

AQA
AQUATIC-ARCHITECTURE STUDIO
**“an underwater interspecies alliance for an inshored
coexistence”**

ADVANCED ARCHITECTURAL DESIGN STUDIO
ANDRÉS JAQUE (OFFICE FOR POLITICAL INNOVATION)

_instructor

XIAOXI CHEN *_teacher assistant*

Travelling studio, developing field work in ICELAND November 5-11, 2018





What?

An estimated sea level rise of 70 inches by 2100¹ caused by climate change is arguably the most significant fact that will fuel architectural evolution in the coming decades. No longer avoidable, the expansion of the maritime into the built environment, and the emergence of a new *trans-geographical* aquatic mixture of oceanic and humanized demarcations, provides a unique laboratory. In this laboratory, contemporary notions of the tensions between nature and architecture, as interdependent and mutually including realms, can be interrogated and reinvented. The problematic transformation of the coastal line has become a scenario of inequalities, catastrophes, toxicity, and environmental crises. But the coast is also a location where new architectural possibilities, technologies, forms of politics, communicational strategies, and beauty are being urged and tested.

This studio will invent [and test] architectures to operate in the growing and problematic boundary between the oceanic and the earthly—aquatic, architectures where air-based beings will negotiate with salt-water-based beings for coexistence.

If Coney Island (NY) was the prototype of the coastal line at a time of unlimited resources exploding metropolitan domains, and if Elizabeth Harbor (NJ) was the prototype of the-ocean-seen-as-a-source-of-globalized means, then this studio asks: What is the architectural vernacular of the post-Anthropocene age?

Each student or group of students will develop an inventive aquatic architecture, bringing together the human with the oceanic, allocated in a specific point of the geographical planetary band affected by particular conflicts resulting from climate-change-caused sea-level rise.

¹ Source: COP21. However, this is a disputed figure. Delta Commese establishes a 1.5 m (59") rise by 2100. COP21 predicts a potential high rise of 4.19 m (165") by 2215.



How?

1. The studio will start with an immersion in the challenges that sea-level rise comprises and the way it has been analyzed by scientists, ecologists, artists, and politicians.
2. Each student or group of students will start working with a specific “challenge” caused by sea-level rise. The studio will provide the means and connections so that each work will rapidly capture the necessary expert insight to navigate the complexities of each challenge.
3. Each student or group of students will search for the location/s where responses to their challenges can be best tested.
4. Each student or group of students will develop simultaneously:
 - A. An ecosystem-scale invention. This is to say: a design strategy to respond to (not to resolve) the specific problematics her/his/their challenge is part of.
 - B. An aesthetic approach, a new vernacular that caters to the making of an evolved sensitivity responding to the project’s needs. This is to say: a visual and sensorial ecosystem of references and options where the problematic can be reconstructed as a cultural milieu.
 - C. A number of material inventions that will become components of the project. This is to say: a number of devices that can be tested through the making of 3D prototypes fabricated in GSAPP’s shop and performed in the studio.
 - D. 3D representations of the architecture resulting from applying 1, 2, and 3 into a specific location. This is to say: an architectural device set in a specific existing location where its effects can be envisioned.
5. In conjunction with the development of these projects are a number of discussions featuring experts from different fields working on the evolution of the coastal line in facing sea-level rise. These sessions will be organized by the instructor and the TA, and the work developed by studio participants will become the material discussed by guest experts.

The methodology of the studio is intended to make research, design, and invention come together to address urgent and non-explored challenges as a means to prompt distinct architectural propositions.



Field Trip

November 5-11, 2018

Iceland, an island nation radically dependent on the evolution of sea-level rise, contains all the geographical features mobilized by the discussion of climate change: the melting of ice caps, the rise of coastal lines, the loss of drinkable water resources, the rising of earth level due to loss of ice load, the exacerbation of volcanic activity, a popular culture heavily engaged in providing cultural tools to face environmental challenges, a political ecosystem structured through earthly and oceanic engagements.

The studio will engage in a six-day field trip experience, visiting the most important locations where environmental and geographical innovation and reinvention is happening—geothermal infrastructures, sensitive coastal locations, pop culture venues, melting ice caps, and volcanic landscapes—together with Iceland-based experts and activists.

Calendar

Week 1. 9/5–9. September 5. Lottery. Group is constituted. September 6. First Studio Meeting. 1st presentation by Andrés Jaque: Sea Level and its architectural challenges. Distribution of challenges.

Week 2 . 9/10–16. With the advice and support from the Instructor and TA, the studio will develop research to construct the cases focus on exploring 'Challenges and architectural modes to face them'.

Week 3. 9/17–23. The result of the 'Challenges and modes to face them' research will be presented on week 3. This 3rd week a new research on 'Aesthetics to engage with challenges culturally and to seanse them' will be started' with a brainstorming of a number of cases of artists, filmmakers, designers and photographers (from Armin Linke to Sarah Sze, from Björk to Alexander Kluge or Joan Jonas) developing ways to engage culturally and politically with the earthy and the oceanic.

Week 4. 9/24–30. The result of 'Aesthetics to engage with challenges culturally and to seanse them' will be presented this 4th week. In conversation with guest experts, this 4th week prototypes of architectural components will start to be proposed and its development discussed and planned at GSAPP fabrication workshop.

Week 5. 10/1–7. Planning and development of a specific architectural proposal for a targeted site based on the A. Ecosystem–scale invention. B. Aesthetic approach. C. The material inventions as components of the project.

