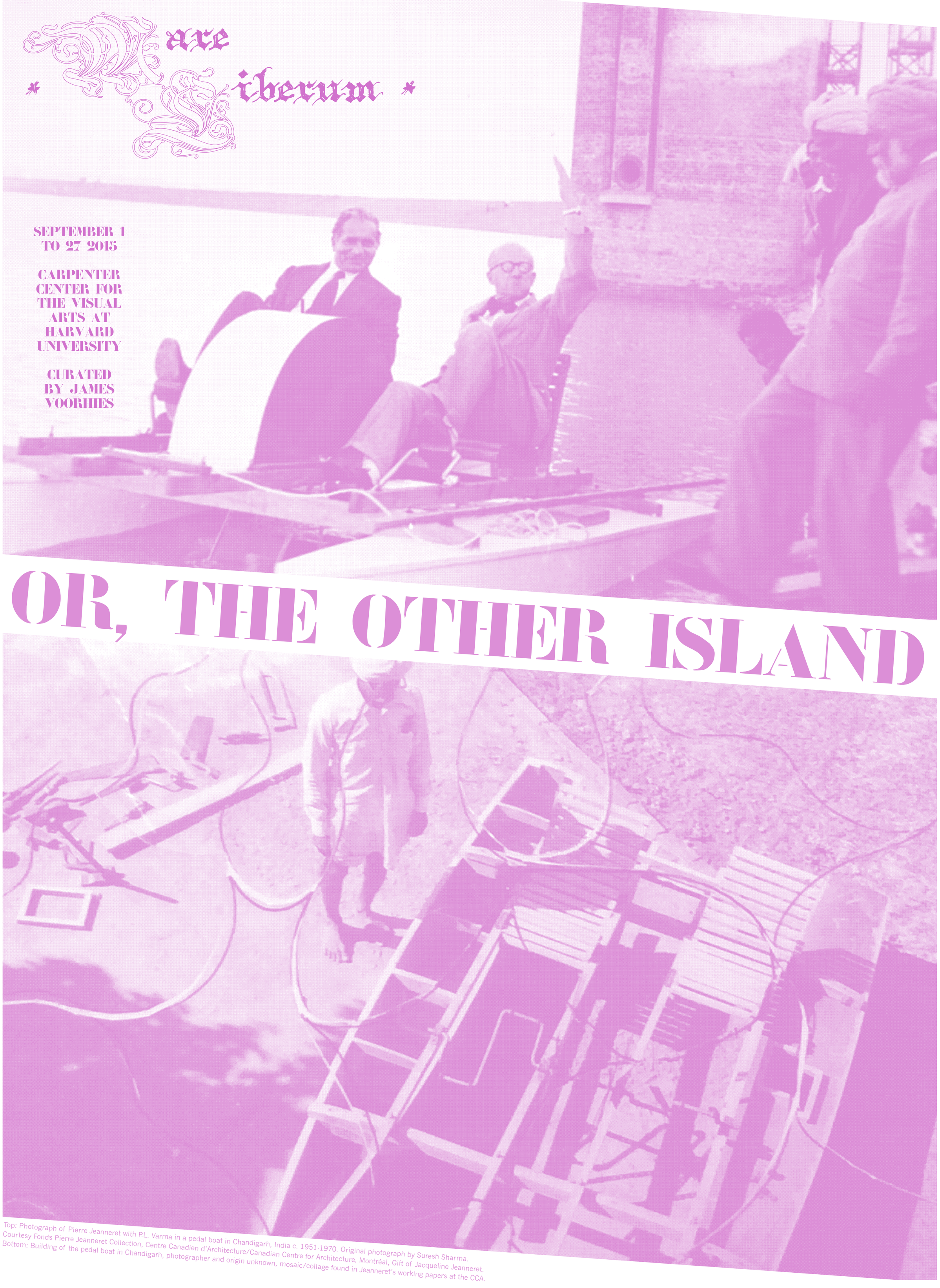
Ave Liberum

SEPTEMBER 1
TO 27 2015

CARPENTER
CENTER FOR
THE VISUAL
ARTS AT
HARVARD
UNIVERSITY

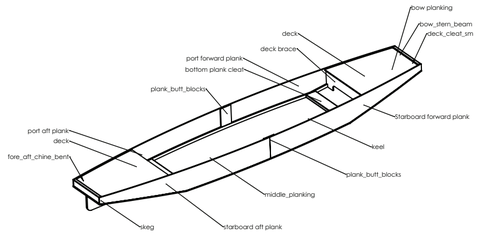
CURATED
BY JAMES
VOORHIES

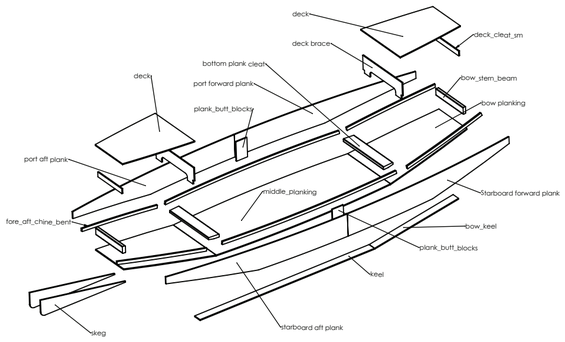
OR, THE OTHER ISLAND



Top: Photograph of Pierre Jeanneret with P.L. Varma in a pedal boat in Chandigarh, India c. 1951-1970. Original photograph by Suresh Sharma.
Courtesy Fonds Pierre Jeanneret Collection, Centre Canadien d'Architecture/Canadian Centre for Architecture, Montréal, Gift of Jacqueline Jeanneret.
Bottom: Building of the pedal boat in Chandigarh, photographer and origin unknown, mosaic/collage found in Jeanneret's working papers at the CCA.

CAMBRIDGE PUNT FULL & EXPLODED VIEWS





THE PUNT

punt (n.2): "flat-bottomed river boat," late Old English punt, perhaps an ancient survival of British Latin ponto "flat-bottomed boat" (see OED), a kind of Gallic transport (Caesar), also "floating bridge" (Gellius), from Latin pontem (nominative pons) "bridge" (see pontoon). Or from or influenced by Old French cognate pont "large, flat boat."

A punt is a flat-bottomed boat with a square bow, intended for use in small rivers or other shallow and mostly calm waters. Punting is what one does in a punt. The punter punts the punt by pushing against the river bed with a pole. If you're using an oar you're probably in a gondola. A gondola is a sort of punt dressed up for formal occasions, funerals, and the like. A punt is good for fishing, or carrying ballast, or taking you and a friend camping for the weekend on a river isle. A punt is one of the simplest boats you can build, and for that matter it is one of the most versatile. You can stand in it.
