewellyn

Cooke (1935), pp. 18–19.

Shelter Belt Image Label (back wall):

Artistic representation of shelterbelt spacing. Shelterbelt strips are planted in parallel rows following the Jeffersonian grid. Lake States Forest Experiment Station, St. Paul, Minnesota, 1934 *Forest Service, USDA*.

Shelterbelt Facts on Apron:

During the Great Depression, when 25% of the population was unemployed, the US Forest Service, Works Progress Administration, and Civil Conservation Corps employed a total of 2.5 million people to plant 222,825,220 million trees—approximately 90 trees per person.

Patent extended label

How the West was sold: The shelterbelts were an ambitious conservation effort to undo the damage done by overworking the land. Instead, the Great Plains were claimed by an ideology of technocratic progressiveness inscribed in Jefferson's grid. Driven by big banks and big businesses that demanded higher yields and profits, farmers adopted increasingly sophisticated technologies. Barbed wire, grain silos, and refrigerated trucks all contributed to higher volumes of production, an increase that was met by more and more consumption. Farmers became reliant on fertilizer and pesticides to sustain unnatural monocultures; ripped out shelterbelts to plant more crops; and used pivot irrigation to water crops, even during severe drought.

Center Pivot Irrigation Label:

Invented in 1948 and patented in 1952 by farmer Frank Zybach, the center pivot irrigation system allows for the development of “marginal” lands, like the sandy soils of the Great Plains, that are unsuited to surface irrigation. Today, approximately one third of all irrigation in the US utilizes self-propelled irrigation systems, mostly center pivots. The standard pivot system irrigates a 125-acre

circle, which fits into the Homestead Act's 160-acre square, a geometric exercise that radically altered the landscape of America. Round pixels replaced square ones.

Bay 34: USSR

In the eight years between the end of World War II and his death in 1953, following devastating famines in the 1930s and the destruction of the Russian countryside by the war itself, Joseph Stalin developed a hyper-ambitious plan—The Transformation of Nature—to stabilize and increase food production in the Soviet Union. Vast territories in what are now the Volga Region, western Kazakhstan, the Northern Caucasus, and Ukraine were opened up for agriculture, reorganized, stabilized, and “sheltered” by a newly planted forested grid—14 million acres (5.7 million hectares)—that still exists today.

Nikita Khrushchev, who famously denounced and exposed Stalin's crimes in 1956, continued Stalin's work, extending its scale and scope. For a Soviet Union still plagued by food shortages, Khrushchev's Virgin Lands Campaign, begun in 1953, massively increased the cultivation of the Great Steppes beyond Stalin's vision. Enticed by romantic images of rustic life, complete with campfires and guitar, over a million young, enthusiastic students were enlisted as “volunteers” to help convert 112 million acres (45 million hectares) of “idle” land into (briefly) productive agricultural fields.

Leonid Brezhnev intervened even more radically in nature's course, and in 1968 began the “reversal” of 1,398 miles (2,550 kilometers) of Siberian rivers—canalized deviations to irrigate barren fields. In a combination of nuclear giddiness and Promethean ambition, the canal between the Pechora and Kama Rivers was supposed to be excavated using 250 nuclear explosions, each the equivalent of the bombs dropped on Hiroshima. Public health concerns and the potential violation of international treaties halted the work after only three detonations, a test known as “Taiga”. The 1971 blasts created not an efficient canal but a 2,000-foot-wide (600-meter) atomic lake...

Stalin's, Khrushchev's, and Brezhnev's plans transformed an area roughly ten times the size of Texas. Together the Transformation of Nature and Virgin Lands campaigns, after promising beginnings, were unable to stabilize the newly cultivated territory and to make permanent the expansion of Soviet agriculture at the intended scale. The Siberian River Reversal remained a utopian fantasy aborted by economic stagnation; it was finally abandoned by Mikhail Gorbachev, the last leader of the Soviet Union.

Apron: Early Shelterbelts 1880–1930s

Shelterbelts originated after the mass famine of 1891–1892. To fight drought, Russian scientists N. Genko, V. Dokuchaev, and later G. Morozov created an experimental system that employed trees and shrubbery to help block wind and prevent soil erosion. This solution became the basis of the shelterbelt program initiated by Franklin D. Roosevelt in 1933 to fight the devastation suffered in the Dust Bowl in the midwestern United States.

Apron: Transformation of Nature 1947–1953

1954 *New York Times* “Three years after the end of World War II, Soviet agriculture was still in desperate shape. Food was short and the Kremlin searched eagerly for some magic remedy that would miraculously transform Soviet agriculture from poverty into limitless abundance. [Trofim] Lysenko, working with the Kremlin's chief agricultural planner V.S. Dmitriev, convinced Stalin that he had the means of producing the desired miracle and this could be applied if only Stalin would outlaw Lysenko's opponents.”

Diafilm extended label:

If we imagine all the shelterbelts, 15,194,509 acres (6,149,000 hectares), as a strip 98 feet (30 meters) wide, it could wrap the globe 51 times. Image: 1949 *Stalin's Plan for Transformation of Steppe and Forest Steppe Slideshow*, The Diafilm Factory

Apron: Virgin Lands Campaign 1954–1965

1994 Nikita Khrushchev “When we had already plowed a large number of hectares of virgin lands, terrible dust storms occurred in Kazakhstan. Clouds of earth rose into the air, the soil eroded. If the economy is cultivated in the steppe conditions, then long-known means of erosion control are used that have been tested in practice, including planting protective strips from tree stands: a difficult and expensive business, but justifying itself. There are certain agricultural practices. People have to reckon with natural processes and adapt to them, contrasting their invention with wild nature. But, no matter what happens and despite all the difficulties, virgin bread remained the cheapest.”

Apron: Siberian River Reversal 1968-1986

2003 Irina Zherelina “The fantasy of somehow turning Siberia’s northward-flowing rivers toward the south to water the dry, drought-ridden steppe of Central Asia has tempted officials for decades... Soviet leaders promised water not only to irrigate Central Asian cotton and wheat crops but to save the Aral Sea.”

—2003 Irina Zherilina “In a turn to the past, Moscow proposes to reverse Siberia's rivers”. *Give and Take*. 6. p.10

Brezhnev’s river reversal would have increased arable land by 11 million acres (4.5 million hectares) and increased production by 17 million tons of grain, 23 million tons of cattle feed, and 7 million tons of fruits and vegetables.

33: Mao

The source of Chairman Mao’s power was the countryside. At the beginning of his reign, in 1949, 80% of the Chinese population were farmers, mostly in the remote countryside. In two operations, the Great Leap Forward (1958–1962) and the Cultural Revolution (1966–1976), Mao drastically transformed its nature. In the first, he launched a harsh modernization campaign, consolidating individual farms into state-run communes, and, in a form of decentralized, rural industrialization, the new communes were combined with backyard furnaces so that (low-grade) steel could be produced in the countryside—no longer in huge steel factories. In the second, the Cultural Revolution, Mao triggered an intentional upheaval—a true disruption?—where urban

society, with its inevitable “elitist cliques,” was rudely confronted with an idealized countryside. Farmers would “teach” a lesson in rural integrity to intellectuals exiled from the urban centers to study the farmer’s wisdom from up close...From the 1950s to the ’70s, the Chinese example was a global inspiration; Mao’s influence, and reports of Chinese triumphs, spread to South America and Africa. From the West, a seemingly endless stream of intellectuals and artists (Jean-Paul Sartre and Simone de Beauvoir in 1952, Michelangelo Antonioni in 1972, Susan Sontag in 1974) visited China to absorb the implications of Mao’s reinvented/remodeled countryside. Mao himself met and encouraged a long line of revolutionaries and freedom fighters, including Frantz Fanon, Che Guevara, and Malcolm X.

Mao in Train Still (Web wall) extended label

Chairman Mao Rides the Rails—Countryside Spectacle

“All rail traffic stopped and stations were closed as his special train went through. Security officers posing as food vendors lent the stations an air of normalcy for his benefit. During the Great Leap, peasants were mobilized to tend transplanted crops along miles of tracks, creating the impression of a bumper harvest when the harvest was a disaster.”

—Andrew J. Nathan, professor of political science, Columbia University

Apron Quotes

Maoists don't want to deal with intellectuals only, and for the most part these are the ones who left them. The line of political democracy they are developing now corresponds to the need to widen the scope of actions, in factories as well as with the youth who are disgusted by the culture and the work that is imposed on them.

—1973 Jean-Paul Sartre with Michel-Antoine Burnier

Mao and Fanon and Guevara all saw clearly that the people had been stripped of their birthright and their dignity, not by a philosophy or mere words, but at

gunpoint ... They had suffered a holdup by gangsters, and rape; for them, the only way to win freedom was to meet force with force.

—Huey P. Newton, 1973

As long as Mao believed in the infallibility of Stalin, he piled up one defeat after another. When he shook off his awe of Stalin and turned to the peasants and the country and bypassing party bureaucracy and ideology, acted directly and in person, his success was immediate.

—Alberto Moravia, 1986

We're now entering a village in the mountains without any advance warning. It seems abandoned and deserted. For one fourth of the Earth's population, we're so unfamiliar that it fills us with awe. Our big eyes, curly hair, long noses, pale skin, extravagant gestures, outlandish costumes ... They are taken aback, but very courteous. Afraid to offend us by fleeing they come out and stand still in front of the camera, often motionless and as if petrified.

—1972 MICHELANGELO ANTONIONI, *CHUNG KUO—CINA*

During our brief digression into the highland, we've witnessed a gallery of astounded faces but we've never noticed any expression of hostility.

—1972 MICHELANGELO ANTONIONI, *CHUNG KUO—CINA*

Once China meant ultimate refinements: in pottery, cruelty, astrology, manners, food, eroticism, landscape painting, the relation of thought to the written sign. Now China means ultimate simplifying.

—1972 SUSAN SONTAG

Everyone from the village is in the square where we are supposed to attend an exhibit of peasant painting in one of the nearby buildings. An enormous crowd is sitting in the sun: they wait for us wordlessly, perfectly still. Calm eyes, not even curious, but slightly amused or anxious: in any case, piercing, and certain of

belonging to a community with which we will never have anything to do.

—1986 JULIA KRISTEVA, *ABOUT CHINESE WOMEN*

Apart from its ancient palaces, posters, children's ballets, and May Day, China has no color. The countryside (at least the one we saw, which is not that of the old painting) is flat; no historic features to disrupt it (no bell tower or manor): in the distance, two gray buffaloes, a tractor, regular but asymmetrical fields, a group of workers in blue, that's all. The rest, endlessly, is beige (shade of pink) or tender green (the wheat, the rice); sometimes, but always pale, yellow rapeseed slicks or that mauve flower which, apparently, serves as fertilizer. No disorientation.

—1974 ROLAND BARTHES

Bay 32: EUROPE

I.

When the embryonic European Union (EU) was formed in 1958 by six states—France, Belgium, Luxembourg, the Netherlands, Italy, and (West) Germany—the European countryside was in dire straits. World War II, poverty, archaic practices, conflicting national interests, and conservative rural “values” created a compelling case for a drastic rethinking of the future role and presence of agriculture in the “old” continent, and to consider how a balance could be maintained between urban and rural opportunities.

This initial period of Europe’s transformation exactly coincides with Mao’s proposal for the transformation of China launched as the Great Leap Forward (1958–1962), but where China and the Soviet Union were working through huge physical master plans, the EU’s future was to be defined by rules, regulations, and subsidies. In 1962, after intense continent-wide negotiations, Brussel’s first commissioner for agriculture, Sicco Mansholt, originally a Dutch farmer, was able to introduce Europe’s Common Agricultural Policy (CAP), which projected a single, “universal” legislative regime onto the complex patchwork of regional differences that is Europe. The “old” countryside was to be turned into an efficient, productive domain. New land

consolidations and technologies would create larger and more efficient farms, products would be standardized.

Only a few years later, the very success of the modernization led to large systematic overproductions: Butter mountains, milk lakes, even wine lakes, created new tensions and protests by farmers in the 1960s and '70s.

II.

Brussels

The “universal” regulations of the CAP that Mansholt imposed on the continent turned out to work well on the flatter, therefore modernized, territories in the north but were problematic in the more complex topographies in the south—that “bigger” part of Europe that is, in fact, not flat, which corresponds, not coincidentally, to the Roman Empire. The cult of flatness as the implied theme of Europe’s modernity conflicts agonizingly with its history and its most valuable traditions—an issue that was recognized only in 1975 when legislation was introduced to compensate “less favorable areas” defined as “handicapped by [...] high altitude or by steep slopes at a lower altitude or by a combination of the two.”

III.

1972 The Club of Rome publishes *The Limits to Growth*. Mansholt experiences a Damascene change of heart, and, in a letter to the president of the European Commission, proposes a radical shift in the philosophy of Europe’s growth-based development. His thorough blueprint is, in retrospect, a visionary document that shows how more than 50 years ago lucid political proposals were circulating in Brussels that could have addressed the mistreatment and exhaustion of the globe that now threatens all our futures...

Fifty years after Mansholt’s crisis, the repercussions of the Paris Climate Agreement are forcing European states and the EU as a whole to reduce their agricultural sectors once again, by half, reversing the successful industrialization initiated 60 years earlier.

1972 "It becomes clear that this society cannot be based on growth, at least not in the material sector [...] We should no longer base our economic system on achieving the maximum growth."

Footnotes

The Farmer as Soldier

The Unimog (or Universal Motorized Tool, based on the German Universal-Motor-Gerät) has been produced in Germany by Daimler Benz since 1949 as a utility vehicle with four-wheel-drive and a carrying capacity of a ton. Developed to help peasants rebuild and run their farms after World War II, its capabilities were quickly discovered by armies all over the world. Today, the Unimog is mostly known as a military vehicle; sometimes farmers take theirs back to the city, giving their protest a decisively military note.

Successful farmers revolt again, easily, immobilizing the smooth networks of the flat lands, in some cases flying Confederate flags in a case of apparently associated causes. Perhaps the EU is a Sisyphean model: The intensity of the effort to keep it together constantly overshadows the tangible benefits of the results.

Bay 31: Qatar

Intro

On June 5, 2017, food imports to the peninsular Arab country of Qatar were abruptly stopped by its neighboring countries in an international blockade.

That Qatar overcame the crisis with remarkable speed was due to a thorough, data-driven analysis of the country's "food insecurity" initiated in 2008, as a response to having 90% of its food imported, of which 50% came from Saudi Arabia.

Overnight, Qatar was forced to put in place an alternative food supply system, opening up Iranian, Turkish, and Moroccan sources. The team's risk analysis enabled this fast response to what seemed a sudden emergency, but which was in fact an event the Qatari government had been anticipating for years.

After the blockade, one of the most noted responses was the creation—*ex nihilo*—of a massive meat and milk industry, which involved airlifting into Qatar 4,000 cows along with milking machines and other automated equipment and a veritable city of hay, creating a huge, completely interior complex, Baladna Farm. Within months, Qatar was able to provide for the dietary needs of its people and, later, even began to export milk and Qatar-made mozzarella to US forces stationed nearby in the Middle East.

