CLOG

SC[-F]

### © Copyright 2013 CLOG

All rights reserved under International and Pan-American Copyright Conventions. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording or by any information storage retrieval system, without permission in writing from the publisher.

CLOG is published four times a year.

For inquiries, contact clog@clog-online.com

Visit online at www.clog-online.com

Printed and bound in Canada.

ISSN: 2164-9782

ISBN: 978-0-9838204-6-8

# ○ Kyle May

Editor-in-Chief

Julia van den Hout

Editor

**Jacob Reidel** 

Editor

Jeffrey Franklin

Editor & Designer

**Archie Lee Coates IV** 

Editor & Designer

Stephanie Lee

Assistant Editor

Thomas Lozada

Assistant Editor

Rachel Meade Smith

Distribution Manager

## CONTENT

10	CITIZENS OF EARTH, CITIES OF HEAVEN
12	ON DEFINITIONS
14	SCIENCE ARCHITECTURE FICTION
16	THE WEAPONS OF THE METABARON
18	METABUNKER'S IN DA HAUS (SCHERZO)
20	SCIENCE FICTION RANT
22	THE ARCHITECTURE OF THE FUTURE AND THE FUTURE OF ARCHITECTURE
24	SIDEWALK BRIDGES
26	"IN THE FUTURE" CITY POSTCARDS
28	1929
30	MONUMENTAL PUBLIC ARCHITECTURE OF THE INTERWAR PERIOD AND THE DYSTOPIAN IMAGINATION
32	MODERN URBAN PLANNING IN POST-WAR SCIENCE FICTION
34	GOOGIE
36	AIRSTREAM
38	WE NO LONGER PREDICT TOMORROW. WE ONLY CRITIQUE THE NOW
40	BANHAM + PULP
42	DYSTOPIAN LONDON CA.1988: MAX HEADROOM
44	WHEN IS THE FUTURE?
46	SCIENCE FICTION IN ARCHITECTURE: MASK OR FISSURE?
48	HOME SWEET SPACE
50	THE MEGASTRUCTURE IN SPACE!
52	SCI-FI R&D
54	FUTURE PERFECT APARTMENT BLOCK
56	INTERVIEW WITH JOSEPH KOSINSKI
62	WORLDS WITHIN WORLDS
64	2001: A SPACE ODYSSEY ANALYSIS
66	IT'S BIGGER ON THE INSIDE
68	DUDE, WHERE'S MY FLOATING CAR?
70	A LANDING PAD ON EVERY ROOFTOP: YESTERDAY'S CITY OF TOMORROW
72	OPENING THE DOOR TO ROBOTS IN AMERICA
74	ALIEN AFTERPARTY
76	A SURFEIT OF SURFACE
78	PROGENERATIVE INTELLIGENCES
80	CENTERFOLD
82	WE CAN REMEMBER IT FOR YOU
84	TOTAL RECALL
86	A DUNE THAT DID AND DIDN'T HAPPEN
88	ELEVATOR TO THE WILDERNESS
an .	SAVE THE LARS HOMESTEAD

92	"A LONG TIME AGO IN A GALAXY FAR, FAR AWAY"
94	THAT'S NO MOON. BUT IS IT ARCHITECTURE?
95	RESISTANCE IS FUTILE
96	INTERVIEW WITH RYAN CHURCH
100	ZERO G
101	PYRAMID
102	LOOK, I AM YOUR FATHER
104	GRID
106	THE SHAPE OF THE FUTURE
108	A STAR IN A BOTTLE
110	DECONSTRUCTING THE DEATH STAR
112	"HEY IT'S A BALL" AN EYEWITNESS ACCOUNT OF THE BIRTH
	OF OMA'S DEATH STAR
114	FIVE THESES FOR THE CITY OF SPHERES
116	SCI-FI URBANISM
118	CONTEMPORARY REPRESENTATION OF THE DYSTOPIAN CITY IN
	SCI-FI FILMS
120	2001(%)
122	SHANGHAI SCI-FI SKYLINE
124	JACKED
126	UNDER TOMORROWS SKY. A PROJECT FOR THE FUTURE CITY.
128	HOLOGRAPHY FOR ARCHITECTURE - A MISSED OPPORTUNITY
130	ARCHITECTURE THROUGH A SCI-FI LENS
132	IS GOOGLE THE NEXT STARCHITECT?
134	DISTRACTED BY FERTILITY: SCI-FI AND SPECULATIVE
	ARCHITECTURE
136	ANALOG - DIGITAL - ORGANIC
138	FUTURE ANIMALS
140	WHAT DOES ARCHITECTURE KNOW?
142	ZONA ARCHEOLOGICA
144	CONSTRUCTING THE VIRTUAL + PIRATING SPACE
146	100 YEAR STARSHIP
148	SCIENCE FICTION AS A MEANS TO CREATE MOMENTUM FOR
	RADICAL CHANGE
150	CONTRIBUTORS
156	IMAGE CREDITS