Originally designed as work boats, or for hauling cargo from shallow place to shallow place (say, up and down a canal), the punt has remained one of the best vehicles for getting out on the water and tooling around, i.e. pleasure trips up and down English canals. For that matter, it's not so bad for exploring further-off places on mostly flat water either, equally suited to it as a raft would be and without the need for added flotation. The punt is a boat, and as such, it arrives at flotation through a displacement that is integeral to its shape. See Archimedes' principle for more on that. It's a simple boat, but it does what a boat does, which is to say, it allows you to get out and explore the waters around you, and to do so without making much noise or using too much petroleum. Punts or boats that are like punts are used around the world for those very reasons.

INSTRUCTIONS

First, review updated plans and dimensioned part diagrams on our website — http://www.thefreeseas.org/punts.

1 Start by cutting out all the pieces you'll need: (4) sheets of plywood, (2) 8' 2x4s, and (4) 8' 1x2s. It's better to find scrap wood for all these parts if you can.

1A Take a look at the flat parts and draw them out onto the sheets of plywood. The bottom boards and decking may appear straight, but in fact they have gentle curves that need to be drawn and cut out. Lay out the measurements on the drawings, including the construction lines. Connect three points of a curve by bending a slightly flexible 'batten' through all points and tracing its edge.

1B Where the bottom of the boat and the bow and stern raise upwards there is a 2x4 called the BOTTOM PLANK CLEAT that connects all the parts together and creates a seal against water getting in. Cut its bevel on a table saw or bandsaw, where the blade or table can tilt. Alternatively you can create that bevel with a hand-plane.