Apron Text: Food Security

A political sketch in five episodes:

I. Blueprints

In late 2007, global food prices fluctuate wildly. In Qatar, this instability triggers an alert: The country is arid, almost entirely dependent on imported food; half of it comes by air, the other half by land from Saudi Arabia, across Qatar's only land border. A government task force is set up with a budget for six months; Fahad Al-Attiya, now Qatar's ambassador to Russia, leads it. It ends up taking four years to create the Qatar National Food Security Program, at its height employing 200 researchers. With the goal of establishing food security for Qatar in the event of crisis, they first document the country's current food *insecurity*: Supermarket shelves are monitored, needs are tracked in almost real time. Risks are assessed by special consultants; they calculate the chance that a serious crisis will happen "soon" at a sobering 46%.

II. Food (In)security

The government's first impulse is to obtain productive land in politically neutral and more fertile environments. Farms are bought or created in India, Kenya, Australia, Oman, and other countries. Enormous quantities of food are now produced—on at least 2.5 million foreign acres—for Qatar, but not *in* Qatar. This food supply remains vulnerable since the country still depends on import. Locally, drastic modernization of agriculture is crucial: The analysis shows that the vast majority of food produced on the

peninsula is used as fodder for camels. That is difficult to change, because farms have been traditionally gifted to locals.

Fahad Al-Attiya: *“Most of the fodder was used for camel racing. And where does the water come from for growing the fodder? From underground, completely free water. But growing camel fodder has now almost completely exhausted our only natural source of water.”*

III.A. Situation Room

On June 5, 2017, the consultants’ prediction turns real. One by one, the major suppliers of Qatar’s food turn off the supply. Qatar’s response is orchestrated in the prime minister’s situation room: Food shortages could trigger an exodus of the country’s majority non-Qatari population. But the worst is averted. Qatar was not surprised, the blockade was a crisis foretold... The data-driven research now becomes a blueprint for Hassad Food, Qatar’s investment arm in agriculture. Since all quantities and suppliers are known, alternative sources can be mobilized immediately; suppliers in Jordan, Turkey, Iran, Oman, and Morocco help out. A huge food lift is organized almost overnight—empty supermarket shelves last only a day... New milk arrives from Turkey in unreadable packages; quickly, though, people realize that they prefer Turkish milk. Qatar’s emir stabilizes blockade food anxiety through his edict to import “more than we need...”

Mohamed bin Badr Al-Sadah, CEO of Hassad Food: *“An hour into the blockade, we set up a 4-by-4-meter impromptu situation room at Doha’s Central Market, from which we drew new air-land-sea routes to import the large shipments and monitored the local markets. Our key objective was that the shelves should not be empty. In five days, we managed to oversupply the market.”*

Fahad Al-Attiya: *“We knew where everything came from, we had minute data based on knowledge and information that had not been available to earlier governments, so we were immediately able to switch suppliers. But that switch was a response, not a prevention.”*

Data has averted a political disaster.

III.B. Redirection

Fahad Al-Attiya: *“That night I got a phone call, and this is where I was activated to prepare something because something might happen... And this is when we began dusting off our report. The blockade did happen and the report was ready—we knew exactly what we needed to get, from where.”*

IV. Acceleration

The blockade becomes the trigger for the accelerated development of Qatar’s food production on the peninsula itself. Semi-state entities such as Hassad Food and Baladna Farm become the vehicle: Baladna imports 4,000 cows; the first airlift of 165 German cows arrives seven days after the blockade begins. They are accommodated in air-conditioned automated installations; in four months, a strip of stables and factory space 1.8 miles long by 0.6 miles wide (3 by 1 kilometers) is constructed to make the country self-sufficient in dairy products. They even start exporting Qatari mozzarella, among other dairy products, to the US military stationed in Afghanistan. The factory also features a restaurant, playground, and exhibition center where the origin of milk is explained.

In parallel, and with similar intensity, the Ministry of Municipality and Environment allots large plots of land to private agricultural companies and imports the latest farming technologies to increase local production and replace inefficient, small-scale local farming. In 2018, the Emir inaugurates the Water Security Mega Reservoirs project, the world’s largest such project, distributed across five reservoir locations.

Masoud Jarullah Al-Marri, Executive Secretary of the Committee for Monitoring the Implementation of Food Security, Ministry of Municipality and Environment: *The local market needs 2,260,000 tonnes of vegetables in a year. With the 34 additional private farms within the next five years as per our plan, the self-sufficiency of the country in vegetable production will reach between 60 and 70%.*

V. Abundance

In roughly 10 years, Qatar has been transformed into a country that produces 30% of its own vegetables and 100% of its own dairy, creating a new, high-tech countryside in the

process. New vegetable, livestock, and fishery central markets are constructed across the peninsula, guaranteeing local produce, regulated prices, and monitored quality. Insecurity has turned into security.

RAMP 4 – EXPERIMENTATION

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Intro

Experiments

As soon as we leave the urban condition behind us, we confront newness and the profoundly unfamiliar. What we collect here is evidence of new thinking—in China, in Kenya, in Germany, in France, in Italy, and in the US: new ways of planning, new ways of exploring, new ways of acting with media, new ways of owning, paying, renting, new ways of welcoming, new ways in which the countryside is inhabited today.

Bays 49–46: Chinese Villages

Bay 49: Intro Map

ATLAS Extended Label

The extreme growth of Chinese cities in recent decades eclipsed an equally radical development of China's countryside. Next to the United States and the EU, the new Chinese countryside forms an enhanced interaction of rapidly expanding infrastructure;

growing agricultural, forest, and energy production; new rural domestic tourism; and a digital service economy, while simultaneously facilitating standstill through natural and cultural preservation.

Bay 48

Introduction Text

Chinese Villages: A New Era

In parallel to decades of relentless urbanization, the Chinese government has, with much less fanfare and global attention, been dramatically redefining its countryside. The countryside has been foundational to modern Chinese politics: The establishment of the People's Republic of China in 1949 was largely a victory of Mao's organized and rebelling countryside over the city; the nation's subsequent leaders have all had strong rural ties. With continuous investment in infrastructure and poverty alleviation unmatched by Western counterparts, China's stage-setting for urban-rural connections in the 21st century might be unanticipated by the rest of the world.

The UN's World Population Prospects report suggests that in this decade the Chinese countryside, together with the rural population in Africa, is facing the strongest demographic transition—from rural toward urban habitation—in the world. The UN predicts that 300 million people will move from China's countryside to cities before 2050. However, a combination of political investment, a radical embrace of the internet, and recent migration movements challenges the supposedly global urban destiny of mankind. Given the current difficulties in infrastructure affecting the livability of urban areas, with large cities like Shanghai and Beijing struggling to maintain their populations, China's political system has been actively rebalancing its spatial planning toward the countryside. There's a growing desire for community-based living in both off- and online communities. A new generation in the countryside might be giving a totally new direction to what China will look like.

Chinese Villages: A New Era is the result of a three-year collaboration between AMO and the Central Academy of Fine Arts in Beijing. It shows how China is shaping the future of its countryside: how a mix of state and market interventions directs digital

transformation, agricultural technology, tourism, and culture in reestablishing the role of, and life in, the countryside.

—Stephan Petermann, RK, Lyu Pinjing, Shi Yang, Li Shao Jun, Vivian Song, Zhu Pei

Intro Text

4+1 VILLAGES

China has between 2.5 million and 3.1 million villages, depending on whom you ask. The four village portraits shown here present prototypes of larger developments that are changing village life throughout China: From digital growth, enhanced need for food production, experiments with new forms of tourism, cultural recognition, and the role of Communist heritage, they reveal fragments of the new realities shaping the larger Chinese countryside.

TAOBAO VILLAGE

东风, Dongfeng, Jiangsu Province

A visit to IKEA in Shanghai inspired villagers from Dongfeng to start an online equivalent to the Swedish multinational using Alibaba's Taobao e-commerce network, a cross between eBay and Amazon. In 2010, Dongfeng became one of China's first "Taobao villages," a physical community centered around online production, sales, and distribution. Today, Dongfeng is among the most successful of China's more than 4,300 Taobao villages, each with an annual e-commerce turnover exceeding \$1.5 million (10 million RMB). Whereas the city used to be the essential node for trade, Dongfeng and its fellow villages show how new opportunities in trading outside the city are shifting ground in China.

URBAN FARMING

寿光市 Shouguang, Shandong Province

Approaching Shouguang on the 250-mph bullet train from Beijing, the only things you see in the last 15 minutes are greenhouses. Shouguang is the world's largest greenhouse area, producing vegetables for more than 60 million people. China has only 7% of the world's arable land, while it needs to feed 21% of the world's population. A shortage of farmland has moved farmers into 15-story tower communities, where they successfully mix urban life with stable agricultural production. From the tower, former truck driver Mr. Zhuo Mingan and his wife, Zhang Chunhua, commute daily to their farm 30 minutes out of town, returning back to the neon-lit city in time for dinner and square dancing with the other farmers.

NEW YUBULU

雨补鲁 Yubulu, Guizhou Province

In 2015, Professor Lv Pinjing from the Central Academy of Fine Arts was invited to redevelop a small 600-year-old hamlet in the Shangri-La-like mountains of Guizhou surrounded by surreal modern additions—a massive highway network with towering overpasses, hills covered in solar panel arrays, and new land-based ~~artificial~~ fish farming. He drafted physical reforms, adding more harmonious elements to the otherwise generic concrete village, as well as a separate plan to support a new way of life. This plan, which is backed by the locals, maps out an economic transformation away from a century-old dependence on farming toward Airbnb-type hosting, preserving traditional village life while answering a growing need for new forms of tourism.

THE WORKING COMMUNE

刘庄 Liuzhuang, Henan Province

Most of China's recent leaders have paid homage to the workers' commune of Liuzhuang in Henan. After serving as the birthing ground for the workers' commune model in the late 1950s, the village resisted many temptations of the capitalist-oriented reforms of the '70s and has continued to function as a collective to this day. The village

now shows both the clear progress made by 60 years of Socialist commitment, and the challenge of reinventing itself again in China's new era.

Bay 47

Intro Text: Statecraft: How the Chinese Government Works

While China's political system is often presented in Western media as a monolithic stronghold, closer examination reveals a more complex interplay of various forms and levels of government at work. As a result of long-term experience in planning infused by bottom-up initiative, it is a system in constant flux, always reevaluating and reshaping its role for the nation.

—2019 Annotations by Prof. Peter Ho and Prof. Jiang Jun

Bay 46: Chinese Villages: Countryside Innovation

Intro Text: Countryside Innovation

New advances in seeds genomics, collective forest creation apps, low-tech redesigns for toilets, live countryside shopping directly with farmers, smaller-scaled automated drone farming, and popular countryside social-media streams provide glimpses of new interconnections between rural and urban life, and the continuing pursuit and refining of modernization.

Bay 45: Ocha: African Avant-Garde

Etta Madeta and Dr. Linda Nkatha Gichuyia, lecturers in architecture at the University of Nairobi, discuss Kenya's contemporary countryside, which isn't following the script set for it by the UN, colonial legacy, or contemporary Chinese influence...

Are mega-regions, mega-cities, urban agglomerations, the inevitable fate of East Africa? These terms monopolize current discussions and definitions of emerging futures all over the world. The UN says that over 50% of the world's population currently lives in cities,

and according to their prediction, by 2063, African cities will have more than doubled in population.

We see the countryside as an opportunity to plant seeds of a new life, different from the generation before us but rooted in old ancestral grounds. No longer are we confronted with the mundanity, deterioration, and “backward” notion of farm life and the rural village. The village is becoming the voice of reason on how to move forward. It makes us want to go luxuriate in our countryside, also called *Ocha* or *Gishagi* in Kenyan slang.

Kenya: M-PESA extended label

LNG: I use M-Pesa to pay for my Uber ride and bills like rent, electricity, and water. With a simple click of a button, I can buy a single tomato from the corner shop or buy shares of a company. The difference between M-Pesa and, say, Paypal is that all you need is a phone number—no bank account and no physical address required. M-Pesa is a means of financial inclusion for the unbanked, especially nomadic tribes. It goes to show that a lack of infrastructure can accelerate innovation, development, and implementation of radically new technologies that can fundamentally change rural life.

Kenya:Boda Boda extended label

EM: The boda boda motorcycle taxi is the primary means of moving through the countryside, where rough terrain, poor infrastructure, and impassable road networks make vehicular access difficult. The boda boda craze started in 2007 when the Kenyan government waived import taxes on motor bikes. Today there are about 600,000 boda bodas, each earning an average of \$10 a day, or \$220 billion per year in total. A huge economic driver, the boda boda is the main source of income for many tech-savvy rural youths seeking to transcend village stereotypes; the boda boda offers a way out of subsistence farming.

Kenya-UBI Extended Label

EM: The countryside is Kenya's laboratory for sure, a prime example is the Universal Basic Income (UBI) experiment happening a stone's throw from the village I'm from in Western Kenya. Starting in October 2016, the American NGO GiveDirectly launched its UBI experiment, based on the premise that aid should not be prescribed. Recipients are given cash through M-Pesa—either a small amount over a long period or a lump sum—and how they use it is up to them. I see it as a project that will change the way we think about aid and giving, not only at a global scale but at the human one. Results are still anecdotal, but GiveDirectly will be publishing their first official findings later this year. GiveDirectly describes the experiment below:

As part of a randomized controlled trial, each of 295 rural villages in the Western and Rift Valley regions of Kenya were assigned to 4 groups:

1. Long-term basic income: 44 villages (4,966 people), with recipients receiving roughly \$0.75 per adult per day, delivered monthly for 12 years. All payments for all groups are made in Kenyan shillings.
2. Short-term basic income: 80 villages (7,333 people), with recipients receiving the same monthly amount, but only for 2 years.
3. Lump sum: 71 villages (8,548 people), with recipients receiving the same amount as the short-term basic income group (in net present value), but all up-front as a lump sum.
4. Control group: 100 villages not receiving cash transfers.

Mahjouba Extended Label

In 2016, Algerian-born, Cameroon-raised Belgian artist Eric van Hove embarked on a project that would enable Moroccan artisans to build a motorcycle called the Mahjouba. "Together, the artisans form a brand-new kind of giga-factory," says van Hove. A virtual plant spread all over the country, Mahjouba production represents a countermodel to the globalized market economy. Mahjouba defies traditional categories; it's cheaply mass-produced but at the same time handcrafted—a customized, standardized object. The Mahjouba motorcycle illustrates how centralized production by underpaid workers

in fully automated factories could be replaced by clever networks of small, local, and interconnected production entities in the countryside.

Mobius Extended Label:

LNG: Attempting to drive some well-known cars from Europe, Asia, and the US off-road through the rough terrains of the African countryside is a bad idea, unless it's the last time you ever want to drive that car. Instead of waiting for billions of dollars to be spent on road improvement in remote areas, the first Kenyan automaker, Mobius, is now building an extremely rugged, inexpensive car that can be bought for less than \$13,000, the same price as a ten-year-old, used, run-down Japanese sedan in Kenya. Mobius builds a car that can be an ambulance, a people-carrier, a farm truck, reflecting the real needs of a country that today counts among the largest importers of used cars in the world.