Week 6. 10/8–14. Discussion of the interspecies theory and architectural design practices with guest experts. From Donna Haraway to Rosi Braidotti. From Isabelle Stengers to Bruno Latour and Maria Puig de la Bellacasa. And from Forensic Oceanography to Cooking Sections, and from Revital Cohen & Tuur Van Balen to Melanie Bolanio. A design shift from the culture of resources to the culture of assablages, and from matters of concerns to matters of caring. Development and studio testing.

Week 7. 10/15–21. Development and studio testing. Studio discussions, experts input and mutual support sessions.

Week 8. 10/22–28. October 26. Midterm review. A selection of experts and activists will contribute readings of their work, and will advise students in our to take their propositions further.

Week 9. 10/29–11/4. Development of methodologies and tools to be applied during the field trip to Iceland.

Week 10. 11/5–11. Field Trip to Iceland.

Week 11. 11/12–18. Debate week, devoted to plan the final development and testing of components, strategies and applications.

Week 12. 11/19–26. Final consulting with external advisors.

Week 13. 11/27–12/2. Final developments and editions

Week 14. 12/3–9. Final developments and editions

Week 15. 12/10. Final Review



Bibliography

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Braidotti, Rosi. *The Posthuman*

Demos, T.J.. "Against the Anthropocene" (Ch. 4 in: *Against the Anthropocene, visual culture and environment today*)

Federici, Silvia. "Feminism and the Politics of the Common in an Era of Primitive Accumulation"

Graham, James with Caitlin Blanchfield, Alissa Anderson, Jordan Carver, and Jacob Moore (eds.) "Climates: Architecture and the Planetary Imaginary"

Haraway, Donna "Awash in Urine: DES and Premarin® in Multispecies Respond-ability"

Charles Heller, Lorenzo Pezzani, Maurice Stierl. "The Politics and Antinomies of Freedom of Movement – a view from the Mediterranean Frontier"

Latour, Bruno. "Politics of nature: East and West perspectives"

Latour, Bruno. "From Multiculturalism to Multinaturalism: What Rules of Method for the New Socio-Scientific Experiments"

Lee, Spike. *When The Levees Broke. A Requiem in Four Acts* (2006)

Mancuso, Stefano. Chapter 5 (Where he writes: "Each Plant Is a Living Internet Network") from *Intelligence of Plants*

Maribel Casas-Cortes, Sebastian Cobarrubias, John Pickles. "Riding Routes and Itinerant Borders: Autonomy of Migration and Border Externalization"

Nixon, Rob. *Slow Violence and the Environmentalism of the Poor*

Paglen, Trevor "Some sketches on vertical geographies"

Pasquinell, Matteo. *The Automaton of the Anthropocene*.

Stengers, Isabelle. In *Catastrophic Times: Resisting Coming Barbarism*

Steyerl, Hito "A Sea of Data: Apophenia and Pattern (Mis-) Recognition" (Chapter 5 from: *Duty Free Art. Art in the Age of the Planetary Civil War*)

Toni Morrison, (chapter 1 "Romancing Slavery" or 3 "Color fetish") from "The Origin of Others", 2017

Viveiros de Castro, Eduardo. "The Crystal Forest: Notes on the Ontology of Amazonian Spirits"

Andrés Jaque

Andrés Jaque (Phd Architect (ETSAM), Alfred Toepfer Stiftung's Tessenow Stipendiat (Hamburg) and Graham Foundation grantee) is the founder of the Office for Political Innovation, an international architectural firm working at the intersection of design, research and critical practices. He is the author of awarded projects including 'Plasencia Clergy Hall of Residence', 'House in Never Never Land', 'TUPPER HOME', 'ESCARAVOX', 'Rolling House for the Rolling Society', 'Ròmola', 'CA2M Art Museum' and 'COSMO, MoMA PS1'.

In 2016, he received the Frederick Kiesler Prize from the City of Vienna; he has been awarded a SILVER LION for Best Research Project at the 14th Venice Biennale, the Dionisio Hernández Gil Award, and the London Design Museum's Designs of the Year.

His publications include *Transmaterial Politics* (2017), *Calculable* (2016) *PHANTOM. Mies as Rendered Society, Different Kinds of Water Pouring into a Swimming Pool*, *Dulces Arenas Cotidianas* (2013), *Everyday Politics* (2011), and *Melnikov: 1000 Autos Garage in Paris 1929*.

His research work has been published in *Perspecta*, *Log*, *Thresholds*, and *Volume*, among many others.

The design work of his office has been published in the most important architectural and general media, including *A+U*, *Bauwelt*, *Domus*, *El Croquis*, *The Architectural Review*, *The New York Times*, *Wall Street Journal*, *The Guardian*, and *El País*; and has been exhibited at the Museum of Modern Art MoMA, London Design Museum, MAK in Vienna, Tel Aviv Museum of Art, RED CAT Cal Arts Contemporary Art Center in Los Angeles, Z33 in Hasselt, Schweizerisches Architektur Museum in Basel, the Cité de l'Architecture et du Patrimoine de Paris and Princeton University SoA among many others.

His office is currently developing projects for Real Madrid, Thyssen Bornemisza Art Contemporary, Reggio Emilia Schools, CA2M Contemporary Art Museum, Victoria and Albert Museum.

Andrés Jaque is Associate Professor at Columbia University Graduate School of Architecture, Planning and Preservation; where he directs the Advanced Architectural Design Program. He has previously taught at Princeton University, UA, ETSAM, Bezalel Academy.