

BAS MASTER COURSE THE FUTURE SOFT HOUSE
Charlotte Erckrath, Phil Watson, Alberto Altes, David Rios



Chemistry Outreach Laboratory, Newcastle University, courtesy Rachel Armstrong, 2016.

THE FUTURE SOFT HOUSE

The built environment is often regarded as a material commodity, which once completed has a limited lifespan before being replaced. This habit contributes to the urgency that the climate and health crisis faces us with. Common approaches of sustainability and environmental concepts consider the afterlife of buildings and building materials through recycling and transformation of already existing constructions. This approach looks at resolving the problems from the backend. Instead, this course explores what potentials future approaches could provide, if one puts into question an understanding of architecture as fixed and stable from the start? Could we activate the built environment to become a living organism in dialogue with us and nature, thus becoming more resourceful and energy efficient? Could we, in response to currently emerging technologies and practices, imagine new applications in the built environment that are engaging with ecological cycles in a resourceful and constructive manner?

The course proposes to approach architectural design from this perspective. We work with an idea of softness that relates to the adaptability of architecture as an organism as well as to the dynamic evolution of such organism over time. Softness is seen as embracing - instead of avoiding - the incompleteness of life. Instead of time experienced as removed from the environment, time engages inseparably with place and drives a constant process of evolution. The term 'house' is understood in the most open

and expandible way. It could be seen as the architecture of a certain domestic intimacy as well as activity, but also more generally as the architecture of an inhabitable place in relation to its environment. The rawness of the time and place relation allows us to experience the house within a constant journey evolving and changing itself over time and in conversation with the everyday. As such the soft house can be seen as an evolving slowness – it is taking place in dialogue with the everyday of life and in immediate connection to the inhabitant and the surrounding environment.

The Future Soft House Master Course explores the idea of what a future responsive architecture might be and proposes the school as an experimental laboratory for prototyping future architectures. The school performs both as a laboratory for the course and a site of exploration for future soft architectures.

The Future Soft House Master Course is a collaboration with the EEL, an experimental platform for developing future architectures, founded by Phil Watson. The EEL operates as an open forum which sets base at BAS for the period of the course. Parallel to the master course at BAS, master students from Salford University's engineering, architecture, media studies and micro science faculties are exploring a related topic. During the course of the term, knowledge exchange will take place.



Speculative Artistic Methods

The approach to evolving the future soft house departs from active speculation on potential technologies through artistic methods. An initial workshop introduces the students to existing technologies as well as to those not yet in any technical manuals and invites them to speculate on composing new possibilities. Mixing speculative research with open imaginary inquiry is suggested as a potential strategy and the workshop explores the unwritten fantastic opportunities of imaginary methods to construct architectural and landscape ideas by focusing on the science of imaginary solutions. References are made to scale-shift microbiological sciences. Within the course framework it is possible to identify discrete principal components of biological and anatomical systems and reverse engineer components identifying genes, signaling methods, enzymes, symbiotic bacteria etc. combining these to create a harmonious novel collection of living biological systems.

Artistic practices, such as speculative imaginary realities allow for an engagement with existing and potential technologies in new ways. Through these new perspectives, we can explore scientific and technological knowledge more varied and unexpected. "Parallel Botany" a field guide to imaginary plants by Leo Leonna or "The Islanders" by Charles Avery are important references for engaging into a rigorous practice or "science" of imaginary solutions. Charles Avery's work "The Islanders" describes a detailed fictional world functioning in parallel to the actual world inventing imaginary spaces and places, people and animals in detailed drawing

constructions. Similar to this, Max Ernst explores in his surrealist work the potential of a parallel imaginative reality within the known, notably in his bird and landscape drawings (Max Ernst, *La Nature a l'aurore* (1937) and Max Ernst, *La Joie de vivre* (1936)).

Besides the potential of imagining and inventing, these references also show pathways into how we can explore further scientific knowledge. Botanical systems for example operate in natural ways and have an incredible diversity and technology which enables them to survive and evolve - they adapt to extreme environments creating relations with these as they evolve. Some of these are extraordinary. The meeting of different living systems draws on the possibilities of constructing new worlds between organs and plants to create hybrid forms with imaginary technologies - living architectures. Future responsive environments need responsive technologies.

After the initial workshop the student projects evolve in a second phase through physical exploration, various scale prototypes and experiments. Ideas will be tested and developed through experimental prototyping. Drawing becomes an essential tool to elaborate and contextualize the concepts and ideas. Seen as a long-term research project, we aim to make the explorations and acquired knowledge further available through careful documentation and written reflections that will be collected into a common document.