Kenya-SGR Extended Label

EM: The Mombasa-Nairobi Standard Gauge Railway (SGR) is one of many Chinese infrastructural projects carried out in Kenya. Part of the Belt and Road system, also known as the “New Silk Road,” China’s multibillion-dollar strategy to connect Asia, Africa, and Europe, the SGR is seen by some in Kenya as a win-win partnership and a break from the traditional models of paternalistic foreign aid from the West. The Madaraka Express line connects Mombasa and Nairobi, parallel to the Lunatic Express, a “train to nowhere” built by the British in the early 20th century. It’s still not clear what the massive debt incurred by this project means for Kenyans.

Chin-African Neocolonialism-Extended Label:

EM: The presence of Chinese influence in Africa can’t be ignored—from the emerging Chinatowns in cities to the \$3.6 billion Standard Gauge Railway

project, the \$32 billion Thika superhighway, and the \$7 billion affordable-housing scheme, not to mention the Mandarin classes being taught for free in our institutions. Despite the invasion of our sensibilities, I actually agree with this functional neocolonialism, which brings with it lost freedom and debt we can't afford but also actual improvement to the people of Kenya. Even if the chains of British colonial rule are barely shaken off, accepting these invisible Chinese shackles seems to be in our best interest, for the time being.

LNG: I think we are blindly attracted to China's contrasting approach to international relations compared with the EU and US model of human rights, the donor-recipient relationship, and interventionist and aid-based approaches. Then, along comes China, offering multilateral and equal partnership goodies without the nasty colonial baggage, and with a "trade and investment" promise to sweeten the deal. We owe China 72% of our bilateral debt and 21.3% of our external debt. With what we know now, we need to review this relationship because I don't think it's working. We did not sign up for this neocolonial treatment. Is it too late for a divorce? Can we legally ask for full custody of our funded projects?

Voi Station Extended Label

EM: The Voi Standard Gauge Rail Station stands with its wide wings like a spaceship that has just landed, a stark contrast to its colonial predecessor. Since its construction, this hub has attracted commercial, social, and residential development around it, inspiring a faster rate of development in its once sparse surroundings.

Kenya-Voi Section Text (left web wall)

EM: Voi is a town in Kenya that is fermenting a sort of rural urbanization. Partly due to its history and location, Voi has become a hotbed of consolidated growth, with a new China-funded train station and county government devolution-fueled development projects. During the colonial era, the construction of the Kenya-Uganda railway, in 1898,

brought growth to the village. Voi is still a destination, locally and internationally, as a gateway for tourists to the Tsavo National Parks. With city limits defined by the Chinese-built SGR, the Tsavo county line, and Tsavo East National Park, Voi shows how Africans can deal with the pressure of outsider interventions and redesigns of their country—it is a story of adaptation, resistance, amalgamation, superimposition, and African self-empowerment. Voi is an example of the countryside's power to act as a center of development and avant-garde experimentation. The future of the African countryside may lie in such accumulations of villages—a counterexample to the thesis that the development of Africa will result in ever-larger mega-cities.

Bay 44: E. Africa – Kenya

Preservation section text

LNG: There's a trend toward the commercialization of rural landscapes, like the vast lands taken from various tribes in the name of conservation. Mordecai Ogada spoke out about this in his seminal work, *The Big Conservation Lie* (2016), saying, it's "a far-fetched thought that one can presume to celebrate, conserve, and value any culture or heritage while up-rooting or otherwise dislodging people from their ancestral origins." This conflict of big economies versus community heritage begs the question: What is the future of human-wildlife conversation, and who will be the ones speaking? I'm conflicted because we rely on these government projects to open up the countryside and make it accessible, and we rely on tourism as one of our biggest revenue sources, but I'm opposed to a top-down narrative in which we have no say. How do we strike that balance between conservation and development, preservation and profit? How do we protect our natural resources in the ever-changing and urban-centric landscape of East Africa?

Kenya-Tsavo extended label

EM: Home to the Big Five (lion, leopard, rhinoceros, elephant, and Cape buffalo), the Tsavo National Parks cover 8,495 square miles (22,000 square kilometers), the largest

national park in Kenya and one of the largest in the world. Its future is uncertain; the new Chinese SGR cuts right through the heart of the park and development interests aren't far behind. A contracting countryside has changed animal migration and breeding patterns, and human-wildlife conflicts are at an all-time high. What is the future of preservation when development comes knocking?

Kenya-Agriculture extended label

LNG: More than half of the world's uncultivated arable land, 1.5 billion acres (600 million hectares), is in Africa, but the yields, and appeal, of farming are small. Begha, a brick worker in Voi, told us: "Bricks sell better than growing food. So instead we grow bricks to buy food." In Kenya, the average farmer is 65 years old, while the median age of the population is 18. How do we appeal to a young, tech-savvy generation? How do we make farming cool again?

Kenya-Sote Tech Hub extended label

EM: Sote Tech Hub is a mini Silicon Valley, located in Voi. It provides an open space for young innovators and start-ups to design market solutions to local challenges. The fact that it's nestled in the countryside has proven crucial to its fame because of the unique and avant-garde technological innovations: particularly, a sonar app for elephant detection and an app to monitor agricultural farms sustainably. Sote Tech Hub is an incubator for countryside innovations and raises the question of what rural populations will be able to do in the future, and what the future of rural work might be.

Kenya-Agritech extended label

LNG: The agricultural sector in Kenya alone employs 15.9 million smallholder farmers, and generates 26% of Kenya's GDP. So headlines like "African agritech booms with a 110% growth since 2016" are very encouraging, especially considering the propagative effects caused by faster, more efficient disruptive digital technologies. Anything tech is a

magnet to the youth. Hopefully, we can get them more involved in agriculture, an industry that has long been associated with peasants.

Kenya-Renewable Energy extended label

EM: The sight of those windmills eclipsed by the barren Turkana landscape is a contrast that gives me goosebumps—not because of the sheer humor of seeing camels rubbing their necks on the 330-foot-high turbines, but because of how the vast expanse of the noncity is feeding the city. The new Turkana Wind Power Station provides 310 megawatts, or 17% of our installed electrical capacity, and the 50-megawatt Garissa Solar Power Station provides 2% of the country's energy. These are ambitious projects that inch Kenya closer to its goal of 100% renewable energy sources by the year 2030—a very welcome agenda as we all grapple with runaway climate change, its effects, and the need for cleaner sources of energy to mitigate it.

Kenya-Devolution extended label

EM: In 2013, Kenya took a radical step to decentralize power and return it to the local and rural level. A new constitution established 47 county governments. There has been a mad dash for every county government to champion a model of development with the tall glass towers, spaghetti road networks, and busy-looking streets. Open most of the county government websites, and you're met by utopian master plans, often quite alien to the region. Is another form of development possible? Not mega-metropolises but medium-size, bottom-up towns? Not the Dubai-ification of the countryside, but the Voi-ification?

Kenya-Afrofuturism extended label

LNG: Imagining the future isn't just for urban planners; it's also deeply ingrained in the Afrofuturism movement that has revolutionized art and culture in Kenya. Some use the term to refer to a radical and almost sci-fi form of African progress; others, like the Kenyan photographer and digital artist Osborne Macharia, embrace it as a means to

represent themselves in an honest and un-nostalgic way. The tribal cyborgs in Jacque Njeri's *MaaSci* series of digital images (2017), picturing the Maasai tribe exploring space, stand in beautiful contrast to the government-led "city planting" movement and wildlife commercialization. The artists take a ground-up, radical view of the future; the government imposes a predictable future from above.

Anti-mass Urbanization (two maps)

LNG: The seeming inevitability of urbanization is robbing us of a chance to see what is actually happening in the East African countryside. The African Union's proposed railway network is the basis for an alternate proposal of counterurbanization or villagization; the presence of extra-large infrastructure, renewable energy, informal and collaborative virtual networks, and jobs means there is really no need to live in the city at all. East African cities and the East African countryside could share a destiny—a network of countless villages that partially congeal into city-like constructs.

Kenya African Avant-Garde section text (conclusion)

EM: As Kenyans, we find ourselves constantly straddling modern life in the city and traditional life at home, and we have a way of embracing and living seamlessly in contradiction. The neglect of Africa and its reduction to a continent "in need of help" is inappropriate and out of touch with the reality. Africa can lead a global ruralization movement, an alternate model to living in crowded, expensive, dysfunctional cities. The countryside is a space that resists the common "sleepy African village" narratives; it is a field of experimentation where pioneering avant-garde experiments of worldwide importance take place.

Bay 43: Off-Grid

Section Text (right web wall)

Drop-outs, opt-outs, burners, radicals, perfectionists, inspirationists, separatists, secessionists, dissenters, anarchists, realists, paranoiacs, patriots, terrorists. The vast American countryside has always functioned as a testing ground for the most ambitious, radical, truculent, and antisocial elements, first from Europe and later from its own cities. Beginning in the 18th century, the availability of land, vacant or forcibly vacated, coupled with a new and relatively permissive state made the American countryside an incubator for new ways of life.

Historic and contemporary “off-grid” groups are united by an ideology of radical self-sufficiency, a desire for sovereignty, a distrust of mainstream authorities and political systems, an ethos of radical experimentation, and/or an underlying thread of doomsday millenarianism. They call into question every basic assumption and dogmatic convention of our “civilized” society: religion, sex, the nuclear family, and property ownership, and our relationship to land, production, and consumption. Now claimed by conservative news pundits, billionaire survivalists, and fulfillment centers, the American countryside was once the preferred stage of radical utopian visions, a perch from which the self-determined could wage war on the city. For those off the grid, the countryside is a generative space of production, not just of food or energy but of revolution.

Sects:

“Extreme and bizarre religious ideas are so commonplace in American history that it is difficult to speak of them as fringe at all.”

—Philip Jenkins, *Mystics and Messiahs: Cults and New Religions in American History* (New York: Oxford University Press, 2000), p. 5.

Historic communal efforts are often viewed with a nostalgic tinge, and their religion(s) as something associated with family values and fiscal conservatism. But these religious communities are radical even by today’s standards—or especially by today’s standards: The Shakers and Rappites practiced celibacy, the Perfectionists practiced complex marriage, the Amanas actively discouraged marriage and childbirth, and all of them believed in coparenting, communal

housing, and communal meals. For all of them, there was no such thing as a single-family home.

Some groups, like the Hutterites, are practically unchanged since the 16th century; other communal efforts have collapsed or disbanded; still other utopian visions retired with vested joint-stock options. The Oneida Perfectionists (1848–1880), who were scandalizing their neighbors with free love 100 years before the hippies, are today one of the largest producers of stainless-steel and silver-plated cutlery in the world. The True Inspirationists, or the Amana Society (1843–1932), a group of German Christian mystics who followed divine inspiration west, still produce refrigerators and ovens as the Amana Corporation, now owned by Whirlpool.

Drop-Outs:

“The insights of Buckminster Fuller inspired this catalog,” reads the first page of the first *Whole Earth Catalog* (1968), which became a how-to guide for a generation of (mostly white, mostly middle-class) drop-outs. Perfected in the summer of 1948 at Black Mountain College in North Carolina, itself a kind of commune, Fuller’s geodesic dome and his thinking inspired the formation of Drop City, Colorado, one of the first rural counterculture communes.

Idealists

In the early days of the United States, for pioneers, homesteaders, and reclusive religious sects, the countryside was a default condition. The Back-to-the-Land movement of the late 1960s and ’70s, which saw more than 3,000 communes spring into existence, was something else entirely. After hundreds of years of civilization, back-to-the-landers rejected the city and returned to the garden—the now iconic naked farmers, the Adams and Eves of hippiedom, weren’t doomed to till the soil but free to work the land. They returned to the beginning to see if something new could grow. Many such communes still exist, including The Farm,

Tennessee; Twin Oaks, Virginia; Arcosanti, Arizona; Libre, Colorado; and Black Bear Ranch, California.

“That was new to me, a city boy driving a tractor,” said David Frohman, who lived on The Farm in Tennessee from 1971 until 1983.

Opt-Outs

In today’s hyperconnected world, Black Bear Ranch (1968–present) in Northern California is unbelievably remote. The nearest town is an hour-and-a-half drive through terrain so rough that their online directions read as a series of increasingly dire warnings: “It is requested that incoming vehicle operators have funds set aside to tow or otherwise remove a stranded vehicle... If your vehicle is two-wheel-drive, please consider not coming up with it... If it’s winter, please consider not coming in at all.” Founded as “a mountain fortress in the spirit of Che Guevara, where city activists would be able to come up, hide out, practice riflery and pistol shooting, have hand grenade practice, whatever,” Black Bear Ranch, like its contemporaries, has tempered into a quiet middle age. The directions further caution visitors to watch for children, goats, dogs, and chickens and end, “We go to sleep early, so arriving during the day is respectful to our lifestyle.”

Arconauts

Arcosanti, Arizona, is a technoprimitivist moonscape of arches and cypress spires built and manned by volunteers and students self-described as “Arconauts.” Begun in 1970 as the hippie movement flourished, Arcosanti forged its identity in the halcyon days of LSD and free love. An indictment of American urbanism like nearby Phoenix, Arcosanti is a demonstration of Italian architect Paolo Soleri’s high-density and low-impact Arcology: architecture + ecology. Many off-grid communities don’t survive the death of their founder—it’s the final test to see if ideology, not personality, can cohere and sustain a group of people. At Arcosanti, there was a one-two punch: Following Soleri’s death in 2013, his

daughter, Daniela Soleria, published an open letter alleging years of sexual abuse by her father. The Me Too movement clocked Arcosanti so hard that their website now features a #MeToo statement. Today, the Arcosanti compound—partial, fragmentary, still incomplete—epitomizes the double-edged nature of utopian fantasies.

Slabbers:

Slab City, California, 640 square acres of homestead land that nobody wanted, is home to the homeless. Wealthy retirees, aged hippies, army veterans, Christian fundamentalists, burners, and drop-outs park their mobile homes on concrete slabs, all that remains of the US Marine Corp's Camp Dunlap. General Patton drilled there; the Enola Gay practiced there before becoming the first aircraft to drop an atomic bomb—on Hiroshima.

Officially, Slab City doesn't exist. Like its residents, known as Slabbers, it has fallen through the cracks. There is no water, no mail, no electricity, no garbage collection, no municipal services of any kind. There are also effectively no laws, no taxes, and no foreclosures. Residents call it "the last free place."

Jefferson spliced this legal loophole right into the DNA of the 1785 Land Ordinance, the biggest grid in the world. Slab City is sited on section 36, the township parcel designated for public education. Surveyed but never settled, Slab City is one square mile of desert intended for a school that was never built, owned by a state that can't manage it, and patrolled by a sheriff's department that is understaffed and has better things to do. Federal, state, and local authorities all turn a blind eye to one of the longest lived squats in American history.

Survivalists

For some off-grid groups, the city is a site of existential threat. Survivalist self-exile and subsistence in the countryside is a function of that belief. The countryside's isolation ensures continued survival after an ecological disaster,

nuclear strike, pandemic, political collapse, or race war that would, presumably, hit cities the hardest.