1C The KEEL pieces and the SKEG might be good but are untested and optional. Punts without these components still work great. If you find your doesn't paddle straight, these components could help.
2 The SIDE PLANKS need to be joined to form each side of the boat using the BUTT BLOCKS. Each side plank's 11.5" side will be meet the other. Overlap that joint with the Butt Blocks using wood-glue and either short screws or nails. Make sure that the SIDE PLANK assemblies are mirror images of each other in respect to which side of the plank the BUTT BLOCK is on, so that the BUTT BLOCK lands on the inside of the punt on both sides.

4 Glue and screw the SIDE PLANK assemblies along the sides of the MIDDLE PLANKING (bottom of the boat). Mark a horizontal centerline on the MIDDLE PLANKING and make sure the joint of the SIDE PLANKS lines up with that centerline. The screws should go through the MIDDLE PLANKING first and into the CHINES that are already glued to the SIDE PLANKS. Start at the centerline and work your way out towards the ends. Be liberal with the glue and insure a continuous glue bead here–as this is going to keep out the water.

5 Glue and screw in the BOTTOM PLANK CLEAT to the MIDDLE PLANKING at either end.

6 Pull the ends of the SIDE PLANKS in towards each other and use the BOW and STERN BEAMS to hold them in place.

7 Glue and Screw down the BOW and STERN PLANKING in the same manner as the MIDDLE PLANKING by screwing through the planking into the chines of the SIDE PLANKS. You will need to bend the SIDE PLANKING more by hand to line up nicely with the BOW and STERN PLANKING.

8 Screw in the DECK BEAM CLEATS into the DECK BEAMS, and glue and screw in the DECK BRACE to the side planking only. If you decide to screw the DECK BRACE into the bottom of the boat, make sure to use lots of glue so that the screw holes don't leak.

8A Through experimentation we have decided that the decks could use some 2x4s to make them stronger for standing on. Add them longitudinally from the DECK BEAM CLEATS to the DECK BRACE and screw them in.

9 Screw down the DECKS without applying glue. You may want to add floatation under here now or at some other time. These surfaces may wear faster than the others. This way you can replace them.

10 Through even more experimentation we've decided that this boat needs a thwart between the the BUTT BLOCKS in the center of the boat. This provides some extra structure for the SIDE PLANKS as well as a nice place to sit and possibly row. Have a look at the photos to see how we did it. Make it strong.

10A It might be a good idea to also reinforce the bottom of the punt with 4 or 5 horizontal strips of wood the size of the chines. With lots of people in the boat the bottom tends to bend, and this will help keep it flat.

11 Paint the boat to keep it waterproof, or varnish it.

12 Learn how to "Punt."

GLOSSARY

Keel. The Keel runs along the outside bottom edge of the boat and provides reduces sideways sliding once the boat is in the water. ⪢ **Skeg.** The Skeg connects to the Keel and functions as a small fin to help improve steering and stability. ⪢ **Stem.** The Stem of the boat is the front end, but it also refers to the wooden member that supports the shape for the front and back edge of the boat. ⪢ **Inwale and Outwale.** The general vicinity of the outside top edge of a boat is called a gunwale, and the inside wooden member of this area is called the INwale. The outside wooden member of this area is called the OUTwale. The ribs and hull are typically sandwiched between these two wooden members. ⪢ **Breast Hooks.** The beefier chunks of wood where the gunwales meet the stem and stern. ⪢ **Thwarts.** Wooden members spanning the boat laterally, sometimes all the way from inwale to inwale. They provide a lot of strength. Seats count as thwarts too. ⪢ **Rub Rails.** These are the bumpers along the bottom of the hull to protect it as you drag it ashore. ⪢ **Bang Strips.** These are the bumpers that are attached to the outside of the hull at the stem and stern to protect it from scratches when you run into things and drag it around. ⪢ **Hull.** The Hull is the outside surface of the boat. It keeps the water out, and the air in. ⪢ **Butt Plates.** These form a butt joint, which is a type of connection between two pieces of wood (or planks), other joints include the scarf (scarph) and numerous others depending on the use and occasion.