Image from the cross course Design in Extreme Environments held at BAS Bergen Architecture School 02/2020: The Pink Lagoon



Critical Reading

As part of the course the students undertake critical readings drawing from radical feminist and queer theories to decenter speculation and fabulation away from the human and anthropocentric technologies to open up the idea

of the Future Soft House to various potentially productive interpretations (Donna Haraway, Karen Barad, Ursula K. Le Guin...).

Teacher: Alberto Altés

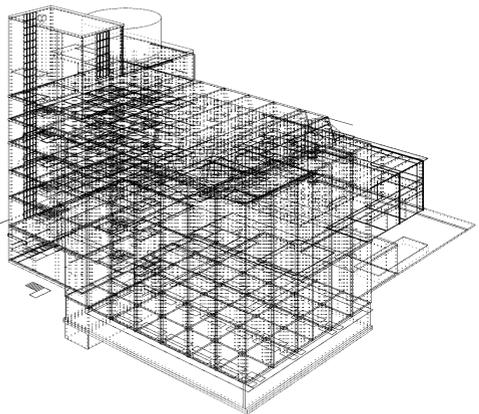
The Site: BAS Building

The Bergen School of Architecture (BAS) is situated in an old silo building in Bergen with a deep-water quay towards the fjord. Since the school has moved in, the building continuously adapts to the programmatic demands of the educational institution and transforms through

educational building experiments. In that way the building can be understood as a continuous and open experiment for the questions future architects will face.

The Future Soft House course explores new programs in response to this site and operates as an experimental design laboratory working with newly emerging and speculative technologies inside the BAS building, connecting and at times integrating with the school's every day. The school acts as a structure for creating internal interface environments within it. A specific focus will be placed on the empty silo spaces of the school that hold an unused potential. In connection with the spaces currently inhabited as learning environments these may become interconnected through the concept of the living organism.

The rawness of the BAS building - it's open and incomplete state of transformation with a raw and truthful atmosphere, reminds us of incompleteness and the journey of constructing things. Could we imagine the soft house like this - a constantly evolving landscape?



Course Structure

Part 1

Introduction to the idea and purpose of the studio as evolving future architectures. First week Intense Studio Workshop - developing ideas with us all in studio.

Part 2

Modelling relations between art and science as prototypes for installations. Exploring components of the soft house - working with models, drawings and renderings.

Part 3

Ongoing modelling, drawing and development of detail drawings.

Part 4

Fabrication of prototypes as scaled models.

Part 5

Scaling up the models as larger pieces.

Part 6

Intervention between the silo and the prototypes.

Part 7

Development of intervention: exploring the relationship between the site and the prototype through evolving soft structures

Part 8

Scaling up soft structures

Part 9

Developing structures for the soft house: compositions of the interior to be fabricated with the earlier prototypes

Final presentation of models, drawings and prototypes

Study Trip

The study trip is planned as a visit to the PRATT INSTITUTE SCHOOL OF ARCHITECTURE in New York during Spring for a 5-day workshop. This is depending on the option to collaborate with the school during our visit. (To be confirmed) We keep you informed about potential alternatives such as a visit to one of the EEL Partners. i.e., Spacelab, London; Department of Visual Arts (Bryan Cantley), California State University, Fullerton; ...

Learning Outcome

Skills: drawing and modelling / fabrication
Knowledge: exploration of new technologies and materials, experiments with new construction types for soft structures, cellular behaviours and possibilities for evolving new materials
Competencies: developing research into future climatic responses of buildings, enabling insight into constructing alternative construction methods, documenting the process of researching

Teaching Team

Charlotte Erckrath

Charlotte Erckrath's field of interest is the investigation of design methodologies through critical drawing practice and material exploration. In her personal research she is looking at the emergence of poetics in conceptual ambiguities.

Charlotte graduated at The Bartlett School of Architecture, University College London and completed a Master in Advanced Architectural Studies. She has taught architectural design at ALICE/ EPFL Lausanne and at the School of Architecture - University of Brighton. Recently she has led the drawing course at the Department IEX at the Technical University of Braunschweig. Currently Charlotte is working as Associate Professor at the Bergen School of Architecture and collaborates with Dr Sarah Stevens on the Architectural and Urban Design MA at The University of Brighton.

Phil Watson

Phil Watson has taught architectural design studio at both Master and Bachelor level at numerous places for over 20 years, amongst them The Bartlett School of Architecture, UCL London and the universities of Nottingham, Birmingham and Greenwich. Phil Watson is founder of the Free School of Architecture based in Wales and more recently Phil is Director at the EEL (extraordinary, experimental, laboratory), based at Spacelab Shoreditch, London.