Silicon Valley's billionaire survivalists prep for the end—a collapse of climate, capitalism, ecology, society, food systems, or all of the above—amassing tricked-out bunkers like Vivos xPoint in South Dakota, private islands, or New Zealand estates. Others have turned their attention to floating nation-states, temporary beta-countries, and extraterrestrial territorialization. If shit does hit the fan, what kind of a world would they rebuild?

Garden of 1,000 Buddhas section text

Who owns the land? Native Americans have lived in western Montana for more than 14,000 years. In 1855, the Flathead Indian Reservation was created, home to the Bitterroot Salish, Kootenai, and Pend d'Oreilles tribes. Half a century later, the US Congress passed the 1904 Flathead Allotment Act and opened the reservation to homesteading by non-Native American settlers. Ever since, conflicts have persisted over the use of natural resources, especially between the Native American tribes and the Amish of St. Ignatius, a religious community located on tribal lands. Another layer of complexity was added when, a decade ago, a Buddhist named Gochen Tulku Sangngag Rinpoche erected a pilgrimage site—The Garden of 1,000 Buddhas—within the Flathead reservation. He was supported by Linda Pritzker (of the Hyatt Hotel fortune), also known by her lama name, Tsomo. The Flathead's hills are now dominated by multicolored Buddhist prayer flags and a giant statue surrounded by no fewer than 1,000 white Buddhas: an army of Eastern gods occupying tribal land. Montana's countryside remains a territory marked by conflicts over land use and property rights—while becoming a microcosm of religiously motivated global conflicts and hopes for reconciliation.

Off-Grid Conflict section text (left web wall)

As urban tendrils of suburbs and exurbs and their infrastructure continue to creep into the American countryside, geographic isolation is getting harder to come by. Unable to

press on in covered wagons or sail to an uninhabited land, off-grid groups come into constant, sometimes violent, conflict with the grid and those on it—facing charges of tax evasion and child abuse, religious persecution, cult scares, red scares, raids, and drug busts. A belief that American governance, once remote and abstract, has become stifling and omnipresent is shared by those on the far right and those on the far left, by preppers and communalists, Trump voters and old hippies.

Off-grid groups represent a real threat to American sovereignty: They were and can be entirely self-sufficient, resilient *de facto* micronations with their own laws, currency, and oaths of loyalty and allegiance. They have withstood and outlasted regimes, countries, and political policies. They are truly islands in the countryside, untouched by time and turmoil. We may find their doctrines unpalatable, but their continued existence is proof positive of one's ability to opt out.

Bay 42: (Re)Population

(Re)Population Tarnac section text (right web wall)

For some, a journey to the countryside is an act of depoliticization, or a retreat into the private and nostalgic. For others, like the writer John Berger, who moved to Quincy, in the French countryside, after winning the Booker Prize in 1972, it was the opposite: a critical countermodel to an increasingly unpleasant urban life marked by capitalist efficiency and social isolation. Lately, the French village of Tarnac has become famous for its anarchist and *altermondialist* residents. In 2008, special forces raided the village, capturing 20 men and women living in a commune who were believed to be the anonymous authors of an anarchist treatise called *The Coming Insurrection*. The accusation was terrorism. Later, in court, all allegations, among them of sabotaging high-speed train lines, were proved wrong. Today, Tarnac and its adjacent areas have turned into an informal

anarchist university hidden in the forest, where an international audience gathers and tests alternate models of living, education, politics, and love.

The Coming Insurrection – Fox News Video

The Coming Insurrection, drafted by the anonymous Invisible Committee in 2007, became world-famous in 2010, when Fox News host Glenn Beck presented it on his show as a fundamental threat to the Western world. The book argues that French society was caught between drudging consumption, divisive selfishness, and a fundamental lack of perspective. The only remedy was to broaden the uprisings that had already taken place in the banlieues of Paris, Marseille, Lille, and other French cities in late 2005, when, following the death of two minors who tried to escape the police, protesters set fire to thousands of cars, bus stops, and other public facilities. The last chapter of the treatise acts as a guide to revolution.

Coal + “Wir schaffen das”

Abutting the biggest lignite mine in central Europe, the German village of Manheim had for years seemed at risk of being swallowed by the pit, which had been growing since its establishment in 1978. By the late 2000s, a few Manheimers held out hope that the open-pit mine would spare the town, but when Chancellor Angela Merkel proclaimed the end of nuclear power in Germany, in 2011, following Japan’s Fukushima disaster, the collapse of the village became inevitable. The hole in the ground continued to expand, dragging large parts of the Hambach forest with it and approaching the former A4 motorway, which was eventually closed and dismantled. Without its pavement, the road looked like a surreal band of sand, a shore without the sea.

Manheim resettlement efforts started in 2012. Many residents took energy company RWE's compensation money and built new homes in New Manheim (Manheim-Neu), located 5 miles (8 kilometers) east. Old Manheim (Manheim-Alt) became a ghost town. But then things changed: After Chancellor Merkel declared “Wir schaffen das” (“We can do it”), in 2015, and opened the country’s borders to war

refugees, mostly from Syria, hundreds of refugees arrived in Cologne and were transferred by the authorities to the dying village.

Manheim Alt + Manheim Neu

Old Manheim, Germany, is more than 1,100 years old: Its first appearance in historical records came in the year 898 CE in a land grant from King Zwentibold of Lotharingia. A village of reddish-brown houses, with a new-Gothic church, Old Manheim was oriented around farming until the 1950s, when it started to become a commuter town. Bungalows were built for new residents who worked in the nearby open-pit mines or at the Ford factory in Cologne. Old Manheim was also a relic of a vanishing way of life, a built example of how postwar welfare state politics made living in the countryside attractive: Even tiny villages offered a stable infrastructure, with cheap rents, a kindergarten and elementary school, an indoor public pool, two parks, and public transportation that allowed commuters to live near fields and forests. Not so long ago, more than 1,700 people lived here. In the resettlement, these Germans moved to new buildings that looked as plain as a prefab container village, while the refugees moved into ancient German farmhouses and small family bungalows from the 1960s, and made the village look like an optimistic, heterogeneous, globalized version of the German countryside: a Syrian family with six children in a bungalow, children from Iraq and Kosovo in the once deserted marketplace, a bustling primary school...

Balo Family

Among the refugees brought to Manheim was Hussein Balo, who was born in northern Iraq and owned a chicken farm near Mosul. When ISIS arrived, 37 people from his family were shot. Balo escaped with his children and grandchildren to Turkey, then across the Mediterranean. This film shows their journey: They huddle on a dinghy in a life-threatening situation whose danger is belied by the blue water and cresting waves, the gentle smiles of some who look at their mobile phones, while little children lie in the middle of the boat. That same year, thousands of people drowned trying to make this Mediterranean crossing.

Balo and his family arrived in Germany in 2015 and were given an empty house in Old Manheim by the local authorities. They stayed there for three years.

New Deutschland Film

About 47 million people live in the German countryside, more than half the country's population. Over 80% of Germany's land is used for agricultural and forestry purposes. According to the latest Farm Structure Survey, around 940,000 people (including seasonal workers) produce food and commodities worth more than \$56 billion (€50 billion) every year on some 275,000 farms. Still, depopulation is a big issue, and as people struggle to find work in the countryside, schools and shops continue to close. With the promised effects of new industries, digitalization enabling more people to work from home, and waves of refugees arriving, this could soon change.

Hambach Forest

While the refugees arrived in Manheim, environmental activists settled in the nearby forest to prevent it from being destroyed by the growing mine. Their occupation found international support on a scale previously unseen; even Swedish activist Greta Thunberg visited the squatters in their tree houses. Finally, the Higher Administrative Court issued an injunction: Hambach Forest, with its unique fauna, including the strictly protected Bechstein's bat, must be preserved. The extension of the pit was stopped. The forest became a symbol of a fundamental dispute over the general direction of the country's economic and environmental policy. Even Volkswagen CEO Herbert Diess stated, with regard to the Hambach debate, that there is no point in building electric cars if the electricity comes from expanding coal mines.

(RE)POPULATION Manheim section text (left web wall)

Chancellor Angela Merkel has reshaped Germany with two major decisions: In 2011, after the Fukushima disaster, she announced that Germany would abandon nuclear energy; in the fall of 2015, she opened the country's borders to a million refugees escaping civil war in Syria, Iraq, Tunisia, and other African countries. Both decisions had a major impact on the countryside. When the federal government decided to repopulate dying and abandoned villages with refugee families, at least temporarily, the German countryside turned into a large-scale social experiment...

Bay 41: Riace

The villages of Riace and Camini, in Calabria, Italy, have been inhabited since antiquity. For over two millennia, the villagers lived off of agriculture, primarily olive growing and viticulture. But after the World War II, up to two thirds of the population left in search of employment, among them many young people who migrated to the wealthier north.

Riace Bronzes extended label

There was some hope that tourists would come to see the Riace bronzes, two antique sculptures of Greek warriors that were found in the Ionian Sea near Riace in 1972. But they were brought instead to the city of Reggio Calabria, a 77-mile (124-kilometer) drive away. Riace continued to die. The houses fell apart; the shops and schools closed.

Revitalized town square extended label

Then something unexpected happened. In 1998, a boat carrying Kurdish refugees became stranded on the shores of Riace Marina. Domenico Lucano, a young professor (and mayor of Riace from 2004 to 2018), applied for money to renovate the village's derelict buildings in order to accommodate the refugees and provide them with job training. All of a sudden, there was life again in the narrow alleys. The success of Riace served as inspiration for many other villages, like nearby Camini.

Riace Money extended label

A local currency was designed for the refugees, who were not allowed to be paid for their work in euros.

Global Village extended label

In Riace, hundreds of refugees, from Syria, Sudan, Eritrea, Côte d'Ivoire, Iraq, Bangladesh, and Afghanistan, among other countries, helped rebuild a section of old houses, calling it a "villaggio globale" (global village). Local shops reopened. The Calabrian experiment gave the lie to gloomy predictions that an existing society can only accommodate a certain number of migrants. At its peak, about 800 migrants, refugees, and asylum seekers from 20 countries populated Riace, whose population had been down to 600. Crime was still lower than in most parts of Italy. When Italy's right-wing, populist government took over in 2018, Riace mayor Lucano, named one of the world's 50 greatest leaders in 2016 by *Forbes* magazine, was arrested for abetting illegal immigration. While Camini resisted the new situation, Riace's future was again threatened, and many refugees were forced to leave. Meanwhile, Lucano, no longer mayor, is back in his village.

Artists/Production extended label

In Camini, enrollment at the school jumped from eight children to 50. The bar reopened and became a popular meeting place for locals and new arrivals. Syrian women started to produce Aleppo soap and cooked jam, while Eritrean potters merged their knowledge with Calabrian ceramicists, creating new forms of pottery.

Camini Utopia (Jesus Statue)

Children played in the church square. In the reopened kindergarten, name tags featuring Arabic and African names hung next to Italian ones. In a local activist's office hung an image of four refugees carrying a statue of Christ from the local church to the beach, a procession that had not been practiced in decades, as none of the elderly residents was able to carry it all the way down to the coast.

Camini Section Text (left web wall)

Repopulated and restored by refugees, the Italian villages of Riace and Camini exist as both something completely new—African-Arabian villages in the hills of southern Europe—and a rebirth of the traditional Italian village, as it still haunts the memories of Italians and the dreams of tourists with the smell of fresh pastries in the alleys and with children playing in the village square. As in antiquity, when travelers from Greece, Arabia, and northern Africa populated the Italian shores, the village has again become an amalgam of different Mediterranean cultures. For many inhabitants, the village is not a thing of the past; with the recent arrival of refugees and Italian returnees, it has become a space of rediscovery of societal practices long-submerged by the market economy and its demands, and a space of experimentation with alternative life models and possibilities for the future.

RAMP 5 – PRESERVATION

RAMP 5 CONTENTS:

Intro: Preservation

Bay 59: Conservation

Bay 58: Buffer Zone: What is Wild?

Bay 57: Buffer Zone Gorilla Politics: Profit and Preservation

Bays 56–54: Permafrost

Bays 53–52: Buying=Saving

Ramp 5 Intro

Preservation

In 1810, Alexander von Humboldt could still “discover” unmolested nature; even when it was inhabited, indigenous peoples lived lives that depended on nature without destroying it. Just 200 years later, we have to “save” nature to save ourselves. A considerable part of our current computing power is used to calculate how much nature has to be “preserved,” but that word has already become a misnomer. Because the entire Earth is subjected to warming, everything will change, including what we try to keep the same. Since the publication of Rachel Carson’s *Silent Spring* (1962), 15% of the Earth’s surface has been preserved, but much more will be needed to compensate for the adventure of modernity. Currently, scientists are developing models in, broadly, two versions. The first, “Half Earth,” is based on E. O. Wilson’s 2016 manifesto. It implies a drastic separation between an almost pristine nature on the one hand and human habitation and cultivation on the other. The second proposes a more intensive sharing/mixing of all our territories, as if we moderns could become “indigenous” again. (In fact, a quarter of the Earth’s surface is still husbanded by indigenous populations.) Both approaches imply radical changes in food production, ideology, and agricultural techniques. They will also require the intense collaboration of all spheres, and all political factions that are barely on speaking terms today—and the collective

mobilization of tools and technologies that have been spoilt by their unquestioned dominance. For this year's UNCBD in China—the United Nations Convention on Biological Diversity, one of the acronymed entities that secure our future—a team of international scientists will present their first global modeling—greenprint?—of our future habitat, to be presented as the latest, most intensive attempt to finally “save” nature.

Bay 58: Buffer Zone What is Wild

Section Text: What is Wild?

CULTURAL HISTORY OF THE GORILLA: Since antiquity, the gorilla has spurred the imagination of Western audiences. Initially seen by only a few, the gorilla was introduced to the general public through reports and illustrations. These often fantastic representations developed into their own genre, revealing more about the desires and fears of those who depicted them than the gorilla itself. Ever since, the gorilla has been a highly ideologized construct in Western science and popular culture, reflecting preoccupations with nature, race, power, sexuality, and identity. In hardly any other field have theories about animal behavior been so saturated with the ideologies of their time as in the study of gorillas.

By the late 1960s, early colonialist representations of the gorilla as a ferocious beast had evolved into a more intelligent human adversary with the popular film *Planet of the Apes* (1968), in which mutant apes conquer and enslave humanity. But the hippie era also saw the resuscitation of the gorilla's image as a “gentle giant,” owing in large part to the pioneering research of primatologist Dian Fossey, who began studying gorillas in the Congo in 1966. After Fossey, female scientists came to dominate the field. The history of recent primatology also reflects paradigmatic changes in discussions of gender and race, feminism, and postcolonial theory.

Buffer Zone—Cultural History extended label: Beringe Gorilla

In 1902, the German explorer Friedrich Robert von Beringe shot two mountain gorillas in the volcanic Virunga Mountains of Rwanda. This moment was framed

in the Western world as the “discovery,” by lethal immobilization, of a species that was, of course, already well known to the local population.