IN THE END,
EVERYTHING
BECOMES
SCIENCE
FICTION
ARCHITECTURE

Everything is becoming science fiction. From the margins of an almost invisible literature has sprung the intact reality of the twentieth century.

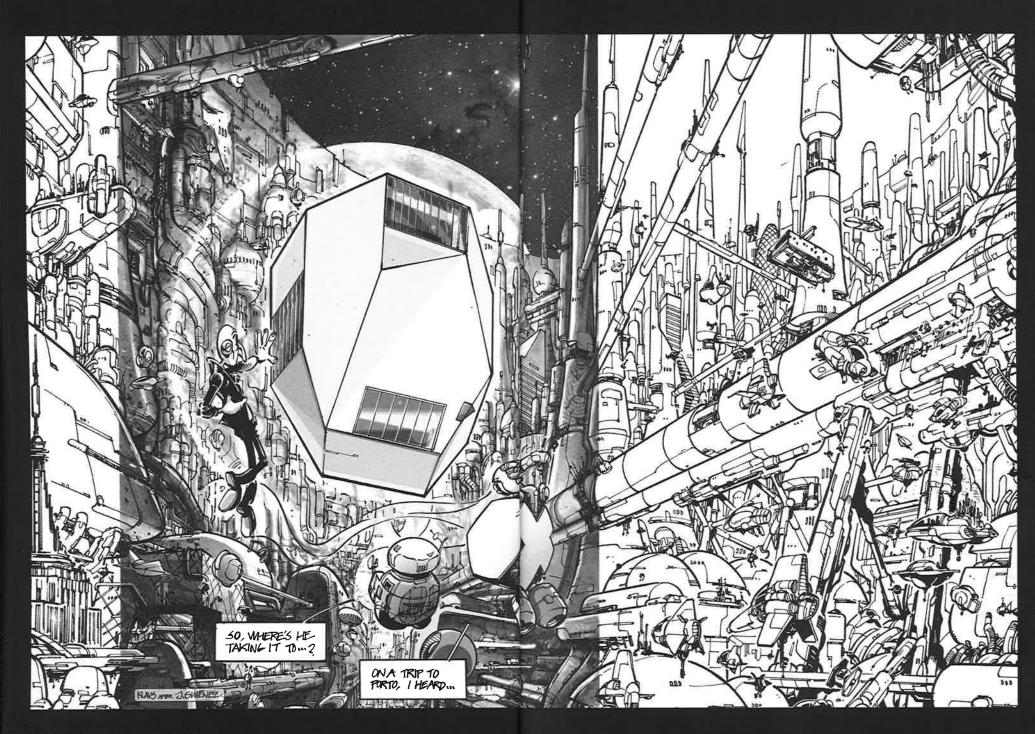
—J.G. Ballard: "Fictions of Every Kind" (Books and Bookmen, February 1971)

Rem Koolhaas read The Cast of the Metabarons. Or maybe not. Certainly, as much as Rafael Moneo likes to trace the architectural lineage of Casa da Musica back to Breuer's Begrisch Hall in the Bronx (and, let's be honest, they only look alike if seen from a certain angle), Koolhaas's diamond-shaped starship bears more than a passing resemblance to the megastructural Metabunker-as does Mr. K to the Metabaron himself-designed by Jodorowsky and Moebius in the early 1980s and refashioned a decade later by Juan Gimenez. The image of the music center's diamantine volume, landing on top of a stone tapestry that waves in Marilyn-ear fashion amidst Porto's urban grid, could hardly be more accurate in its rendition of the megastructural ship, hanging motionless in the middle of the Möbiusian City-Well. The main entrance, with its porthole-like design, reinforces the spaceship connection, also present in other projects by OMA, such as the aptly christened Transformer and its lunar module resonances. And the same case could be made for the transvestite Death Star designed by OMA for the UAE (or, in a sort of Escherian flattening, by Heerim Architects in Azerbaijan).

