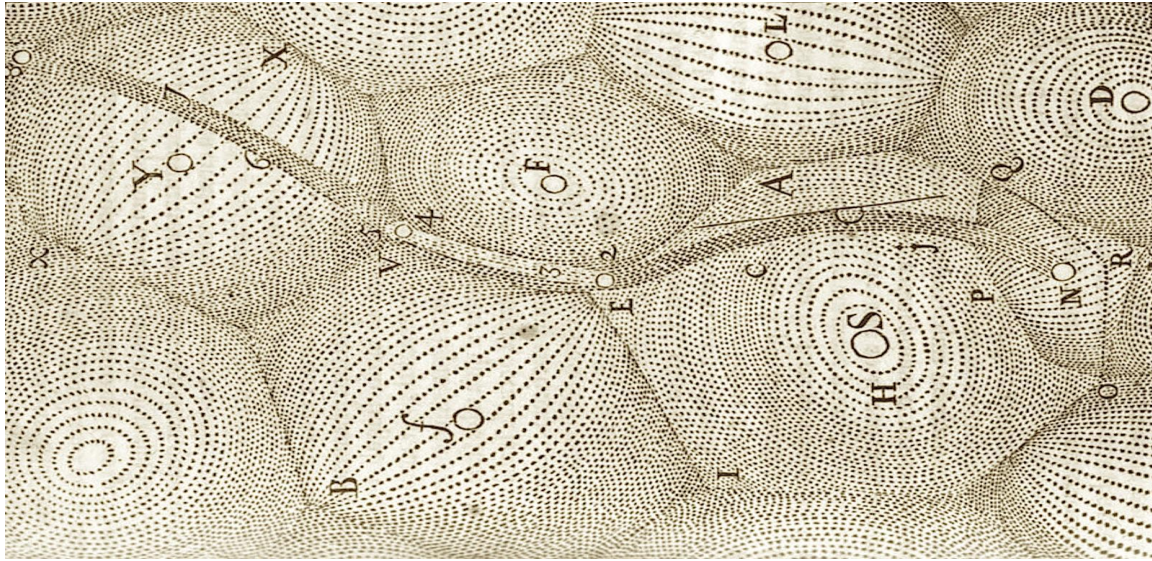




STUDIO TWO: COSMOS

Post Planetary and Universal Design - research studio 8 weeks, February/March 2022
Ed Keller and Carla Leitão

'In affirming a future untethered to the repetition of the present, we militate for ampliative capacities, for spaces of freedom with a richer geometry than the aisle, the assembly line, and the feed. We need new affordances of perception and action unblinkered by naturalized identities. In the name of feminism, 'Nature' shall no longer be a refuge of injustice, or a basis for any political justification whatsoever! If nature is unjust, change nature!'

Xenofeminist Manifesto

'Looking ahead fifty or a hundred years, we shall be... in a position to design biosphere populations adapted to survive and prosper in various environments on various planets, satellites, asteroids, and comets. For each location we could design a biosphere genome, and for each biosphere genome we could design an egg out of which an entire biosphere could grow. ... The first species to emerge from a Noah's ark egg would be warm-blooded plants designed to collect energy from sunlight and keep themselves warm in a cold environment. Warm blooded plants would then provide warmth and shelter for other creatures to enjoy.'

Freeman Dyson, *Noah's Ark Eggs and Viviparous Plants*

COSMOS: Studio Two considers the surface of our planet and the world-buildings we have conducted across past centuries, and continues by leaping off earth to extra-planetary networks as an extension of design. The studio connects terrestrial *techne* to deeper and broader timelines. We ask: what is an operational *new nature*, and when does architecture transform into landscape, extend beyond a horizon, link to systems off planet, and catalyze a revolutionary universality?

Our planet itself is, indexically, a computer: meteorology, geology and biology as computation. And its material systems bundle together different temporalities: for example, the earth has registers of massive addressability in river meanders which arc across millions of years, which begs the question: where and how might a planet have 'mind' or 'computational capacity?' If so, what kinds of information processing takes place, what networks are folded into that, and how can we work as designers to access those flows of information and energy?

What might we choose to design, to catalyze this *new nature*, a new set of universalist politics? Would we design a new law of physics? a new legal system? a planetary infrastructure that would guarantee food and shelter for all citizens on earth, human and otherwise? Is this a design project for material systems, informational systems, biological systems? Do we design a new body for ourselves, or a new brain? Cities have always been external memory systems – extended phenotypes for human culture and life. Yet one wonders what technological/urban design moves could work across the 'smart cities' of our future. Infrastructure, networks, forms of governance, cultures: all comprise a collective 'intelligence'. As an extension of our current technopolitics, the concept of 'thallience' developed by Karl Schroeder – a distributed technology based sentience, emerging from the massively addressability of total ubicomp – could yield countless non-human ontologies, acting in the service of a radical inhumanism; integrating subjects and objects that humans would never 'see', or understand as relatable, yet for and with whom we will have to design.