Buffer Zone—Cultural History extended label: The Giant of Karisimbi

In his writings from the 1920s, the taxidermist and conservationist Carl Akeley anthropomorphized the male gorilla as a nuclear-family father, while his travel companion, the writer Mary Hastings Bradley, exploited the popular image of the hypersexual, polygamous ape in books including *On the Gorilla Trail* (1922). In a violent colonial discourse, the gorilla was the embodiment of Africa—a dangerous, menacing, but extremely energetic continent in need of domestication.

Buffer Zone—Cultural History extended label: *Gorilla Carrying off a Negress*

In an 1859 letter, the artist Emmanuel Frémiet complained about the reception of his statue at the Paris Salon that year: “The jury’s condemnation was unanimous. My work was declared to be seriously offensive to public morality, and it was banished pitilessly from the Salon.” Less than 30 years later, in 1887, a bronze version of the work won the Salon’s Medal of Honor.

1859 *Gorilla Carrying Off a Negress*, Emmanuel Frémiet

Section : Extreme Conservation

Buffer Zone—Habituation Extended Label:

CRISIS AND SUCCESS Mountain gorillas are found only in two small habitats—in the Virunga Massif, straddling the boundaries between Rwanda, Uganda, and the Democratic Republic of the Congo, and in Uganda’s 128-square-mile (332-square-meter) Bwindi Impenetrable National Park, a rainforest that was established as a nature reserve in 1991 in southwestern Uganda, not far from the

borders of Rwanda and the Democratic Republic of the Congo, on the edge of the Albertine Rift.

In the 1980s, fewer than 500 mountain gorillas remained in the world. Endangered by habitat destruction and poaching, disease and civil conflict, the subspecies was on the brink of extinction. Due to massive conservation efforts, by 2018, the population had more than doubled to over 1,000. One of the reasons for this rare and fragile success was habituation. In the past four decades, gorilla groups in Bwindi and the Virungas have experienced almost daily proximity with researchers and tourists, most gorillas were habituated specifically for tourism, and have lost their strong natural fear of humans.

Left Web Wall Extended Labels / Captions:

“Gorilla Wall” Images Extended Label:

SCIENTIFIC STUDY To study how the gorilla population changes over time, scientists in Bwindi and the Virungas collect data on all births, deaths, and transfers between groups of the habituated gorillas. In addition to this database, the growth and development of individual gorillas as well as the group composition can be illustrated through photographs to form a “gorilla wall.” Each column is made up of photos of a particular gorilla as it grows up in the Kyagurilo Group, monitored from 1998 to the present.

“Gorilla Wall” Caption:

A re-creation of gorilla primatologist Dr. Martha Robbin’s cabin in Bwindi Impenetrable National Park. Photos: Dr. Martha Robbins/Max Planck Institute

Tourism extended label:

TOURISM is a key component of gorilla conservation and generates significant revenue for the governments, local communities, and private businesses. Park

admission fees, up to \$1,500 per visitor, make up 60% of the park service budget in Uganda—proving gorillas can “pay their own way.”

Bay 57: Buffer Zone Gorilla Politics: Profit and Preservation

While the mountain gorilla population has boomed, the size of the Virunga and Bwindi Parks has remained the same. The two habitats are situated only 18.6 miles (30 kilometers) apart, but both are surrounded by some of the highest densities of humans living in a rural setting, with 300 to 600 people per square kilometer, reliant mostly on subsistence farming. The wilderness has almost automatically become a park, an island of impenetrability. Having lost their fear of humans, habituated gorillas have been known to leave the forest, enter nearby villages, and raid the crops—ignoring the boundaries established by humans between wilderness and civilization, and leading to frequent and undesirable human-wildlife interactions. The increase in the gorilla population corresponds to an increasing number of tourists. A recent census found 604 individuals living on the Virunga Volcanoes, and 459 individuals living in the only other nearby population, in Bwindi. Moving gorillas from “critically endangered” status to “endangered” could mean a rollback of protections for gorillas and already at-risk habitats. Over the last ten years in the Congo, Virunga park has been opened up to potential mining operations, the construction of hydroelectric dams, and other extractive industries.

Buffer Zone Billboard Text:

In an attempt to minimize conflict between local farmers and gorillas, conservation groups like the World Wildlife Fund jointly purchased a swath of land located between Bwindi Impenetrable National Park and the adjacent communities. The 19-mile-long, 1,082-foot-wide (9-kilometer-long, 300-meter-wide) Buffer Zone comprises an inner area bordering the park planted with crops that gorillas don’t like—like artemisia, Mauritius thorn hedges, lemongrass, and tea. A monoculture of well-tended tea plantations in the Buffer Zone, carefully

cleared of any other plant, is intended to keep the enterprising, habituated gorillas in their designated “natural” habitat.

Buffer Zone-In the Buffer Zone:

The Buffer Zone was planted to keep gorillas in the park and wild animals in the wilderness. It was a decisively modern urbanistic gesture, a Cartesian tabula rasa created to establish order between two seemingly chaotic, uncontrollable realms. But quickly, the wind carried in seeds of plants that gorillas like, and delicious vegetation grew among the unpalatable hedges. Some gorillas seemed to enjoy the new space, spending more than half their time in the Buffer Zone, blurring the boundaries set by humans to distinguish wildlife from culture and wilderness from farmland, while demonstrating a surprising capacity to adapt to new conditions. Both humans and gorillas are tempted by the fertile soil of the Buffer Zone—a new hybrid space of complex coexistence. What kind of future can be seen in the liminal space between park and countryside, human and nonhuman realm, farmland and a radically curated wilderness? Is the desire to protect the status quo paradoxically transforming the buffer into an accelerated zone of encounter, instability, necessary experimentation, a more amalgamated cohabitation?

Bays 56–55: Permafrost

Permafrost introduction text (right web wall)

The threat of thawing permafrost caused by climate change remains largely underrepresented and unknown, occurring in remote and therefore “invisible” areas of the world. Permafrost—continuously frozen ground—constitutes nearly a quarter of the land in the northern hemisphere, occurring at high altitudes and in low-lying areas around the polar region.

The far north is warming up fast, already by up to 9°F (5°C) in some areas. Permafrost that has been frozen for thousands of years is thawing and beginning to release carbon. The northern hemisphere contains between 1.46 and 1.6 trillion tons of organic carbon—almost twice the amount present in the atmosphere today. The term

“carbon” here designates ancient pockets of methane, plus “new” methane, and to a lesser extent, carbon dioxide, released by microbial activity in long-frozen organic matter awakened as permafrost thaws. Scientific projections show that the release of this carbon will be gradual, erratic, and abrupt in different places. Modeling of the amount of carbon that will be released and the warming feedback loop it will trigger is still in its early phases.

But it’s not just a question of present and future carbon release. Permafrost holds much of the northern landscape together, and today, the ground is (abruptly) losing stability as ice within the soil melts. By 2050, everyone living in the northern hemisphere’s permafrost zone will be impacted. By the end of this century, large parts of this landscape will become wetlands and/or experience deformation—often making the land uninhabitable or unusual; other regions will be covered by the sea along a new, emerging coastline. Relocation or evacuation of settlements seems unavoidable in all future scenarios.

The severity of the permafrost crisis has not yet reached global consciousness. Leaders of G8 countries and leaders of affected countries (many overlap) are failing to take large-scale action, and remain fixated on issues like sovereignty, military strength, and the economic “opportunities” released by warming: shorter sea routes, mining, the extraction of minerals and more fossil fuels...

Science and Politics section text (left web wall)

Yakutsk, the capital of Sakha Republic, or Yakutia, in Russia, is the unofficial scientific and cultural capital of permafrost research and home to the Melnikov Permafrost Institute—named after Pavel Melnikov, a pioneer in the field who helped launch an international exchange on permafrost starting in the 1960s, creating the foundation for the international permafrost collaboration today. His institute hosted the International Conference on Permafrost (ICOP) in 1973, attended by some 400 participants from 16 countries. This was one of a series of international scientific and state events during the 1960s and '70s, a collaboration at the height of the Cold War driven largely by personal

friendships, in which experts regularly visited each other's deep hinterlands, with conferences and state visits hosted in Siberia, Alaska, northern Canada, and other remote areas. Despite drastic political differences, leaders were open to the importance of scientific progress. Today, the scientific collaboration is stronger than ever, but the political vision and political will are both missing.

Billboard Map

PERMAFROST

Permafrost is defined ground that remains frozen for more than two consecutive years, but much of the existing permafrost has been frozen for thousands. It covers nearly a quarter of the land area of the northern hemisphere: 50% of Canada, 60% of Russia, and 85% of Alaska. Temperatures across the circumpolar region are rising faster than anywhere else. This was anticipated by scientists, but not at the current extreme rate: Some areas have already warmed by 9°F (5°C). The abrupt warming, together with the resulting increase in precipitation, is causing the rapid thaw and destabilization of permafrost.

Map data: 1997 J. Brown et al., eds., Circum-Arctic Map of Permafrost and Ground-Ice Conditions, Circum-Pacific Map Series CP-45 (Washington, DC: US Geological Survey in Cooperation with the Circum-Pacific Council for Energy and Mineral Resources).

ABRUPT THAW CARBON RELEASE

Land areas covered by permafrost contain between 1.46 and 1.6 trillion tons of organic carbon—almost twice the amount present in the atmosphere today. Highlighted are sections of the permafrost landscape vulnerable to rapid thawing. As permafrost soils thaw, the soil's organic carbon is broken down by microbes and released as greenhouse gases. This process is particularly rapid where abrupt permafrost thaw leads to land surface collapse, landslides, and the formation of wetlands and lakes. Areas susceptible to abrupt thaw make up approximately 20% of the permafrost region, but store approximately 50% of the organic carbon. All of this release will, or is already,

creating a climate feedback loop: more warming, more carbon released from permafrost; more carbon released from permafrost, more warming. Projections suggest that greenhouse gas release from permafrost soils this century could be similar to current fossil fuel emissions from the US.

Map data: 2016 D. Olefeldt et al., “Circumpolar Distribution and Carbon Storage of Thermokarst Landscapes,” *Nature Communications* 7, article 13043.

INFRASTRUCTUR RISK

Emphasizing areas in the permafrost domain with high potential for thaw by 2050. By the middle of this century, everyone living in the northern hemisphere and most of the infrastructure in permafrost zone will be impacted.

Map data: 2018 J. Hjort et al., “Degrading Permafrost Puts Arctic Infrastructure at Risk by Mid-Century,” *Nature Communications* 9.

INDIGENOUS PEOPLES OF THE ARCTIC

Almost five million people inhabit the permafrost zone, including distinct indigenous groups and many recent arrivals, living in cities and small settlements across the Arctic landscape.

Map data: Compiled by Winfried K. Dallmann, *Indigenous Peoples of the Arctic Countries*. © Norwegian Polar Institute (uploaded May 2015, updated March 2019).

Selected Permafrost labels

2012–2020
Tiksi, Russia
Evgenia Arbugaeva

Tiksi is a town in Yakutia (Sakha Republic), located on the shore of the Laptev Sea in Russia. It developed rapidly during the Soviet era as a seaport along the Northern Sea

Route and saw military construction projects during the Cold War. In the 1980s, when photographer Evgenia Arbugaeva was growing up in Tiksi, around 12,000 people lived there; since the fall of the USSR, the population has declined to just over 5,000. Like many other northern towns, Tiksi is now in a state of limbo. People live in hope that the town will grow again once the Northern Sea Route becomes more active.

—

2020
Mammoth
AMO

The mammoth, extinct for more than 4,000 years, is still part of daily life in Yakutia—an icon and a totem in museums, children’s literature, toys, and public art, and the focus of ongoing scientific study. With the accelerated thaw of permafrost, archaeological findings—woolly mammoths, mammoth calves, woolly rhinoceroses—are becoming more frequent due to eroding coastlines and intense ground disturbances. Each summer, findings are brought back from the field to the various research centers and laboratories in Yakutsk. Many of the newly exposed remains, however, are lost to the black market and to decay.

A 3D-printed reproduction of a woolly mammoth skeleton (*Mammuthus primigenius*) that lived between 700,000 and 4,000 years ago. It is based on a composite skeleton that was constructed from isolated bones of different mammoths of the same size, found in 1952. The original skeleton is currently on display at the Smithsonian National Museum of Natural History in Washington, DC.

Permafrost Model Extended Label

2017

Models of the formation of “thermokarst” at the Yakutsk State Museum of History and Culture of the People—landforms that began to form at the end of the last ice age, a

process that has been accelerating with warming. Thermokarst is the scientific term for the often shocking landforms from the thawing of ice-rich permafrost, common in Sakha Republic.

Bay 55: Right Web Wall text

In May 2018, regional legislation was passed to protect the permafrost landscape of Russia's Sakha Republic, unofficially known as Yakutia. The region is four-and-a-half times the size of Texas, with less than one million inhabitants, and home to multiple native cultures and languages—Sakha, Evenki, Even, and others. They can all be heard on the street, along with Russian as the shared language. Today, Sakha is the largest ethnic group in the region, making up 50% of the population.

The new legislation protecting permafrost heralds a new period of deindustrialization and another kind of inhabitation in this fragile (near-)Arctic landscape, and will trigger a major effort of rezoning and redlining areas where new construction, agriculture, settlement, or other intense human land use should be avoided altogether. It signals the beginning of a drawing down of human civilization in Yakutia and other permafrost regions. But it cannot keep up with or halt the rapid pace of thaw and thermokarst already in progress, and does not offer support to communities and landscapes that have already been damaged.

Thaw section text (left web wall)

“Permafrost” is a rendering of the Russian *vechnaya merzlota*, meaning “eternal frost.” A more commonly used scientific term today is *mnogoletnyaya merzlota*, or “multiyear frost.” The abrupt warming, together with the resulting increase in precipitation, is causing rapid thaw and destabilization of the permafrost ground, with an acceleration and intensification in surface disturbances across the permafrost region. Phenomena like craters, hillocks, landslides, and slumps occur frequently, together with increased flooding and inundation.

“Thermokarst” is land surface that forms as ground subsides due to thawing of ice-rich permafrost. Thermokarst processes may cause lakes to enlarge, peatlands to

collapse and landslides or retrogressive thaw slumps to develop. However, most of the northern permafrost region does not have ice-rich permafrost ground, and thus thermokarst is only found in approximately 20% of the permafrost region. (Landscapes with thin soils, or with direct exposure of bedrock, usually have ice-poor soils, and will thus not collapse and form thermokarst when they thaw). Thermokarst lakes and thermokarst wetlands often have high emissions of methane, as the soil organic carbon is decomposing under anaerobic (anoxic) conditions. Methane is a highly potent greenhouse gas, and thermokarst wetlands and lakes will likely contribute significantly to increased methane emissions from the overall permafrost region during this century.

Left Web Wall extended labels

Permafrost is defined as any ground that remains frozen for more than two consecutive years, but much of the existing permafrost has been frozen for thousands of years.

Bays 56–54: Threat and Opportunity

North Sea Route section text (right web wall)

The acceleration of climate change is transforming Siberia in unpredictable ways. Existing infrastructure built on permafrost is under threat, prompting new modes of building: The Akademik Lomonosov is Russia's first floating nuclear power station. Warming of the seas is making the north and other coastal regions more connected for trade, but more isolated for its inhabitants.