Did Koolhaas really read *The Metabarons?* In the end, it doesn't matter,

Writing in a twenty-first century (a period that has been a synonymous with "the

future" for more than a hundred years). those overlaps—be it direct inspiration or sheer serendipity-simply underline the way in which science fiction's imaginary architecture has become part of the general imagination of architecture. Today, the conflation of the advances in representational and building techniques fosters a parallel conflation of the modus operandi of architects and sci-fi designers, as vividly illustrated by offices and publications such as Factory Fifteen and Beyond. We live in a new paradigm where science fiction's architectural imagery-so crucial in the shaping of the imaginations of several generations of architects brotught up in visions of white, hi-tech landscapes and dark corridors covered with lockgates and LEDs—is as much a part of the architectural cultural heritage as the classical orders. the Pantheon, or the Unité d'Habitation. Nowadays, architecture has to fish in new (old) imagery pools, while Post-Modern citation expands to encompass the products of popular culture. In the end, everything becomes science fiction architecture.



#### CONTRIBUTORS

3.4 METHYLENEDIOXYMETHAMPHET-AMINE is an office for architecture recently founded by Jürgen van der Donckt.

AFTER ARCHITECTURE is a design collective founded by Katie MacDonald and Kyle Schumann. They believe that every move forward requires a look to the past, so that at present we might determine what comes after.

Some days JARED BANKS is an Architect who writes. Other days he is a Writer who dreams about architecture.

KATY BARKAN is an architect and writer based in Cambridge, MA. She teaches architecture at the Harvard Graduate School of Design.

SEAN BURKHOLDER is an assistant professor of landscape and urban design at the University of Buffalo School of Architecture and Planning.

CONNER CALLAHAN is a designer, architecture graduate, chef; SHANA OP-PERMAN is a digital advertising producer, astronomy enthusiast, baker; we are curious futurists.

RYAN CHURCH is a Concept Designer and Illustrator known for his designs of worlds, vehicles and characters for movies and video games. Ryan's design work can be seen in Episode II and III of the Star Wars series, Transformers 1-3, Star Trek and Star Trek Into Darkness, Super 8, John Carter, War of the Worlds, Zero Dark Thirty and Avatar.

MATTHEW CLARKE is an architect and policy-maker. He currently works for the

Bloomberg Administration in New York City managing the city's cultural capital projects.

ARCHIE LEE COATES IV is designer and editor of CLOG, as well as 50% of The Office of PlayLab, Inc.

Dr. NATHANIEL COLEMAN is Senior Lecturer in Architecture at Newcastle University, and as of August 2013, he will be a Reader in History & Theory of Architecture. He is the author of *Utopias and Architecture* (2005) and editor of *Imagining and Making the World: Reconsidering Architecture and Utopia* (2011). He is currently working on *Lefebvre for Architects* and editing a special issue of *Utopian Studies on Architecture and Utopia*.

ERIC DE BROCHE DES COMBES is a practicing architect and the founding partner of Luxigon—a visualization company in Paris. He hates nature, and has twelve electric and one acoustic guitar, and was born in the Cité Radieuse in Marseille by Le Corbusier, a flat he still owns: number 60 on the sixth floor.

GREG COOK's words and pictures have appeared in the Boston Phoenix, Boston's WBUR.org, The New England Journal of Aesthetic Research, Nickelodeon magazine, Publishers Weekly, Juxtapoz, The Believer, PoetryFoundation.org, and the bathrooms of Boston's Museum of Fine Arts. He lives in Malden, Massachusetts, home of the "GoldenTornadoes."