We can learn key lessons in a project like this from Stanislaw Lem's *His Master's Voice*, or Cixin Liu's *The Three Body Problem*. In both these hard science fiction texts, the authors consider a truly universalist set of axioms and motivations which would drive a civilization to design for not only its own survival, but for the survival of its planet, its solar system, and even for the emergence and propagation of life across galaxies and entire universes.

All the while, these questions must be brought back to 'earth', as it were. We must turn our eyes to the sky and the ground simultaneously. What systems on our planet must be conserved? What 'gestural ecologies', to use Nandita Biswas Mellamphy's term, can we deploy to work as designers *of* our planet and *for* our planet? A universalist notion of planetary ethics is called for; as Aldo Leopold has pointed out, speaking of a land ethic:

'Land, then, is not merely soil; it is a fountain of energy flowing through a circuit of soils, plants, and animals. Food chains are the living channels which conduct energy upward; death and decay return it to the soil. The circuit is not closed; some energy is dissipated in decay, some is added by absorption from the air, some is stored in soils, peats, and long-lived forests; but it is a sustained circuit, like a slowly augmented revolving fund of life. There is always a net loss by downhill wash, but this is normally small and offset by the decay of rocks. It is deposited in the ocean and, in the course of geological time, raised to form new lands and new pyramids. The velocity and character of the upward flow of energy depend on the complex structure of the plant and animal community, much as the upward flow of sap in a tree depends on its complex cellular organization.'

A Sand County Almanac & Other Writings on Conservation and Ecology, Aldo Leopold

Leopold's 1949 manifesto set the ethical and moral foundations for our planet's 'land ethic' - and it must be extrapolated to the cosmological scale by us as designers, at the very least to respect Leopold's awareness that our planet's ethics were produced by universal principles. These land ethics emerged- indeed, are inseparable- from cosmically scaled laws and systems.

Thus, a key question this studio asks is: how do we as humans, designers, situate our project in this larger universalist frame, and what forms of radical empathy, co-living, co-evolving, mutualism, and shared ontologies do we catalyze as we care for ourselves and our planet?

And, ultimately, will we be tethered - connected, bound, rooted, slowed down, accelerated, nostalgic - to our evolutionary WORLD, the one that made us and where our bodies match up. Will we bring it along for the ride, and in which way - as a counterpart, a rear view, a pendulum, a harbor, a home - or a canvas to continue to draw from and upon?
Ed Keller & Carla Leitão

METHOD, GOALS and OUTCOME

Part of this research studio's project will be to map and identify the kinds of bodies constituted by cosmological and cosmopolitical forces. This work will cross many scales from the atomic to the galactic. A key design outcome oriented component of the studio will then be to choose certain scales to operate at and formulate research summaries or initial propositions for the design of bodies with novel cosmopolitical potential.

SCHEDULE: STUDIO TWO: COSMOS

Instructors: Ed Keller ed.keller@thenewcentre.org
Carla Leitao carla.leitao@thenewcentre.org
Date: Sundays Feb 6, 13, 20, 27, Mar 6, 13, 20, 27
Time: 14 to 16:30 ET
course zoom meeting link: via email
Course structure/schedule:
• 4 seminar/workshop classes: content discussion, analysis and synthesis experiments
 brief research proposal due by session 5
• 3 project development classes
• 1 Coursework Review with External Guests

SHARED ONTOLOGIES, REVOLUTIONARY UNIVERSALITY

Feb 6: Logistics; Intro Lecture; Discussion

Why COSMOS? Formulating the Idea of Cosmos, radical empathy, post-planetarity, universal systems.

READINGS

A Sand County Almanac, Leopold [excerpts pdf and browse]

His Master's Voice, Lem, [excerpts pdf and browse]

XenoFem Manifesto: <https://laboriacuboniks.net/manifesto/xenofeminism-a-politics-for-alienation/>

FILM/SOUND

Arrival, Villeneuve

Mirror, Tarkovsky

<https://nicolemitchell.bandcamp.com/album/mandorla-awakening-ii-emerging-worlds>

<https://nicolemitchell.bandcamp.com/album/intergalactic-beings>

recommended:

Nostalgia for the Light, Guzman

Annihilation, Garland

Cixin Liu, *Three Body*; up to ch. 6

Microcosmos, Margulis, Lynn [pdf]: ch. 4 Entering the Microcosm

Novacene, Lovelock; part 3: chapters 15-23 [pdf]

[*Tentacular Thinking: Anthropocene, Capitalocene, Chthulucene*](#), Donna Haraway

MATTER and SPACE: MATERIAL COMPUTATION, MIND

Feb 13: Matrixes: Laws, logics, rules. Inverted Worlds. (Physics of Space)

READINGS

[The Spam Book](#); Sadie Plant

Tomlinson, *A Million Years of Music* [Preface and ch 1 up to pp51]

How Forests Think, Kohn [chs: Introduction; The Living Thought - pdf]