THE VOYAGE

On September 12th we take our freshly made work-boats out on the local work-river. The Mystic River, flowing north of Cambridge and Somerville from the Mystic Lakes to Boston Harbor, is historically a tidal river. Its name most likely originates from the Massachusetts and Pawtucket term "Missi-tuk," meaning "great tidal river." In 1966 the Amelia Earhart dam blocked the tide, however, and now the Mystic is freshwater for most of its roughly six and a half mile length. Its shores are heavy with industry, including energy generating stations, chemical plants, fuel tanks, and factories.

The Voyage takes us from Lower Mystic Lake the full length of the Mystic into the Chelsea River. This day-long journey is a form of participatory research on the river and anthropogenic changes to its ecology. Throughout the paddle we hear from local river and water rights experts, perform water testing with citizen science developers, participate in a performative record of the river's salt marsh habitat past the dam, and meet community groups operating on the banks of the Mystic and Chelsea rivers.

On the river's shore, we will meet with advocates, organizers, technologists, and artists, who share their expertise, include:

Mystic River Watershed Association (MyWRA) - MyRWA was founded in 1972 and largely functions through the efforts of professional staff and community volunteers working together on a project-by-project basis. Its mission is to protect and restore the Mystic River, its tributaries and watershed lands for the benefit of present and future generations and to celebrate the value, importance and great beauty of these natural resources which play a vital role in the many cities and towns the watershed includes.

Clean Water Action - Clean Water Action is a one million member organization of diverse people and groups joined together to protect our environment, health, economic well-being and community quality of life. Their goals include clean, safe and affordable water; prevention of health threatening pollution; creation of environmentally safe jobs and businesses; and empowerment of people to make democracy work.

Public Laboratory for Technology & Science - The Public Laboratory for Open Technology and Science (Public Lab) is a community which develops and applies open-source tools to environmental exploration and investigation. The core Public Lab program is centers on "civic science" with a focus on underserved communities, in which we research open source hardware and software tools and methods to generate knowledge and share data about community environmental health.

Plotform - Plotform is a collective formed by Jane D. Marsching + Andi Sutton in the spring of 2012 with the aim of creating projects activating our engagement with our local ecologies. Our first project is Marsh Radio Island, which activates the interconnectedness of species in the port city of Boston by deploying *flotants* (modular salt marsh habitats), scrambling strategies from ecological design, carnival, craftivism, community engagement, tactical urbanism, interspecies communication, micronations, and empathetic making. More information at plotformplot.org

The Chelsea Collaborative - The Chelsea Collaborative Inc. is a community-based agency whose mission is to empower Chelsea residents and Chelsea organizations to enhance the social, environmental, and economic health of the community and its residents. The Collaborative carries out its mission through community organizing, technical assistance, program development, and information dissemination. The Green Space committee is the environmental justice branch of the Chelsea Collaborative and it functions as a program of the Collaborative.

THE ISLAND & THE SEA

> "The island seems to have a tenacious hold on the human imagination. Unlike the tropical forest or the continental seashore it cannot claim ecological abundance, nor—as an environment—has it mattered greatly in man's evolutionary past. Its importance lies in the imaginative realm. Many of the world's cosmogonies, we have seen, begin with the watery chaos: land, when it appears, is necessarily an island. The primordial hillock was also an island and on it life had its start. In numerous legends the island appears as the abode of the dead or of immortals. Above all, it symbolizes a state of prelapsarian innocence and bliss, quarantined by the sea from the ills of the continent. Buddhist cosmology recognizes four islands of "excellent earth" situated in the "exterior sea." Hindu doctrine tells of an "essential island" of pulverized gems on which sweet-smelling trees grow; it houses the magna mater. China has a legend of the Blessed Isles or the Three Isles of the Genii which were believed to be located in the Eastern Sea, opposite the coast of Chiang-su. The Semang and Sakai of Malaya, forest dwellers, conceive paradise as an "island of fruits" from which all the ills that afflict man on earth have been eliminated; it is located in heaven and has to be entered from the West. Some Polynesian peoples envisage their Elysium in the form of an island, which is not surprising. But it is in the imagination of the Western world that the island has taken the strongest hold." ~ The Island, Yi-Fu Tuan, *Topophilia* (1974)