REINIER DE GRAAF is a Partner at OMA, the Office for Metropolitan Architecture, where he is responsible for projects in Europe, Russia and the Middle East. In addition, de Graaf supervises the work of OMA's think-tank, AMO

MARK DERMUL (1970) lives in Ghent (Belgium) with his lovely wife Sofie and their three kids Sarah, Amber and Kobe. Bank manager during the day. Mark spends his free time indulging in Star Wars and Auchentoshan Scotch whisky.

KYLE DUGDALE is an architect and a doctoral candidate at Yale School of Architecture. A graduate of Corpus Christi College, Oxford, and of Harvard's Graduate School of Design, he is interested in the philosophical and theological pretexts of contemporary architecture.

JEFFREY FRANKLIN is designer and editor of CLOG, as well as 50% of The Office of PlayLab, Inc.

PEDRO GADANHO is the Curator of Contemporary Architecture in the Department of Architecture and Design at the Museum of Modern Art, New York. Previously, he divided his activity between architecture, teaching, writing and curating.

SCOTT GEIGER is a New York Foundation for the Arts Fellow for Fiction. His fiction has won a Pushcart Prize and appeared on exhibit at Storefront for Art and Architecture.

RICARDO GONÇALVES graduated in architecture from the Universidade Mackenzie in 2007, and is currently a masters student at the Universidade de São Paulo (USP). He is co-founder of HIPERSTUDIO, a young architecture firm in São Paulo.

ALPNA GUPTA is a freelance architect

based out of Brooklyn, NY.

PATRICK J. GYGER is an historian and author. He's the former director of Maison d'Ailleurs. museum of science fiction in Switzerland, and current director of le lieu unique. national center for arts in Nantes (France).

DALIA HAMATI is a Lebanese / British architect living and working in New York

SARA HAYAT is a second year graduate student, studying architectural history at Brown University. Her research interests include the representation of the built environment in the arts and the relationship between memory and Postwar German Architecture.

BRIAN HORRIGAN is the curator of Minnesota Historical Society and co-author of Yesterday's Tomorrows: Past Visions of the American Future (1984, reprinted 1999).

JULIA VAN DEN HOUT is co-founder and editor of CLOG, and Press Director at Steven Holl Architects.

KELLEN QIAOLUN HUANG is currently working in New York City as an Architectural Designer after his master study in Cornell University. His conceptual works have been published on various medias, including *Mark Magazine* (Netherland), Future Architecture (Spain), Archdaily and Creative Diagram in Architecture (Chinese Edition).

#### CONTRIBUTORS

JUSTIN HUI is a designer from Boston. He holds a B.Arch from Cornell University.

INTERIORS, comprised of architectural designer, Mehruss Jon Ahi and filmmaker and film scholar, Armen Karaoghlanian, is an online journal in which films are analyzed and diagrammed in terms of space. Interiors focuses on how space is used and how the architecture of the film impacts its narratives and characters. (www.INTJournal.com)

ANDY C. JENKINS is a writer. Andy C. Jenkins is a fool.

MATTHEW JOHNSON is an assistant professor in the Gerald D. Hines College of Architecture, University of Houston, and a partner at LOJO Architecture. He received his M.Arch from Yale and his B.A. from Stanford with Honors.

DAMJAN JOVANOVIC is a postgraduate student of architecture at Stäedelschule Architecture Class in Frankfurt, Germany.

KLAUS is a frustrated cartoonist who lives in an old castle in Europe. Much to his surprise, his work is often published in architectural magazines, and has been exhibited in places such as Barcelona, Cambridge, Chicago, London, Naples or Portimao. His cartoons can be found online in Klaustoon's Blog.

JOSEPH KOSINSKI is a graduate of Columbia University's Graduate School of Architecture, Planning and Preservation, and Director of *Tron: Legacy* (2010) and *Oblivion* (2013).

SIMON KRISTAK is an architect and

industrial designer focused on transportation, urban design and architectural projects. Simon has worked as a multidisciplinary designer for several New York-based practices, a design instructor and guest critic, as well as a writer and editor for various publications.

JIMENEZ LAI is an Assistant Professor at The University of Illinois at Chicago and Leader of Bureau Spectacular. Previously, Jimenez Lai has lived and worked in a desert shelter at Taliesin and resided in a shipping container at Atelier Van Lieshout on the piers of Rotterdam.