[Discognition](#), Shaviri [ch: 'Thinking Like a Slime Mold']

Lem [various excerpts, see "LEM excerpts HMV Solaris Summa.pdf"]

[Thalience](#), Schroeder

FILM/SOUND

Solaris, Soderbergh

Solaris, Tarkovsky- browse

BRIDGING DREAMS: NEW NATURES GESTURAL ECOLOGIES THERE'S NO PLACE LIKE 'HOME': RADICAL EMPATHY, INHUMANISM, COSMOPOLITICS

Feb 27: Techno-cultural Structures. (Imagined Programmatic Futures)

* Sci-Fi imagined gestures towards Cosmos

* Earthbound dreams of the Cosmos (space exploration, occupation, etc)

READINGS

Terra-&-Terror Ecology: Secrets from the Arrakeen Underground, Nandita Biswas Mellamphy [pdf]

Gesture and Speech, Leroi-Gourhan, Ch8- Gesture and Program pp 237-254 pdf

Extraterrestrial Languages, Oberhaus- Ch 3 Aliens on Earth, and browse pdf

Revisit *His Master's Voice*, Lem pdf

FILM/SOUND

Annihilation, Garland

2001, Kubrick

Cave of Forgotten Dreams, Herzog

Nostalgia for the Light, Guzman

The Cosmopolitical Gesture <https://alienocene.com/2019/12/23/the-cosmopolitical-gesture/>

Cthonic Cosmographies <https://thermalhowl.bandcamp.com/album/cthon-cosmographies>

<https://sunn.bandcamp.com/album/pyroclasts>

Johannsson- Arrival

<https://open.spotify.com/album/3GDfBsNm22NeGSP2vQDWnO?si=tbJDWroOTUGmNjybBtCTNw>

Post Planetary mix by Jason Brogan:

<https://open.spotify.com/playlist/0h5xYjllp4jnEVF1NpVdly?si=cd5d8e9ccf9c41b7>

Nandita's talk from Atmospheres: <https://www.youtube.com/watch?v=j71RJvf3C4M>

Recommended

[Ecology and Design: Parallel Genealogies](#), Chris Reed Nina-Marie Lister

The Cosmopolitical Gesture, E. Keller [pdf]

22 *Theses on Nature*, Steven Shaviri [in *Discognition*, pdf]

Dune, Villeneuve

Showing Off to the Universe-

<https://writings.stephenwolfram.com/2018/01/showing-off-to-the-universe-beacons-for-the-afterlife-of-our-civilization/>

March 6, 13, 20: DEVELOPMENT

project development classes- presentation and discussion of projects in progress
Includes rescheduled Feb 20th class session

March 27: GROUP DISCUSSION of WORK in PROGRESS

Coursework Review with External Guests

ONLINE PLATFORMS

The class will be conducted via zoom as per New Centre practice; we will use SLACK as an online platform for asynchronous discussion, presentation, comment, collaboration, and file sharing. Other platforms [such as Miro, etc etc] may be used for group and project based needs. All readings and as many films as possible will be provided in advance of class lectures and discussion.

PREVIOUS SEMINARS:

[STUDIO ONE: WORLD syllabus](#)

[ATMOSPHERE SEMINARS FALL 2021](#)

[Programmed Ontologies, How to Code a World | The New Centre for Research & Practice](#)

[Philosophical Topology & Planetary Politics | The New Centre for Research & Practice](#)

POST-PLANETARY UNIVERSAL DESIGN PROGRAM

The New Centre's Post-Planetary Universal Design Program asks how design practice can operate as a way of thinking of, projecting and enacting structural changes in the world, by entirely reimagining environmental paradigms as well as the disciplines and practices that are integrated to produce them.

The program is a hybrid seminar and research studio curriculum, based in architecture as a core discipline. By surveying precise disciplinary modes of thinking and designing while questioning the limits of disciplinary boundaries, we ask: for whom and for which timescales is design intended? Through this lens, we explore the most speculative and critical aspects of current design and theory, pursuing links and resonances across media, technology, philosophy, ecology, and planetary sciences.

Design is a radically temporalized act, functioning as an amplifier or attenuator for the planetary, broad spectrum codecs of our historical, material, organic, and socio-technical configurations. Architecture operates across a deep 'stack' of temporal arcs- from the moment of a gesture or the life of a single organism, to the millenia long presence of a building, a law, a city, or an ecosystem. Historically, architecture has worked to capture, fix, and transmit stable configurations of past order into the future. However the socio-geopolitical and technical instrumentation of our planet today offers novel resistances to previous models of architecture and design.

By analyzing, distilling and synthesizing these arcs of time and scale, work developed in this program will project across and into alternate configurations of the 'past' and 'future'. Post-Planetary Universal Design accounts simultaneously for the limits of an organism, a building, a mind, a planet and a universe: 'worldmaking' writ small and large.

A year-long design studio forms the core of the program, with seminars, workshops and conferences orbiting the studio's gravitational centre and tapping into and extending across a broad international network.