Coastline section text (left web wall)

The landscape as it's been known here for thousands of years and the means of living in this vast wilderness are disappearing. As people struggle to remain, and civilization prepares to retreat, new-ancient forces are being released, together with the carbon, a resurgence of myth and storytelling...

Bays 53–52: Buying=Saving

Intro text (right web wall)

Starting in the early 1990s, wealthy individuals began buying up large tracts of land in Patagonia, the southernmost point of South America. Today, in both Chile and Argentina, there is a booming real estate market focused on the buying and selling of isolated and pristine terrain—utilizing nature conservation as a selling point. This emerging real estate market, a form of privatized conservation, was the unintended consequence of neoliberal policies enacted in the 1970s and '80s during the military dictatorships that affected both countries. During the end of the dictatorship in Chile, a few local conservation activists started creating national and international awareness of the threats facing the vast and spectacular ecosystems in southern Chile. A conservation philanthropist attracted by these activists was Douglas Tompkins (1943–2015), the American cofounder of the clothing brands The North Face and Esprit, who through his Tompkins Conservation Foundation (TCF) has been responsible for the conservation of more than 3,100 square miles (8,000 square kilometers). Following Tompkins, several private conservation initiatives in Patagonia have sprung up. Today, the global conservation discourse has shifted toward the economic valuation of nature, which considers the role of natural ecosystems in maintaining the wellbeing of humans. Ecosystems are critical to the stability of the present economic system and therefore should be accounted for in the calculation of nature conservation. The prevailing theory is that richer industrialized countries are taking advantage of the capacity of ecosystems to provide goods and services (climate regulation, disturbance prevention, waste treatment, etc.), biomes that are located predominantly in poorer countries; in short, the poor are subsidizing the rich, via nature. Valuing nature in economic terms has been one of the most contested propositions in today's conservation discourse.

Ecological Epiphany section text (left web wall)

In the early 1980s, Douglas Tompkins and his first wife, Susie Tompkins, Esprit's creative director, commissioned Ettore Sottsass and the Memphis Group to design the interior of Esprit stores, pioneering the colorful aesthetic that would characterize the decade. As image director of Esprit, Douglas Tompkins was involved in successful marketing campaigns that encapsulated the style that a new young generation was looking for. Esprit promoted itself as a highly responsible company, both environmentally and socially. Unfortunately, none of these sentiments applied to the workers sewing Esprit garments. In 1976, the press reported that the immigrants sewing in Esprit's San Francisco factory were paid well below the minimum wage. In the face of an organizing effort by workers, Esprit simply closed the factory. By 1996, 95% of Esprit apparel was being made overseas. While Esprit was selling more products every day, Douglas Tompkins became involved with the philosophy of deep ecology, which proposes an understanding of nature as a community with no hierarchy, where humans would not have a special or larger ecological role. His engagement with this philosophy would ultimately lead him to sell his part of the business focus his efforts on conservation.

Conservation Rush section text (52 right web wall)

Patagonia is an area of extraordinary beauty and immense resources. In the 1980s, the dictatorship of General Augusto Pinochet established an economic structure that focused on the extraction of natural resources, liberalization of the markets, and protection of private property. The transition to democracy, following the "No" vote in 1989, put pressure on environmental groups to find new ways of protecting nature. They reached out to wildland philanthropists and other wealthy institutions who would later create a network of private conservation

Ecological Economics (52 left web wall)

The discipline of Ecological Economics studies ways of modeling the value of ecosystems services to humanity; the premise is that all of ecology carries enormous value that warrants stronger preservation. Healthy ecosystems provide goods and services to the local and global communities that are not fully captured in commercial

markets and, therefore, these ecosystems are not fully considered in policy decisions. The current annual value of the world's ecosystem services is estimated at between \$115 and \$123 trillion. In 1997, the Kyoto Protocol established the first global market for an ecosystem service, trading carbon credits in order to reduce carbon emissions. Since then, various efforts to trade other ecosystem services have been proposed. In its effort to preserve, Ecological Economics becomes the latest attempt to commodify nature. It is clear that ecosystems possess a wide variety of instrumental values (for example, cultural value, recreational value, medicinal value, spiritual value, transformational value, natural resource value, and ecosystem services value). But the issue is whether ecosystems and species have non-instrumental value or inherent value as well.

RAMP 6 – CARTESIAN

RAMP 6 CONTENTS:

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Intro

Cartesian Euphoria?

On this floor we have assembled extreme manifestations of current needs and experimental thinking combined with the most advanced unfolding technologies, all in nonurban situations, either exiled from the city because of their colossal scale, the risks their research imply, or simply the “greener” and “free-er” conditions that prevail in the countryside. Can we prove that René Descartes could only have invented his mathematical methodology because he was living in the hyper orthogonal landscapes of the Netherlands—dedicated to produce vegetal and artistic abundance in increasingly artificial ways? Can we treat the ocean like a new countryside? Can we prove that Japan is the site where demographics of aging will mobilize robots to sustain “life” in the countryside; that certain corporations now operate revolutionary structures that accidentally invent a “new architecture,” focused on machines not on humans; that plants no longer need daylight or Earth (and a lot less water) to grow, that they can

influence and take care of each other better than our current monocultures allow them to, showered with pesticides; that nuclear energy is not a finished chapter, but that fusion is around the corner; that all these phenomena create new, dreamlike images, promises and conditions...

Bay 69: Descartes (floor texts)

French philosopher René Descartes (1596–1650) lived most of his life in the Dutch countryside.

Working in rural retreats and geometrical gardens, he developed the idea of Cartesian space: a universal coordinate system that allows for mathematical description.

Descartes projected x/y axes onto the world, creating a gridded tool of abstraction, reduction, and standardization that dominates today's countryside.

Jefferson's grid, data centers, fulfillment centers, monocultures, and the greenhouse hub of Westland in the Netherlands:

The Cartesian grid has organized space to optimize production at ever-increasing scales.

Everywhere in the modern world, we inhabit Cartesian space.

Was it the genius of Descartes, or did the Dutch landscape itself birth these ideas?

The Origins of Cartesian Space: Today, "Cartesian" is synonymous with reductionist optimization in which life is mechanical and space is ordered,

but Cartesianism originated in a richly complex landscape, a cultivated space of opulence and riotous diversity.

Retracing this origin reveals how Cartesian space can also be carefully tended to make for an irreducibly intricate combination...

of tame and wild, leisure and work, reason and passion, the organic and the mechanical, nature and culture.

The aim: "make ourselves masters and possessors of nature."

The means: "the invention of an infinity of artifices that would enable us to enjoy, without any pain, the fruits of the earth and all the goods to be found there."

—1637 René Descartes, *Discourse on the Method (Including Optics, Meteorology, and Geometry)*

Bay 68: Oceans (floor texts)

Large parts of the sea are used in a similar fashion as the countryside.

Fish and algae are cultivated in farms, the seabed is mined for oil and other natural resources, wind and tidal farms deliver renewable energy.

Pioneers move offshore.

The sea is the new countryside.

Still, its liquidity and enormous size sustain substantial differences.

It's not feasible to claim ownership of the oceans' main constituent—water.

The oceans slip away from national and personal ownership just as they slip away from national and personal liability.

The Sea Lovers train for a more intimate relation with the ocean.

Nourished by the knowledge of indigenous sea nomads, ocean scientists, and passionate divers,

they learn to enjoy not just the cute and the intelligent but also the gloomy and the uncanny.

They envision a sea of love where all creatures help and celebrate each other.

—Ingo Neirmann

Bay 67: Japan (floor texts)

Japan is already deep into its infamous demographic crisis, the double whammy of depopulation and aging.

By 2100, the population will roughly halve, shrinking to early 19th-century levels, and the proportion of elderly to working population will be about 1:1.

Every worker will essentially gain a statistical grandparent they have to support, on top of their own family.

The crisis will hit the Japanese countryside hardest.

Hundreds of towns, villages, and agricultural areas in Japan's countryside are facing extinction in the 21st century.

A combination of aging, depopulation, and associated decline in tax revenue means there will be no money

and no local governance to sustain these dwindling areas or protect them from natural disasters.

Eighty percent of Japan is mountainous, largely uninhabited and unworkable.

Modern infrastructure connects metropolitan areas, bridging and tunneling through the rugged terrain in between.

Much of this infrastructure was built in a frenzy of reconstruction between the end of the Second World War and the run-up to the 1960 Tokyo Olympics,

Japan's redemptive reentry onto the world stage.

Like the same generation of infrastructure in the United States, Japan's roads, bridges, and tunnels are coming to the end of their natural life.

Repairs and rebuilding will be needed en masse in the coming decades, probably sooner given the inevitability of earthquakes and other natural disasters.

But who will do the work, if everybody is gone, too old, or overburdened?

And as the few remaining farmers in Japan's countryside get older, how will they continue to work, without a new generation to replace them?

Will the demographic crisis facing Japan trigger technological innovation like that birthed after the war,

but this time with a shrinking rather than a booming population?

The Fukushima Robot Test Field, built on a perfectly flat 125-acre tabula rasa created after farmlands and houses were washed away by the 2011 tsunami.

It is the first facility of its kind in the world.

It would be tempting to call this an uncanny dreamscape of disaster preparation if everything in it—the structures, the scenarios, the robots that will inhabit it—

weren't so realistic and pragmatic.

There is nothing sci-fi about this place.

Bay 66: TRIC (floor texts)

Tahoe Reno Industrial City (TRIC) is a repository for buildings so big they don't fit in any city.

They coexist at TRIC in a seemingly random arrangement, without connections or shared aim.

Most are surrounded by colossal loading bays, but parking lots are small, and there are no workers.

Barely 1% of the white metallic surfaces—vertical or horizontal—is transparent; facades and roofs are vast, uniform planes.

Inside, there is no daylight, and the effect of pulsating and vibrating machines is mesmerizing.

“Degree zero” architecture is attractive.

We are programmed to think that any “next” architecture can only be the outcome of a struggle.

Because it takes place in the countryside, TRIC is a stealth revolution...

The buildings here are not for humans but for things and machines.

Thousands of years of architectural and cultural history are ditched.

Debates, predictions, ideologies thrown overboard. It is post-human.

These structures are based strictly on codes, algorithms, technologies, engineering, and performance, not intention.

There is no formalized entrance; there are no users, only robots.

Not to hinder process is the one ambition.

There is no context. There is no expectation.

There is nothing.

But the implication is exhilarating.

A new architecture is born and we did not pay attention.

In terms of scale, TRIC is a metropolis; in terms of its inhabitants, a tiny village.

This coexistence needs new words. Things ? Space ? Things in space ?

Bay 65: Precision Farming (floor texts)

The inherent flatness of the terrain and low population density of the Great Plains, from the Texas Panhandle to Saskatchewan, Canada,

create the ideal landscape for hyper-efficiency.

This means monocultures, massive scales, and as much automation as possible— industrial farming.

Guided tractors and combine harvesters are transforming a strip of middle North America into a zone where anything that interferes with the smoothness of the operation is suspect and where farming communities are emptying out.

Farm operations are under pressure to constantly grow, driven by the need for ever-greater efficiency as the cost of equipment increases and profit margins shrink.

For the most part, the economy of bulk crops prevails over sourced, ingredient-based production, and specialty suppliers.

Agriculture on this scale is to a large extent facilitated by the technology of precision farming:

Satellite and drone imagery, field-specific weather forecasts, and sensor readings of soil, seed, and crop conditions

combine in algorithms that determine the optimal application of seeds, fertilizer, pesticides, and herbicides.

Precision farming is designed to produce maximal yields by responding, in minute detail, to the variable nature of a field and the needs of its crops.

Typically applied to industrial farming, its methods can also be used for regenerative farming,

where sustainability in terms of soil health, water usage, and the like are prioritized over maximizing yields.

The Remote Observation Fleet: Four hundred miles from Earth, a fleet of satellites monitors the world's most productive sections of agricultural land,

offering almost real-time feedback

on soil conditions, weather expectations, foliage growth, and other parameters, with precision down to the half inch...

Custom-Cutter Alley: Full-time harvest crews—custom cutters—start the season in southern Texas and work their way north to the Canadian border,

before heading all the way south and working their way back up again.

Using these crews—a Great Plains tradition—the farmer does not have to carry the financial load of owning all the harvesting equipment.

These families (most are family businesses) travel in caravans,

consisting of tractors, grain trucks, harvesters carried on flatbed trucks, SUVs, RVs, and motorcycles, on north-south highways like US 281,

known in the business as Custom Cutter Alley.

Bay 64: Westland (floor texts)

A Field of Constant Observation: The contemporary industrial greenhouse is a synthesized, essentialized nature,

a microcosm,

a closed system that contains all the essential ingredients of life but none of the redundancies;

sun, soil, and water are emulated, optimized, and, finally, automated.

Farmers/growers are liberated from terrestrial concerns, seasonal rhythms, and the whims of the weather.

Growing season and harvest season can be accelerated or slowed, depending on supply and demand.

A proprietary pink-purple light, calibrated for optimal photosynthesis, has stripped nonessentials and inefficiencies from the light spectrum.

Excess is eliminated, supervision is constant.

Highly artificial and sterile environments are employed to create the ideal organic specimen.

Westland, a vast greenhouse conglomeration in the Netherlands, demonstrates the organization of the countryside at an unprecedented scale;

the reorganization and optimization of nature itself.

Nature, perfected.

Bay 63: PhenoMate (floor texts)

The PhenoMate is a robotic imaging device that offers 24-7 monitoring of 960 individual, genetically distinct echeveria plants from the moment they emerge...

Photographing its subject at the full spectrum of light, from deep red to blue—infrared to ultraviolet—

it measures the effectiveness of photosynthesis at a given moment.

The growth and movement of individual plants are automatically measured and compared to identify the genes for optimal photosynthesis.

The goal is to perfect the genetic “engine” of all plants, which transforms water, CO₂, and light into oxygen and growth.

With the PhenoMate data, plants could be selectively bred for maximal efficiency in the air-tight, highly controlled conditions of the greenhouse.

These newly perfected photosynthesizers would radically increase crop yields...

reduce water consumption (and potentially CO₂ uptake if used beyond the greenhouse).

While the US works at larger and larger scales, in the dense environment of Europe, the tendency is to work at a smaller and smaller scale, that of a single plant.

An almost delicate counterpart to what prevails in the US: an agriculture of intensive care.

Bay 62: Pixel Farming (floor texts)

On the experimental “pixel farm” at Wageningen University, in Holland, plots of less than 2 by 2 feet (50 by 50 centimeters)

are used to test the interaction between different crops and the extent to which their proximity can stimulate growth, reduce pests...and restore ecological balance.

Pixel farming is an antidote to the huge agricultural monocultures.

A scientific method that becomes almost “natural.”