STEPHANIE LEE is an editorial assistant of CLOG. She has a Bachelor's degree in Architecture from Princeton University and is a designer in New York.

SALLY L. LEVINE is an architect and educator whose interest in design influences and affinities has steered her to look at science fiction and its influence on and affinity with architectural form.

THOMAS LOZADA is an editorial assistant of CLOG. He is a graduate of the M.S. Arch program at Pratt Institute and a professor of architectural visualization at the New York Institute of Technology.

ALAN LUCEY is from Milwaukee, WI. Currently based in Brooklyn, NY, he is a studio assistant at Abrahams May Architects and on the editorial staff at Convolution Journal for Critical Experiment. A graduate in Literature from Bard College, he is about to begin his M. Arch at the University of Michigan. He also builds sheds and repairs voting machines.

LUIS MIGUEL (KOLDO) LUS ARANA (University of Navarra/IUAV/Harvard GSD/EINA) is an architect and researcher, currently teaching Theory and History of Architecture in the University of Zaragoza mainly interested in the intersections between comics, media, and architecture. In 2013 presented his PhD dissertation Futuropolis: Comics and the Transmediatic Construction of the City of the Future.

CASEY MACK is the director of Popular Architecture, based in Brooklyn. Currently he is writing a book on the unique evolution in Japan of Le Corbusier's idea of "artificial land," forthcomingy from Princeton Architectural Press in 2014 with the support of the Graham Foundation

JOHN MARCIANTE is a designer working in New York. He is interested in the intersections of politics and architecture.

KYLE MAY is co-founder and editor-inchief of CLOG and principal at Abrahams May Architects.

IAN MCALPIN tells stories with photographs—moving, still, and otherwise.

CRAIG WILLIAM MCCORMACK is a recent Master of Architecture graduate and a current PhD candidate with a keen interest in space architecture. He is also the director of a small practice (Felix Laboratories) while teaching.

KIMBERLY MCGUIRE is a graphic designer living and working in Manhattan. She is currently pursuing her MFA in Design at the School of Visual Arts.

MATTHEW MESSNER is a Masters of

Architecture and Masters of Art and Design Criticism candidate at the School of Architecture at the University of Illinois Chicago.

MOVINGCITIES is a Shanghai-based think-thank investigating the role that architecture and urbanism play in shaping the contemporary city. Established in Beijing in 2007 by Bert De Muynck [BE] and Monica Carrico [PT], MovingCities publishes, collaborates, talks and walks, and operate as embedded architects.

THOMAS MICAL is Associate Professor of Architecture at the University of South Australia. His Master of Architecture thesis at Harvard GSD examines cinematic urbanism in the film, *Blade Runner*, and his subsequent professional experience has been in Tokyo and Chicago.

LEO MULVEHILL is an architect living, working, teaching, and thinking in New York. He holds a Masters of Science in Advanced Architectural Design from Columbia University GSAPP, and a Masters of Architecture from the University of Kansas SADP.

DAN NEWMAN is a recent graduate of the Masters of Architecture program at Parsons, The New School for Design. He currently lives in Philadelphia, where he designs objects, buildings, and media.

MATT NOVAK writes about past visions of the future at Gizmodo's Paleofuture blog. He lives in Los Angeles.

#### CONTRIBUTORS

ROBERTO OTERO is an architect living in New York with his wife Mila, daughter Lola and two cats. He currently is a Director at REX

LUKE PEARSON is a designer and architectural artist based in London, where he run two design studios at the Bartlett School of Architecture, UCL. His drawing research is communicated via his site Alephograph and studies architectural arguments formed through delineation.

CYRUS PENARROYO holds a Bachelor of Science from the University of Illinois at Chicago and is currently in his second of two years at Princeton University working towards a Master of Architecture degree. Previously, Cyrus worked in Chicago for Bureau Spectacular, in Hong Kong for Jonathan Solomon, and in New York for LTL Architects.

EMMANUEL PETIT is Associate Professor at the Yale School of Architecture, author of Irony, or The Self-Critical Opacity of Postmodern Architecture (Yale University Press, 2013), and editor of both Schlepping Through Ambivalence: Essays on An American Architectural Condition (Yale University Press, 2011) and of Philip Johnson: The Constancy of Change (Yale University Press, 2009). Petit holds a Ph.D. from Princeton University and an MSc from the ETH in Zurich.