> "And yet he has returned to his mother sea only on her own terms. He cannot control or change the ocean as, in his brief tenancy of earth, he has subdued and plundered the continents. In the artificial world of his cities and towns, he often forgets the true nature of his planet and the long vistas of its history, in which the existence of the race of men has occupied a mere moment of time. The sense of all these things comes to him most clearly in the receding rim of the horizon, ridged and furrowed by waves; when at night he becomes aware of the earth's rotation as the stars pass overhead; or when, alone in this world of water and sky, he feels the loneliness of his earth in space. And then, as never on land, he knows the truth that his world is a water world, a planet dominated by its covering mantle of ocean, in which the continents are but transient intrusions of land above the surface of the all-encircling sea." ~ Rachel Carson, Mother Sea/The Gray Beginnings, *The Sea Around Us* (1951)

Here are two familiar versions of oceans and islands. In one, the island is a separate place, made possible (inaccessible) by water, and distance. The land is under everything, connected, and the sea itself is connective fabric between worlds, places, peoples. And the sea is our common, our connector, as much as the air or more because there is more life in the sea.

We could have called the exhibition "*Les Limbes du Pacifique*"(the limbo of the pacific)—the alternate translation of title of Michel Tournier's *Vendredi*—for who can deny that we are now held by a limbo of our own creation. The unknowing of how grave the toll of anthropogenic climate change will be seems to hang heaviest over these very same island nations that once gave us hope of an essential or other place—the chance for a different world right here on Planet Earth. We have come to see that there is no "other island." That the islands themselves are not separated from each other by water so much as connected by it. For a very different reason than the limbo experienced by crusoe, this is the limbo of our uncertain future, the signs of an oncoming bout with "nature" that is unlike anything we have known as a species among species.

We could have called the exhibition "*Islands of Modernism*" for it is here that we might interrogate a modernist attitude toward, or expectation for, the relationship between the human species and the "natural world." We encounter Le Corbusier's "Landscape within a Landscape," the Carpenter Center itself, or his more totalizing plan of Chandigarh, where we find him in a photograph, afloat on Sukhna Lake with his cousin, Pierre Jeanneret, in a boat of their co-design. Little is known about this image (reprinted on the cover of this publication) or the boat itself, fashioned haphazardly perhaps, without plans and with no trace in the archives of either Jeanneret, except that it seems to say something about Corbu, who designed Chandigarh and its lake, designed a boathouse for the lake, was inspired throughout his career by boat shapes and the compact efficiencies of floating spaces—and the modernist project on the whole. Here was recognition, at last, of nature, dressed up for us to see it. (Corbu decreed that the view from Sukhna Lake to the mountains should be unimpeded, that the whole of it should be a promenade. This is nature as architectural spectacle.)

In the intervening few years between the photograph of Le Corbusier and Jeanneret on Sukhna Lake and the opening of the Carpenter Center (whose plan invites birds to decide what plants should grow on its terrace rather than a gardner) Le Corbusier drowns in the sea beneath his cabin in Roquebrune-Cap-Martin, a heart attack, or suicide, and something was changing about the way in which we understood nature, ecology, and our role within them. In reading Tournier's novel through a contemporary framework, we were transfixed by...fixated on...what the moderns might have to say or think about sea level rise, forced migration of island nations, and ocean acidification. Something about our understand of our own agency in the landscape had shifted. The human footprint that Crusoe finds on the island, his own, has been left not just on the Island, of course, but also indelibly on the planet as a whole.

ABOUT MARE LIBERUM

Mare Liberum is a collective of visual artists, designers, and writers who formed around a shared engagement with New York's waterways in 2007. As part of a mobile, interdisciplinary, and pedagogical practice, we have designed and built boats, published broadsides, essays, and books, invented water-related art and educational forums, and collaborated with diverse institutions in order to produce public talks, participatory works, and voyages as platforms to catalyze societal change. In 2015-17, Mare Liberum embarks on a longform research and participatory art project, "Water Rites." Across multiple sites, Water Rites enters into dialogue with river and watershed communities threatened by sea level rise, the encroachment of extreme energy industries, micro-plastics pollution, depleted fish and wildlife stores, water acidification, and climate change. The collective is: Jean Barberis, Benjamin Cohen, Dylan Gauthier, Sunita Prasad, Kendra Sullivan and Stephan von Muehlen. More info: www.thefreeseas.org/littleboats@thefreeseas.org.