Pixel farming draws on different modes of knowing:

the planting and harvesting cycles of the Amazonian farmer;

virtual plant models of roots, stems, leaves, and flowers;

algorithmic automation;

soil science, which illuminates underground nutrient exchange;

and monitored ground beetles, who are “invited” to live in dedicated pixels, to contribute to pest control.

but also a range of other ecological benefits: healthy soil, a reduced need for fertilizers, natural pest and disease control, and biodiversity.

The challenge is how to plant, weed, and harvest these complex, high-resolution crop patterns.

The pixel farm produces not only food—although it has the potential to exceed that of monocultures—

We need to mechanize and invent—hardware and software—on a micro scale.

Here we can witness the emergence of a Cartesian picturesque,

an orderly grid when viewed from above, a field brimming with variety when standing on the ground.

Too complex for humans to perform, this form of planting, executed by robots, appears natural.

Bay 61: Fusion (floor texts)

Just as we are preparing to ditch technological optimism—or, in fact, the whole notion of progress—

it seems that there is hope for an until now elusive process: nuclear fusion.

The 1980s and '90s were haunted by scientists who produced cold fusion in experiments that could not be duplicated.

Since then, the European Union has invested massively, in facilities in Great Britain and on the French Riviera, at Sophia Antipolis.

And in a remote part of the northeast shore of Germany, in Greifswald,

a team of scientists is laboring with a huge arsenal of hyper-precision tools on the Wendelstein 7-X (W7-X) reactor.

An experimental stellarator—a vessel for nuclear fusion—built by the Max Planck Institute of Plasma Physics might demonstrate at some point that fusion is possible.

Inside a loop that suggests an inside-out Frank Gehry building,

atoms are propelled along a meticulously engineered landscape of bumps and accelerations to trigger their eventual hyper-trajectory

But do we need another distant promise, or will it only detract from current urgencies?

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Countryside, The Future

On view at the Solomon R. Guggenheim Museum

February 20 - August 14, 2020

SAMIR BANTAL is director of AMO, the research and design studio at OMA. With AMO, Samir combines architecture projects in Korea and Morocco, product design with exhibition curation and design, for *Figures of Speech* and *Making Doha*. Over the past years Samir lead the *Countryside, The Future* project with Rem Koolhaas.

SEBASTIAN BERNARDY is an architect and researcher based in Rotterdam. He has worked with OMA/AMO after having graduated from Delft, collaborated with Something Fantastic in Berlin and founded Eventually Made with Vincent Meyer Madaus. His projects merge exhibition design, writing, graphic arts and include tutoring the studio abroad program at Harvard GSD.

IRMA BOOM is a book designer. She is a senior critic at Yale University. Boom has collaborated with RK since the 1990s on many book projects including *Project Japan* and *Elements of Architecture*.

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LENORA DITZLER is an agricultural systems scientist working on a PhD in Farming Systems Ecology at Wageningen University. Her research examines entry points and design frontiers in agroecology for the transition towards more diverse and resilient farming systems. Before moving to the Netherlands, she taught science to art students at The Oxbow School in California.

CLEMENS DRIESSEN studies the entangled lives of animals, plants, and humans. Often in collaboration with designers, researchers, farmers, and artists, he seeks ways to appreciate the vibrant roles of organisms and material things in shaping our world. He is based in the Cultural Geography group at Wageningen University.

LOUISE FRESCO is president of Wageningen University, the Netherlands. With a scientific background in tropical plant breeding and plant production systems, she is a member of the Royal Netherlands Academy of Arts and Sciences, author of *Hamburgers in Paradise* (Princeton, 2015), and a novelist.

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KEIGO KOBAYAHASHI completed a Master's degree at Harvard GSD in 2005. He led numerous projects at OMA/AMO in Rotterdam until 2012. Since then, Kobayashi has returned to Tokyo, where he teaches at Waseda University as Associate Professor, and co-founded NoRA (Network of Research and Architecture).

NIKLAS MAAK is a writer. He edits the Art Section of *Frankfurter Allgemeine Zeitung* and taught architectural theory at Harvard. His recent books include *Living Complex* (Hirmer, 2015) and a novel, *Technophilia* (Hanser, 2020).

ETTA MADETE is an architect, lecturer, and researcher passionate about using architectural design and research to bring sustainable economic, social, and environmental development to Kenya and beyond. She teaches and conducts global research projects at The University of Nairobi and practices architecture at Orkidstudio (Buildx), a Nairobi-based architecture and construction company focused on social impact and sustain-able design.

FEDERICO MARTELLI is a Chilean biologist and designer. He is co-founder of Cookies, a design and architecture studio that explores the relation between art, display, curation, and architecture. He has, since 2012, collaborated with Wolfgang Tillmans, Rem Koolhaas and OMA/AMO, leading the design for the central pavilion of the 2014 Venice Architecture Biennale, *Elements of Architecture*, among other projects.

INGO NIERMANN is a writer and the editor of the speculative Solution Series at Sternberg Press. Based on his novel *Complete Love* (2016), Niermann initiated the Army of Love, a project that tests and promotes a just redistribution of sensual love. Niermann's latest book is *Solution 295–304* (with Marah Hardt and Eduardo Navarro, 2020).

STEPHAN PETERMANN holds a Master's degree in the History of Architecture and the Theory of Building Preservation from the University of Utrecht (2001–07). He joined OMA/AMO in 2006 working with Rem Koolhaas on lectures, texts, and research. In 2019, with Marieke van den Heuvel, he founded MANN, an office focused on spatial research, strategy, and design. He teaches at the Central Academy of Fine Arts in Beijing.

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JAMES WESTCOTT is an editor and writer. He edited *Elements of Architecture* and *Project Japan* (Taschen, 2018 and 2011) with RK/AMO. He teaches at the Architectural Association and is author of *When Marina Abramovic Dies: A Biography* (MIT Press, 2010).

RITA VARJABEDIAN is an architect. She joined AMO in 2013, working on the 2014 Venice Biennale, the countryside project, and with RK on lectures, publications, competitions, and exhibitions.

ALEKSANDR ZINOVEV is an architect working with OMA/AMO. He received his MA at St. Petersburg University of Architecture and Civil Engineering and finished postgraduate research at the Strelka Institute in Moscow. At AMO he has been involved in the renovation of the Tretyakov Gallery in Moscow and the Making Doha exhibition at the National Museum of Qatar.

GUGGENHEIM CURATORIAL BIOS

Countryside, The Future

On view at the Solomon R. Guggenheim Museum

February 20 - August 14, 2020

TROY CONRAD THERRIEN is curator of *Countryside, The Future* and has served as Curator, Architecture and Digital Initiatives, at the Solomon R. Guggenheim Museum since 2014. He organized the museum's first online exhibition, *Ázone Futures Market* (2015), co-organized *Architecture Effects* (2018–19) in Bilbao, and co-organized *Countryside, The Future* (2020) with AMO/Rem Koolhaas in New York. Initially trained as a computer engineer, and later in architecture design, history, and theory, Therrien has held positions as an architect, creative technologist, innovation consultant, and scholar. He currently teaches seminars on architecture, contemporary technology, magic, and the anomalous at Columbia University and the Architectural Association in London.

ASHLEY MENDELSON is the Assistant Curator, Architecture and Digital Initiatives. Since joining the curatorial staff in 2015, she has been one of the curators responsible for defining the Guggenheim Museum's engagement with architecture and technology, supporting the organization of Guggenheim Helsinki Now (2015), *Ázone Futures Market* (2015), and *Architecture Effects* (2018) at the Guggenheim Museum Bilbao. More recently, she served as assistant curator on the exhibition *Countryside, The Future* at the Solomon R. Guggenheim Museum. Mendelson holds a MDes from Harvard University's Graduate School of Design and a BArch from Cornell University; she has also taught at both institutions. She serves on the advisory boards of Madame Architect, a platform for celebrating women in architecture, and Impact Wrkshp, an organization that builds community through design advocacy.



Countryside, The Future

Lavazza has always thought of art and architecture as places of reflection in which to explore the present with a critical eye; as a time for cross-sectional study that helps and encourages us to build new paths towards better futures. Year after year, through our sponsorship of the Solomon R. Guggenheim Foundation, we confirm the fundamental importance of developing projects that embrace a strong culture of awareness, creation and innovation.

The exhibition ***Countryside, The Future*** sets out Rem Koolhaas' vision by explaining how radical changes in technology, economics, science and politics have transformed the non-urban world stage. If the twentieth century was the Century of the City, and if developments in recent years have transformed the international skyline into what today we might call a "global non-place", this exhibition develops the idea of a new narrative in which the countryside is a place of innovation and experimentation.

For Lavazza, cultural and technological innovations, environmental sustainability and commitment to the communities in which we operate are not empty keywords, but signposts that point the way ahead for our development.

Finding in the Guggenheim a counterpart as fertile and committed as we are to imagining and building the future, makes our sponsorship even more meaningful. With ***Countryside, The Future***, the Guggenheim confirms its sights set on the horizons of the possible. Lavazza has always showed interest in these horizons and intends, by supporting this exhibition, to continue to play an active role in imagining the world that doesn't yet exist, as a prelude to creating it.

Francesca Lavazza

Member, Lavazza Board

Trustee of the Board of the Solomon R. Guggenheim Foundation

GUGGENHEIM

NEWS RELEASE

SCHEDULE OF EXHIBITIONS THROUGH 2021

UPCOMING EXHIBITIONS

The Thannhauser Collection

Reopening March 18

Thannhauser Gallery 2

Returning to New York from Europe following its first major exhibition tour, the Thannhauser Collection will reopen at the Guggenheim on March 18 in a captivating new installation. Donated to the museum by art dealer and collector Justin K. Thannhauser and his widow, Hilde Thannhauser, the Thannhauser Collection includes a selection of late nineteenth- and early twentieth-century paintings, works on paper, and sculpture that represents the earliest works in the Guggenheim collection. Pioneering artists such as Edgar Degas, Paul Gauguin, Édouard Manet, Pablo Picasso, and Camille Pissarro laid the groundwork for the emergence of abstract art—the focus of the collection of Solomon R. Guggenheim. Featuring highlights from the Thannhauser Collection, this presentation surveys French modernism at the Guggenheim. Among the works to be displayed are Picasso's *Woman Ironing* (*La repasseuse*, 1904) and Degas's *Dancers in Green and Yellow* (*Danseuses vertes et jaunes*, 1903). The exhibition is organized by Megan Fontanella, Curator, Modern Art and Provenance.

Away from the Easel: Jackson Pollock's Mural

March 28, 2020–February 28, 2021

Thannhauser Gallery 4

This focused exhibition is dedicated to Jackson Pollock's 1943 *Mural*, the artist's first large-scale painting. *Mural* has not been on view in New York in over twenty years, and this occasion marks its debut at the Guggenheim since the extensive research and restoration project undertaken by the Getty Conservation Institute and the J. Paul Getty Museum. Visionary collector Peggy Guggenheim commissioned *Mural* for the first floor entrance hall of her Manhattan townhouse, prior to Pollock's first solo exhibition at her museum-gallery Art of This Century later that same year. Guggenheim's early support of Pollock's work arguably established his career. The year 1943 likewise represents a pivotal moment in the evolution of Pollock's artistic style; though not yet working on the floor and from all

sides, the artist began to challenge traditional notions of painting, combining the technique of easel painting with that of mural production, all while further experimenting with abstraction. *Away from the Easel: Jackson Pollock's Mural* is organized by Megan Fontanella, Curator, Modern Art and Provenance.

Generous funding for *Away from the Easel: Jackson Pollock's Mural* is provided in part by Barbara Slifka; Acquavella Galleries Inc.; Mary and John Pappajohn, Des Moines, IA and Mnuchin Gallery.

Additional funding is provided by The Pollock-Krasner Foundation.

Knotted, Torn, Scattered: Sculpture after Abstraction Expressionism

March 28, 2020–February 28, 2021

Tower 4

In the spring of 2020, the Guggenheim will include Jackson Pollock's groundbreaking, large-scale painting *Mural* (1943) in the exhibition *Away from the Easel: Jackson Pollock's Mural*. In conjunction with this presentation, *Knotted, Torn, Scattered: Sculpture after Abstraction Expressionism* will consider the legacy of Pollock's influential painting through work by Guggenheim collection artists from the 1960s and early 1970s, including Lynda Benglis, Robert Morris, Senga Nengudi, Richard Serra, and Tony Smith. The exhibition offers a unique opportunity to view sculptures and installations by a generation of artists who saw in Pollock's visionary practice urgent questions about scale, materials, process, and environment. This exhibition is organized by Lauren Hinkson, Associate Curator, Collections.

Jean Dubuffet

Summer 2020

Tower 2 Diker Family Gallery

At the end of World War II, French artist Jean Dubuffet (b. 1901, Le Havre; d. 1985, Paris) began exhibiting paintings that defied entrenched aesthetic values. He rejected principles of beauty and decorum, along with the pretention of expertise regularly associated with fine art. Instead he looked to the commonplace and the unheralded, employing crude materials, mundane subjects, and a style that spurned any outward sign of academic training. In this approach, Dubuffet was not only challenging norms; he was searching for a way to celebrate the vitality of experience. He committed his career to this aim, though he continually transformed the artistic means he used to pursue it. He tested different mediums, including painting, drawing, collage, lithography, molding, casting, and performance. Meanwhile, he moved fluidly between figuration and abstraction, explored multiple compositional strategies, and periodically reinvented his palette. Throughout these changes, Dubuffet's work stayed grounded in its refusal of convention and its embrace of life's depth and energy, whether at its most exuberant, fraught, or contemplative.

The Guggenheim Museum established a close relationship with Dubuffet during his lifetime, holding three major exhibitions on the artist and collecting his work in depth. This exhibition, drawn entirely from the museum's rich holdings, will offer an opportunity to survey the ingenuity and committed vision that made Dubuffet one of the most important artists of the second half of the twentieth century. This exhibition is organized by David Horowitz, Assistant Curator, Solomon R. Guggenheim Museum.

Gego

October 9, 2020–March 21, 2021

Rotunda

In the fall of 2020, the Solomon R. Guggenheim Museum will present the first major New York museum retrospective devoted to the work of Gego (Gertrud Goldschmidt, b. 1912, Hamburg; d. 1994, Caracas). This chronological and thematic survey will chart the evolution of the artist's distinctive approach to abstraction through her organic forms, linear structures, and systematic spatial investigations. Approximately 200 works of historical significance from the late 1940s to the early 1990s, including sculptures, drawings, prints, artist's books, and textiles, will be included in the exhibition, which will occupy five ramps of the museum's rotunda. Trained as an architect and engineer in Germany, Gego fled Nazi persecution in 1939 and immigrated to Venezuela, where she embarked on her artistic career at the age of forty-one. This presentation will showcase her development across multiple disciplines and ground her practice within the emerging artistic contexts of Latin America and beyond during the latter half of the twentieth century. The exhibition and its accompanying catalogue will demonstrate Gego's significant formal and conceptual contributions to modern and contemporary art, highlighting her intersections with key transnational art movements including geometric abstraction and Kinetic art in the 1950s and '60s, and Minimalism and Post-Minimalism in the 1960s and '70s.