ENRIQUE RAMIREZ is a writer, critic, and a PhD candidate at Princeton University. He also maintains the quasi architectural website this is a456 (http://www.aggregature.com)

JACOB REIDEL is editor of CLOG and

practices architecture in New York City. He co-edited *Perspecta 40: Monster*.

JASON SAPAN, better known as DOCTOR LASER, is the founder of Holographic Studios in Manhattan, the world's oldest gallery of holography. He has been a pioneer in lasers as an art.

FRED SCHARMEN is the co-founder of the Working Group on Adaptive Systems, a multidisciplinary consultancy. He designs, writes, draws, and teaches in Baltimore, Maryland.

KYLE SCHUMANN is a designer and 5th year architecture student at Cornell University. He is also a science fiction and NASA aficionado.

NEAL SHASORE is a doctoral student based in the History of Art Department at the University of Oxford. His research focuses on public monumental architecture of the interwar period in Britain.

DOMINIK SIGG was born in Zurich, Switzerland, and studied architecture at ETH Zurich. He currently works as project architect in New York City.

RACHEL MEADE SMITH is the Distribution Manager at CLOG. This fall she is joining the Master's program in Design Studies at Parsons.

SOFTLAB is an award-winning design studio based in New York City, involved in the research, design and production of projects across a variety of media.

DANIEL I. VIEYRA is a Professor of Architecture at the College of Architecture and

Environmental Design at Kent State University and author of Fill 'Er Up; An Architectural History of the American Gasoline Station. His fascination with the American landscape, combined with an interest in compact space and digital design, drove him to the Airstream.

JASON VIGNERI-BEANE is Principal of Split Studio and Partner of Planetary ONE, two offices for near-future multi-disciplinary design. He is also the Coordinator of Pratt Institute's MSARCH post-professional degree program.

WILLIAM WATSON is a designer and writer practicing in New York. He is a visiting professor at the Pratt Institute and frequently visits the Thomas J. Watson Research Center near his home in Westchester.

NATHANIEL ROBERT WALKER is a historian and critic of architecture and urban design. He studies past and ongoing relationships between buildings, public spaces, and utopian visions, from ancient times to the present day.

LIAM YOUNG is an architect who operates in the spaces between design, fiction and futures. He is founder of the think tank Tomorrows Thoughts Today, a group whose work explores the possibilities of fantastic, speculative and imaginary urbanisms. The public think tank included contributions from Bruce Sterling, Rachel Armstrong, Warren Ellis, Simon Ings, Daniel Dociu, Centre for Science and Imagination, Geoff Manaugh and Nicola Twilley, Next Nature and live sketching from Paul Duffield and Edouard Caplin. Young also runs the "Unknown Fields Division," a nomadic studio that travels on annual expeditions to the

ends of the earth to investigate unreal and forgotten landscapes, alien terrains and industrial ecologies. Liam's projects develop fictional speculations as critical instruments to survey the consequences of emerging environmental and technological futures.