OR, THE OTHER ISLAND COLLABORATORS AND SPECIAL THANKS:

Patrick Herron, Beth MacBlane (Mystic River Watershed Association) | Maryann Cairns, Catherine D'Ignazio, Laura Perovich, Sara Wylie, Don Blair (Public Laboratory for Open Technology + Science) Maria Belen Power, Roseann Bongiovanni (Chelsea Collaborative) | Magdalena Ayed (Neighborhood of Affordable Housing) | Max Liboiron (Memorial University of Newfoundland, Superstorm Research Lab) | Becky Smith (Clean Water Action) | Moody Jandhyala | John Camera (Local informant) | Jane Marsching, Andi Sutton (Plotform) | Richard Beinecke ("Mystic River Rick") | Jennifer Sigler (Harvard Design Magazine) | Silvia Benedito (Harvard Graduate School of Design) | Alexander Bender, Ellis Isenberg, Tim Knight (TriLox) | Sue Schaffner, Maya Suess (Gowanus Studio Space) | Renata Guttman (Canadian Center for Architecture) | Arnaud Dercelles (Fondation le Corbu) | Shirin Adhami (Photography) | James Voorhies, Daisy Nam, Anna Kovacs, Jesse Collins, Dan Lopez, Fausto Dos Santos (CCVA).

IN THE SHAPE OF AN ISLAND

Falling is subject to the law but the law
is unevenly meted and some fall
harder, fall unjustly hard. The ground
is the substrate of love. It breaks the fall
of law. I love but am robbed
of the empirical precondition of being
loved. I am a mother, human history
depends upon me, am I a monster?
My children are pinned to the earth
by the heel of love. The knee of law
falls heavy on their fragile necks.
I want to touch the quantum
body, but am smaller than the mesh.
There is only one binary: surface
and depth. My love is the promise of water
in water. Gentle waves are genital
chaos. The the cargo ship slips
into a never-total, voluminous
wall of birth – from which commerce
emerges and bodies are lost. The logbooks
that list the names by which we call
the bodies are lost. The book of fate
and the book of futurity and the book
of the fruits of the good and evil will
of the gods go down but day
follows day and the rations
borrow time against hungry bodies.

2

Love is lost, but loss
lasts, and law
is land, law
lands:
is gravity.
There is no land
in the sea of grief. The sea
of grief sinks the sea
of greed
in its commodious swells.
Lawless tears streak
loveless faces.
You do love or you go down.

3

Faces in the waves as centrifugal
thumbprints smear the tide
with scrambled looks of final loss
mistaken for financial loss.
Skin is a source of light without light,
a guide. Those who think the body knows
no bounds have never been blown up
during a routine trip to the market.
The soul is a venal laborer. The eternal
sea is broken into minutes by container
ships, slave ships, ships full
of refugees. The universe is absent
in a monetized sea. I am love,
human history depends
upon me, I hate money. We imagine
Hesiod's gods were never born, were
aborted in the swirl of monstrous
humanoids retreating to the source,
ceding the earth to hungry entrepreneurs.
Hunger-er beyond measure in the dawn
of the age of producerism. Shapes unfurl
and ships raise anchor. *You do love and
you go down.*
Down is the direction of love. Cruel
widow-generating mother without a womb,
capital sea of cumulative bodies, I am
love. I break law. With my body –
the ground. I bind you to the broken rib
of rebirth without memory of previous life.
Cause and effect beyond measure. Water
in water, fire in fire, greed in grief.
Water organizes wide swaths of pre
and post history in indistinguishable
tides. Its enclosure is continuous script
walling us in. Falling is the object
of law, its subject is lost
in the fall. Water undoes water.
You are bigger than me, eternally,
money, my child to whom
I am no parent. I am a ruler, human
measurement depends on me,
am I a monster? No matter
what you've lost, begin again
in a sea of difference as though
it is not missing, and it might return.