THE EEL is an experimental platform for developing future architectures. Its first project being THE SOFT HOUSE which explores the idea of what a future responsive architecture might be. During 2021/22 a series of events are planned. The first exploration is with Derek Hales and his master students from Salford University with a 3-day workshop in Stratford at Spacelab, London followed by an exploration of this EEL project at BAS in Norway - further workshops to take place in 2022 followed by one at the Pratt in Brooklyn and a pataphysical landscape project in the Himalayas.

Alberto Altés

Dr. Alberto Altés studied architecture and urban planning in Valladolid, Barcelona and Delft, and critical theory/museum studies at the Independent Studies Program in Barcelona (MACBA). Following a Post-Doctoral Research Fellowship at the Department of Architecture at TU Delft (2017-2020), he is currently Associate Professor of Architecture at Bergen School of Architecture in Norway, where he continues to explore 'love, care and delay' as modes of engagement in architecture/spatial practices.

He has coedited a number of publications and forthcoming is 'Intraventions in Flux: Towards a Modal Spatial Practice that Moves and Cares' as part of 'Architecture and Collective Life', (2021, Routledge, London). He is also co-founder and partner of LandLab Arkitektur AB, a transversal practice built around forms of care and situatedness.

David Rios

David A. Rios (b. 1983) holds a Master of Arts (2009) and a Bachelor of Photography (2007) from the Bergen Academy of the Arts, where he now resides. He has previously exhibited at Spriten Kunsthall (2018), Skien, Lydgalleriet (2015), Bergen, and Agder Kunstsenter (2016), Kristiansand and has participated in a number of group exhibitions in Norway and abroad. Rios is currently a Senior Lecturer at the Academy of Fine Arts in Bergen.

Guests

Rachel Armstrong

Rachel Armstrong is Professor of Experimental Architecture at the School of Architecture, Planning and Landscape, Newcastle University.

Rachel investigates a new approach to building materials called 'living architecture.' Collaboratively working across disciplines, she builds and develops prototypes that couple the computational properties of the natural world with matter at far from equilibrium. She is coordinator for the Living Architecture project (2016 – 2019).

Rachel is the author of *Vibrant Architecture: Matter as Co-Designer of Living Structures*, *Star Ark: A Living Self-Sustaining Spaceship*, *Soft Living Architecture: An Alternative View of Bio- design*, *Liquid Life: On Non-linear Materiality* amongst others.

Bryan Cantley

In addition to teaching at CSUF in California's Orange County, Bryan Cantley is the founder of Form:uLA, an experimental design practice that explores the boundaries of architecture and representation and the role of drawing within the discourse of visionary space. Form:uLA's work is in the permanent collection of the San Francisco Museum of Modern Art and has been exhibited internationally, including a solo exhibition at The Bartlett in 2008. A solo show, *Dirty Geometries + Mechanical Imperfections*, opened at SCI-Arc in the fall of 2014 and is on view in Storrs Gallery through April 11, 2015.

Derek Hales

Dr Derek Hales is an architect and philosopher of digital and abstract culture. Before joining the University of Salford in 2017, Derek was an architect in practice and was Director of the Yorkshire Forward Centre of Excellence for Digital Design and Subject Leader for Digital Design at the University of Huddersfield School of Art Design and Architecture. He was Director of the Digital Research Unit funded by the Arts Council of England until 2009.

Derek was Research Fellow in Transdisciplinary Practice with the New Centre for Research & Practice (2016-2018) and is interim Chair for the Royal Institute of British Architects' national Research & Innovation Group. He is on the editorial board of the international peer-reviewed journals *Digital Creativity and Architecture & Culture*.

Gavin Keeney

Gavin Keeney is an independent artist-scholar. Recent books include: *Dossier Chris Marker: The Suffering Image* (2012); *Not-I/Thou: The Other Subject of Art and Architecture* (2014); *Knowledge, Spirit, Law: Book 1, Radical Scholarship* (2015); and *Knowledge, Spirit, Law: Book 2, The Anti-capitalist Sublime* (2017). His 2011-2014 research PhD in Architecture, at Deakin University, School of Architecture & Built Environment (Faculty of Science, Engineering & Built Environment), Geelong, Victoria, Australia, concerned theories of visual and subjective agency in Art and Architecture.

Thomas Mical

Thomas Mical is Professor of Architectural Theory at Jindal School of Art and Architecture (JSAA). Previously a tenured faculty in the US, Canada, Australia, and New Zealand, and he has taught and lectured internationally. His research crosses architectural theory, media-philosophy, design research methods. He edits the book series *Architectural Intelligences* (Brill). His research embraces multiplicity and process-philosophy. His life's research has involved modern and medieval surrealism. His current research obsession is extending the exuberant theoretical machinations of Felix Guattari into the built.