10	Top: Pleter Bruegnei the Elder, Tower of Babel, 1563, Kunstnistorisches
	Museum Vienna
18-19	Bottom: Fritz Lang, <i>Metropolis</i> , 1927, Stiftung Deutsche Kinemathek
24	Courtesy of Klaus  Cover of New York Tribune, January 16, 1910
26	Courtesy of Brian Horrigan
28	Courtesy of Sean Burkholder
30	
30	Broadcasting House, London Courtesy of Modernism London Style
32	
34	Chalmers Kearney, <i>Erone</i> , (London: Eaton Press, 1943)  Top:Encounter Restaurant, LAX, 1961, Courtesy of Matt Novak
34	
26	Bottom: Jetsons screenshots from The Paleofuture Blog
36	Collage courtesy of CLOG
38	Royal Hawaiian Motel in Wildwood Crest, New Jersey, Courtesy of Dan Newman
42	Courtesy of Kimberly McGuire
48-49	Courtesy of After Architecture
50	
50	Space Settlements, A Design Study (Washington, DC, Scientific and Technical Information Office, 1977), Courtesy of NASA
52	
54	ESCO Co. Ltd. © The Mechanical Social Systems Foundation
62	Courtesy of lan McAlpin  Perroduced under Fair Lice atills from The Twillight Zone
02	Reproduced under Fair Use, stills from The Twilight Zone,
64	The Little People, © NBC Universal  Courtesy of Interiors Journal
66	Courtesy of Kimberly McGuire
68	
00	Gerald Gurian, "Leonard Nimoy 1964 Buick Riviera," Star Trek Prop, Costume and Auction Authority, December 2008
70	Top: Arthur C. Radebaugh's Closer Than We Think, c. 1958, Todd B.
70	Kimmell Archives
	Bottom: Theodore P. Hall's Model 118 (ConvAirCar), 1947, San Diego Air
	Space Museum
72	Collage courtesy of CLOG
74	Top: MOS Architects (Michael Meredith and Hilary Sample), Afterparty,
′ ¬	2009, Courtesy of Florian Holzherr, Museum of Modern Art, New York
	Bottom: Ridley Scott, "Nostromo en route to LV-426," <i>Alien</i> , 1979,
	© 20th Century Fox
76	Courtesy of Luke Pearson
78	George Cserna, Eero Saarinen Collection, Manuscripts & Archives, Yale
, ,	University
80-81	Courtesy Eric de Broche des Combes / Luxigon, 2013
82	Top: Paul Verhoeven, <i>Total Recall</i> , 1990, © Sony Pictures
02	Bottom: Adolf Loos, Moller House, 1930, Courtesy of Dalia Hamati
84	Paul Verhoeven, <i>Total Recall</i> , 1990, © Sony Pictures
<del></del>	Tudi vernoeveri, rotar necan, 1990, 9 30 ny Fictures

18	© 2011 Humanoids, Inc. Los Angeles.
0	© www.savelars.com
2	Top: George Lucas, "The Imperial Center of Coruscant," Star Wars
	Episode I: The Phantom Menace, 1999, © Lucasfilm
	Bottom: George Lucas, "Theed City on Planet Naboo," Star Wars
	Episode I: The Phantom Menace, George Lucas, 1999, © Lucasfilm
)4	Courtesy of Jacob Reidel
5	Courtesy of Drex Files
00	Courtesy of Ryan Church
01	Courtesy of Ryan Church
08	Courtesy of Kimberly McGuire
12	Courtesy of OMA
14	Top: Adrienne Brown and Amy Kessler, "Soleri, Chanéac,"
	© Yale School of Architecture
	Bottom: Christina Agyros, Henry Ng, and Teo Quintana, "Banham,
	Baudrillard, Goff," © Yale School of Architecture
15	Top: Jacqueline Ho, Sarah Gill, and Teoman Ayas, "Kiesler, Jonas, Otto,"
	© Yale School of Architecture
	Middle: Robert Cannavino and Jeff Pollack, "Maymont, Haus-Rucker-Co,"
	© Yale School of Architecture
	Bottom: Saga Blane and Robert Bundy, "Archigram, Fuller,"
	© Yale School of Architecture
16	Collage courtesy of CLOG
18	Top: Ridley Scott, Blade Runner, 1982, © Warner Bros
	Bottom: Paul Verhoeven, Total Recall, 1990, © Sony Pictures
20	Fritz Lang, Metropolis, 1927, Library of Congress
22	Courtesy of MovingCities [period 2009-2013]
24	Courtesy of Jason Vigneri-Beane, Split Studio
26	Courtesy of <i>Under Tomorrows Sky</i> , Daniel Dociu
28	Courtesy of Jason Sapan / Dr. Laser
30	George Hull "Al Hamra Tower," concept images for <i>The Amazing</i>
	Spider-Man, http://ghull.com/#/131645
32	Courtesy of Kimberly McGuire
34	Courtesy of SOFTlab
42	Andrei Tarkovsky, Stalker, 1979. Courtesy of Open Culture,
	www.openculture.com
46-147	Courtesy of Craig McCormack

Note: Every reasonable attempt has been made to identify owners of copyright. Please contact CLOG if we have made an error or omission and it will be corrected in subsequent editions.

CLOG

SC[-F[