The Guggenheim Museum has a distinguished history of presenting groundbreaking solo exhibitions of modern and contemporary artists whose work aligns with the founding mission of championing nonobjective art, including Ellsworth Kelly, Hilma af Klint, Agnes Martin and James Turrell. Expanding upon this legacy, *Gego* aims to advance the understanding and appreciation of the artist's work within the larger context of twentieth-century modernism. The exhibition is organized by Pablo León de la Barra, Curator at Large, Latin America, Solomon R. Guggenheim Museum and Foundation; and Geanine Gutierrez-Guimarães, Associate Curator, Guggenheim Museum Bilbao, and Solomon R. Guggenheim Museum and Foundation; with the support of Kyung An, Assistant Curator, Asian Art, Solomon R. Guggenheim Museum.

Generous funding for *Gego* is provided by the Jane A. Lehman and Alan G. Lehman Foundation.

Additional funding is provided by the Henry Moore Foundation.

Sarah Sze

October 9, 2020–March 21, 2021

Rotunda Ramp 6 and Tower Gallery 7

In fall 2020, the Solomon R. Guggenheim Museum will present a special exhibition by Sarah Sze (b. 1969, Boston) that will immerse visitors in today's generative proliferation of images through painting, sculpture, print, sound, video and photography. Beginning on the sixth ramp of the rotunda, a site-specific installation of works created by the artist will trace the museum's architecture and culminate at the apex of the Frank Lloyd Wright building in Tower 7, with the New York premiere of *Timekeeper* (2016), from the museum's collection. Monumental, multisensory, and kaleidoscopic, *Timekeeper* combines everyday objects—a table from the artist's studio, scraps of paper, shards of mirrored glass, potted plants—with whirling video projections of things in motion—a bird in flight, churning waves, a running cheetah. Embedded in this living scaffolding of experience and memory are digital clocks

indicating time from around the world, underscoring the multiple simultaneities of human existence. This presentation brings together the diverse elements that embody the artist's meditation on the various ways in which the passage of time is experienced and attests to Sze's unprecedented approach to materials and space. With this exhibition, the museum builds upon its distinguished history of championing the visionary engagements of living artists with Frank Lloyd Wright's unique architecture. This presentation is organized by Nancy Spector, Artistic Director and Jennifer and David Stockman Chief Curator with Kyung An, Assistant Curator, Asian Art.

Sarah Sze is made possible by James Keith Brown and Eric Diefenbach; Agnes Gund; Jerry I. Speyer and Katherine Farley; and those who wish to remain anonymous.

Hugo Boss Prize

Spring 2021

Tower Gallery 5

Founded in 1996, the Hugo Boss Prize is a biennial award administered by the Solomon R. Guggenheim Museum that honors significant achievement in contemporary art. Selected by a jury of international curators and critics chaired by Nancy Spector, Artistic Director and Jennifer and David Stockman Chief Curator, Solomon R. Guggenheim Museum and Foundation, the finalists for the thirteenth iteration of the prize will be announced in late fall 2019. The prizewinner will be announced fall 2020, and a solo exhibition of the winning artist's work will be presented at the Guggenheim in the spring of 2021 and organized by Katherine Brinson, Daskalopoulos Curator, Contemporary Art. Previous recipients of the prize include Matthew Barney (1996), Douglas Gordon (1998), Marjetica Potrč (2000), Pierre Huyghe (2002), Rirkrit Tiravanija (2004), Tacita Dean (2006), Emily Jacir (2008), Hans-Peter Feldmann (2010), Danh Vo (2012), Paul Chan (2014), Anicka Yi (2016), and Simone Leigh (2018). The Hugo Boss Prize is made possible by HUGO BOSS.

Joan Mitchell

Spring 2021

Rotunda

Throughout her four-decade career, Joan Mitchell (b. 1925, Chicago; d. 1992, Paris) created paintings of staggering beauty and emotional intensity and was fearless in her persistent experimentation. In 1950s New York, she was first recognized as a star among the cohort of younger, downtown artists for her bold gestural canvases. She began to visit France regularly in 1955, and by 1959 she had permanently settled there. Her exposure to the art and attitudes of postwar Europe, along with her transatlantic interpersonal network of writers, poets, and musicians set her on a unique artistic trajectory. Through vigorous brushstrokes and imposing scale, Mitchell's paintings bring together expressive physicality and a deep sensitivity to the natural world, forming a singular body of work that simultaneously expanded the vocabulary of US Abstract Expressionism and French Art Informel. Presented in the rotunda of the Solomon R. Guggenheim Museum and co-organized by the Baltimore Museum of Art and the San Francisco Museum of Modern Art, this retrospective of paintings and drawings from collections across the US and Europe will offer the most comprehensive view of the artist and her oeuvre to date. With the assistance of the Joan Mitchell Foundation, this exhibition will also feature rarely seen works and archival materials. The Guggenheim presentation of this exhibition is

organized by Tracey Bashkoff, Senior Director of Collections and Senior Curator, and David Horowitz, Assistant Curator.

Gillian Wearing: Wearing Masks

Summer 2021

Tower Galleries

The photographs, videos, and public sculptures of Gillian Wearing (b. 1963, Birmingham, UK) probe the tensions between self and society in an increasingly media-saturated world. Candid and psychologically intense, Wearing's work extends the traditions of photographic portraiture initiated by August Sander, Weegee, and Diane Arbus, yet it also foreshadows the cultural transformations wrought by reality TV and social media. For her landmark piece, *Signs that say what you want them to say and not Signs that say what someone else wants you to say* (1992-93) Wearing photographed strangers with placards of their own making. In so doing, she changed the terms of documentary street photography and performance art by giving voice to the subjects of her art. *Confess all on video. Don't worry, you will be in disguise. Intrigued? Call Gillian* (1994) continued this theme of confession and self-exposure, exemplifying what would become a keystone of Wearing's practice: asking a diverse group of volunteers to represent their authentic selves from behind protective masks, a process that highlights distinctions between public and private; fictional and documentary realism; and spontaneous versus rehearsed behavior. *Gillian Wearing: Wearing Masks* is the first retrospective of Wearing's work in North America. Featuring over 150 works across all four of the museum's Tower Level galleries, it traces the artist's development from her earliest Polaroids and videos to her most recent photographic self-portraits that destabilize fixed notions of selfhood and explore the performative nature of identity. The exhibition is organized by Jennifer Blessing, Senior Curator, and Nat Trotman, Curator, Performance and Media, with Susan Thompson, Associate Curator.

***Process, Performance, and Politics in the 1970s* (working title)**

Fall 2021

Rotunda

Drawn from the Guggenheim's extensive holdings of Minimal, Post-Minimal, and Conceptual art, *Process, Performance, and Politics in the 1970s* is a full rotunda exhibition that newly examines the critical turn in artistic practice between 1968 and 1980. During these socially and politically turbulent years, artists around the world created work that sought to subvert historical paradigms of art production and display, undermine traditional notions of taste and skill, and challenge the institutional norms of museums, universities, and galleries. Bringing together over one hundred sculptures, photographs, videos, and installations, the exhibition will offer fresh insights into the aesthetic and social transformations of the era, using the Guggenheim's global collection to broaden the canon, highlight work by women artists as well as artists of color, and include artistic voices from outside a Euro-American context. Organized on the fiftieth anniversary of the 1971 *Guggenheim International Exhibition, Process, Performance, and Politics in the 1970s* will reflect upon the museum's programming during the 1970s. This will include a reassessment of the Guggenheim's vital history with performance art and its early collecting practices, which will provide context for key works from the museum's renowned Panza Collection. The exhibition is organized by Nat Trotman, Curator of Performance and Media, with X Zhu-Nowell, Assistant Curator.

ON VIEW

Countryside, The Future **Through August 14, 2020**

Rotunda

Countryside, The Future, is an exhibition addressing urgent environmental, political, and socioeconomic issues through the lens of architect and urbanist Rem Koolhaas and Samir Bantal Director of AMO, the think tank of the Office for Metropolitan Architecture (OMA). A unique exhibition for the Guggenheim Museum, *Countryside, The Future* explores radical changes in the rural, remote, and wild territories collectively identified here as “countryside,” or the 98% of the earth’s surface not occupied by cities, with a full rotunda installation premised on original research. The project presents investigations by AMO, Koolhaas, with students at the Harvard Graduate School of Design; the Central Academy of Fine Arts, Beijing; Wageningen University, Netherlands; and the University of Nairobi. The exhibition examines the modern conception of leisure, large scale planning by political forces, climate change, migration, human- and non-human ecosystems, market driven preservation, artificial and organic coexistence and other forms of radical experimentation that are altering the landscapes across the world. *Countryside, The Future* is organized by Troy Conrad Therrien, Curator of Architecture and Digital Initiatives, Solomon R. Guggenheim Museum, in collaboration with Rem Koolhaas and Samir Bantal, Rita Varjabedian, Anne Schneider, Aleksander Zinovev, Sebastian Bernardy, Yotam Ben Hur, Valentin Bansac, with Ashley Mendelsohn, Assistant Curator, Architecture and Digital Initiatives, at the Guggenheim. Key collaborators include Niklas Maak, Stephan Petermann, Irma Boom, Janna Bystrykh, Clemens Driessen, Lenora Ditzler, Kayoko Ota, Linda Nkatha, Etta Mideva Madete, Keigo Kobayashi, Federico Martelli, Ingo Niermann, James Westcott, Jiang Jun, Alexandra Kharitonova, Sebastien Marot, Fatma al Sahlawi and Vivian Song.

Countryside, The Future is made possible by:

Global Partner Lavazza

Lead Sponsor American Express

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The Leadership Committee, chaired by Dasha Zhukova, is gratefully acknowledged for its support, with special thanks to the Blavatnik Family Foundation, Rachel and Jean-Pierre Lehmann, Naomi Milgrom AO, The Durst Organization, Robert M. Rubin and Stéphane Samuel, and an anonymous donor.

Additional funding is provided by Creative Industries Fund NL, the Dutch Culture USA program of the Consulate General of the Netherlands in New York, and the Netherland-America Foundation.

In-kind support for this exhibition provided by NethWork, Infinite Acres, Deutz-Fahr, 80 Acres Farms,

Priva, Planet Labs Inc., Ministry of Foreign Affairs of the Kingdom of the Netherlands, Volkswagen, Gieskes-Strijbis Fonds, and AMO B.V.

The Fullness of Color: 1960s Painting
Through August 2020
Tower Gallery 5

The title of this exhibition was inspired by *Systemic Painting*, the 1966 Guggenheim exhibition where curator Lawrence Alloway pointed to the emergence of an artistic style that “combined economy of form and neatness of surface with fullness of color.” *The Fullness of Color* presents artists whose style embodied Alloway’s description. Helen Frankenthaler had pioneered in 1952 the “soak stain” technique, whereby she manipulated thinned acrylic washes into the unprimed cotton fabric of the canvas to produce rich, saturated surfaces. Those who followed over the next decade similarly handled paint as a dye that penetrates the fibers of the canvas rather than as a topical layer brushed over it. Morris Louis and Jules Olitski poured, soaked, or sprayed the paint onto canvases, thus eliminating the gestural stroke that had been central to Abstract Expressionism. Figure and ground became one and the same, united through color. Painters in the 1960s likewise approached relationships between form and color through geometric languages, as shown in works by Kenneth Noland and Paul Feeley. *The Fullness of Color* is a reflection of the Guggenheim’s historical engagement with this period, highlighting the varied and complex course abstraction followed in the twentieth century through examples of works now characterized as Color Field, geometric abstraction, hard-edge, or systemic painting. This presentation is organized by Megan Fontanella, Curator, Modern Art and Provenance, Solomon R. Guggenheim Museum.

Major support for *The Fullness of Color* is provided by Barbara Slifka and LLWW Foundation.

Marking Time: Process in Minimal Abstraction
Through July 2020
Tower Gallery 7

During the 1960s and 70s, many artists working with abstraction turned toward minimal approaches. As some of them pared compositional, chromatic, and virtuosic flourishes from their work, a singular emphasis on their physical engagement with materials emerged. The pieces they created—whether characterized by interlocking brush strokes, a pencil moved through wet paint, or a pin repeatedly pushed through paper—call on viewers to imaginatively reenact aspects of the creative process. It is a distinctly empathetic mode of engagement that relies on an awareness of one’s own body, as inhabited and inhabiting time, and, perhaps even more important, a consciousness of the embodied experiences of others. Featuring an international array of paintings and works on paper by Agnes Martin, Roman Opalka, Park Seo-bo, and others, this presentation selected from the Guggenheim Museum’s collection explores this tendency, while considering its rise in multiple milieus and how artists used it to individualized ends. This exhibition is organized by David Horowitz, Assistant Curator, Solomon R. Guggenheim Museum.

Major support for *Marking Time: Process in Minimal Abstraction* is provided by Elizabeth Richebourg Rea.

Guggenheim Collection: Brancusi

Diker Family Gallery, Tower 2

Through April 19, 2020

In gallery space devoted to the permanent collection, the Guggenheim is showcasing its rich holdings of the work of Constantin Brancusi (1876–1957). In the early decades of the twentieth century, Brancusi produced an innovative body of work that altered the trajectory of modern sculpture. During this period, Brancusi lived and worked in Paris, then a thriving artistic center where many modernist tenets were being developed and debated. He became an integral part of these conversations both through his relationships with other artists, such as Marcel Duchamp, Fernand Léger, Amedeo Modigliani, and Henri Rousseau, and through his own pioneering work. His aspiration to express the essence of his subjects through simplified forms and his engagement with non-Western European artistic traditions led to new stylistic approaches. In addition, his mode of presentation, which equally emphasized sculpture and base and in which works were shown in direct relation to one another, instead of as independent entities, introduced new ways of thinking about the nature of the art object. The Solomon R. Guggenheim Museum began collecting Brancusi's work in-depth in the mid-1950s under the leadership of its second director, James Johnson Sweeney. When Sweeney began his tenure at the museum, the collection was focused on nonobjective painting. Sweeney significantly expanded the scope of the institution's holdings, bringing in other styles and mediums, particularly sculpture. The Guggenheim's commitment to Brancusi during these years extended beyond its collecting priorities, and in 1955 the museum held the first major exhibition of the artist's work. Supported in part by the Romanian Cultural Institute in New York.

GUGGENHEIM MUSEUM BILBAO

For the full schedule of exhibitions through 2020 at Guggenheim Museum Bilbao, please visit

<https://www.guggenheim-bilbao.eus/en/exhibitions>

PEGGY GUGGENHEIM COLLECTION

For the full schedule of exhibitions through 2020 at the Peggy Guggenheim Collection, please visit

<http://www.guggenheim-venice.it/inglese/exhibitions/mostre.php?tipo=3>

VISITOR INFORMATION

Admission: Adults \$25, students/seniors (65+) \$18, members and children under 12 free. Open daily from 10 am to 5:30 pm; Tuesdays and Saturdays until 8 pm. Admission is pay-what-you-wish on Saturdays from 5 to 8 pm. Visitors may learn more about the exhibition using the museum's free Digital Guide, a part of the Bloomberg Connects app, which is supported by Bloomberg Philanthropies and available on site or from the Apple App Store or Google Play Store.

For publicity images, visit: guggenheim.org/pressimages

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