Neil Spiller

Neil Spiller is the former Hawksmoor Chair of Architecture and Landscape and Deputy Pro Vice-Chancellor of the University of Greenwich, London. He is on the editorial board of *AD* (Architectural Design). His architectural design work has been published and exhibited on many occasions worldwide. Since 1998, he has produced the epic *COMMUNICATING VESSELS* project. Neil's numerous books include *Cyberreader: Critical Writings of the Digital Era* (2002); *Digital Dreams: The Architecture of the New Alchemic Technologies* (1998); and *Visionary Architecture: Blueprints of the Modern Imagination* (2006).

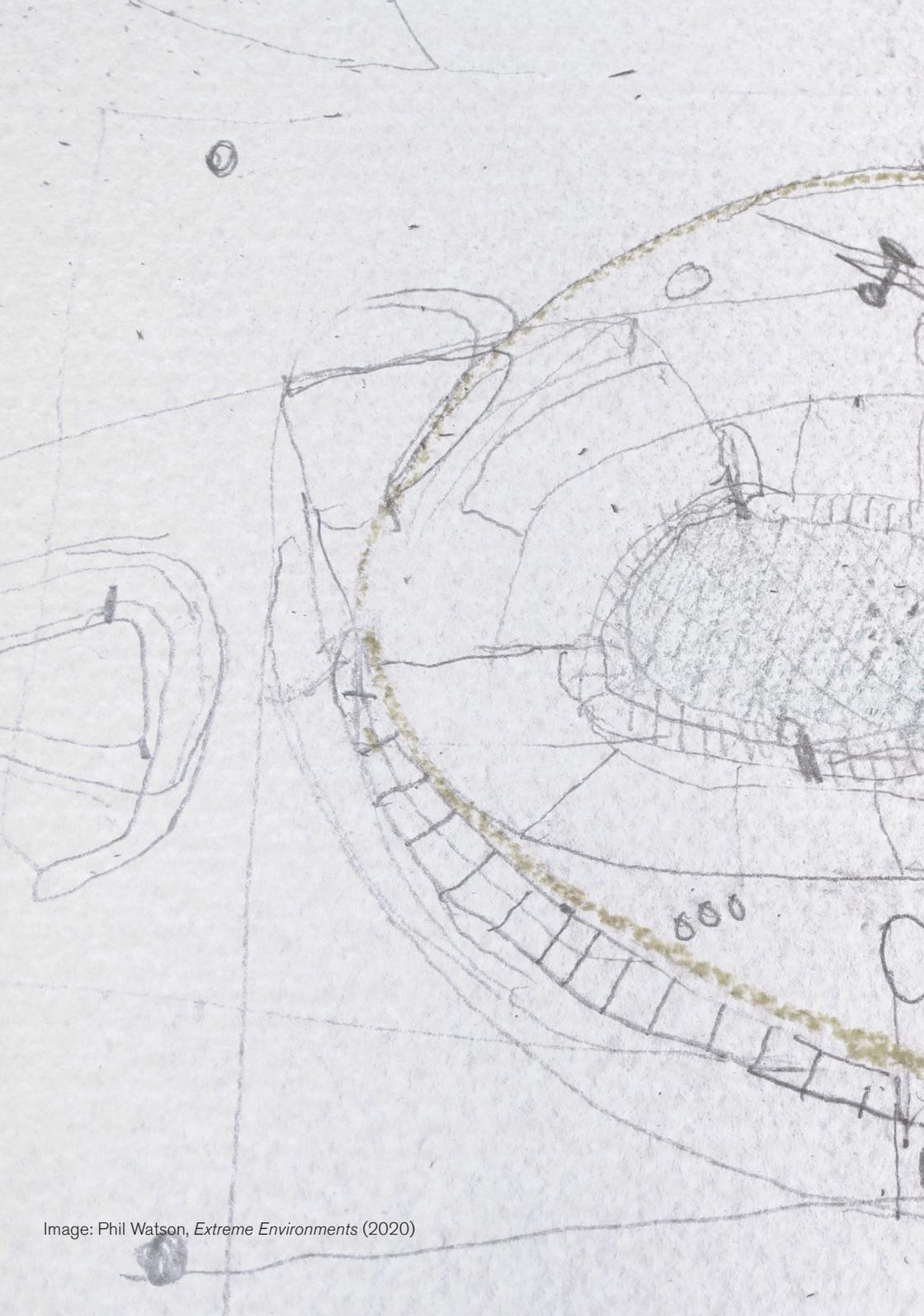


Image: Phil Watson, *Extreme Environments* (2020)