



# CONVIVIAL — TABLES

THE CROSS BETWEEN FOOD AND ECOLOGY



ENTRÉE: THE PANNIER OF THE VENICE LAGOON





# CONVIVIAL — — TABLES

THE CROSS BETWEEN FOOD AND ECOLOGY

ENTRÉE:  
THE PANNIER OF THE VENICE LAGOON

---

In Collaboration With TOCIA!



Edited by María Montero Sierra and  
Barbara Nardacchione

TBA21–Academy



# TABLE OF CONTENTS

---

Entrée: The Pannier of the Venice Lagoon	5
<b>María Montero Sierra and Barbara Nardacchione</b>	
Listen. Eat. Write	11
<b>Chiara Spadaro</b>	
SALINITY	
~ We are here, for Venice and the world	22
<b>Jane Da Mosto</b>	
 Rice and Water Sauce	23
<b>Marco Bravetti</b>	
~ Salt: the Origins of Venice	26
<b>Diego Calaon</b>	
TOXICITY	
~ Toxicity is Communal	40
<b>Camila Marambio</b>	
 Toxic Salad	43
<b>Marco Bravetti</b>	
~ To Ingest the Submerged	46
<b>Lodovica Guarnieri</b>	
"INVASIVE SPECIES"	
~ From Invading to Rooting?	60
<b>Anna Perdibon</b>	





Nixtamalized Tomato with Wakame  
Salad

61

**Silvia Rozas and Marco Zambon**

~ Let Them Eat (Blue) Crab

65

**L. Sasha Gora**

Research Projects on the Venice Lagoon and  
Its Food Systems

74



ENTRÉE: THE PANNIER OF  
THE VENICE LAGOON  
MARÍA MONTERO SIERRA AND  
BARBARA NARDACCHIONE

---

There is no better place to talk about food than around a table while eating. Sitting at the table enjoying a delicious meal inspires reflections on the crafting of meals, cooking, and the growing and harvesting of the produce shared. We reconnect with memories of comfort food that root us back to local and beloved places. No doubt, the shared table inspires conversations, also about food.

To honor these relational practices, TBA21–Academy has organized, in collaboration with the chef Marco Bravetti and TOCIA!, a series of Convivial Tables as the perfect avenue to discuss the complex ties between what we eat and its ecological impact, with a particular focus on its effect on bodies of water. The scarcity of fish resources that were once common, pollution of soil and water, the flow of new species perversely called “invasive,” the urgent need to support alternative modes of production and distribution of food, and the implementation of regenerative economies and practices have been the core principles guiding the guest chefs as they designed the menus for this first edition of Convivial Tables and the *sagra* (an Italian festival dedicated to local



food and culture) hosted at Ocean Space in 2022. Chefs, their collaborators, and invited guests, ate together and reflected on a future food supply chain that would be regenerative and mindful of the ocean. The research aims to contribute to the ongoing discussion on food resources by raising awareness to the potential harm of everyday routines and encouraging an interspecies approach. Changes begin by implementing new practices. Let's practice then.

## RESEARCH GROUP AT THE TABLE

We began by sharing subversive meals. Venice and the lagoon provided the framework for the first round of Convivial Tables. To accompany the guest chefs' dedication and expertise as regards produce, methods, and selected local producers, we invited various members of the community of conscious foodies to partner with the guest chef and explore ideas around the proposed subjects: salinity, toxicity, and "invasive species." The activist and biologist Jane Da Mosto; curator, writer, and researcher Camila Marambio; and anthropologist and historian of religion Anna Perdibon acted as conductors for each convivial table. They assisted in the preparation of the menu and guided the conversations, highlighting some of the most pressing issues explored in the chef's menu and announcing the transfers and love that occurred in the digestive matter. They animated the conversation, choreographing some



of our body movements and knitting the hidden threads between the state of the outer body, the lagoon and its water, and our inner bodies.

Three unique “witnesses” accompanied this journey closely. Artist Simone Carraro; fisherman, writer, and artist Luigi Divari; and anthropologist Chiara Spadaro, accepted our invitation to participate in the full program of Convivial Tables and contribute afterward with their reflections. Spadaro delights us in the opening text with the annotations of this journey and connects our activities with a larger methodological approach to engaging with the environment through cooking. Carraro’s drawings open each of the chapters, while Divari’s food drawings accompany each recipe. They are part of the rich community of people in Venice who are involved in the cultivation of sustainable soils, in the caring for produce, and in creating dishes that are new and connect with vernacular knowledge and project future changes. We have been honored to be accompanied by many of them, who joined the tables and shared their ideas and research. Their continued and fruitful efforts are crucial for a regenerative Venice and you can see their names listed on page 86 of this publication. At the end of this book, you will also find a link to a map—not exhaustive, but intentional—delineating many of these groups’ past and ongoing projects: scientific research involving marine biologists and fisherpeople, elaboration of new produce, and the



promotion of new ingredients, dishes, and many more. We imagine a different idea of the Venice Lagoon, one that remains truly local and is also interconnected with some of these participants' international projects. Maps are complicated, but since we wanted to propose practices and tools we decide to be proactive, "stay with the troubles," as Donna Haraway would call it, and offer some orientation.

## PRACTICING TOGETHER: RECIPES AND REFLECTIONS

The knowledge, ideas, and delicious meals developed in the first edition of *Convivial Tables* called to be shared and put into practice. Digesting mussels, oysters, salicornia, went quickly, faster than we wanted. A publication, we felt, provided the kind of reflexive space we needed in order to dive into the proposed subjects, the ties between ecology and food, between the outer and the inner bodies. This publication offers a way to join this community, connect with some of the members, cook one of the three unique recipes developed for this project by Marco Bravetti, Silvia Rozas, and Marco Zambon, and restage your own convivial table to discuss those food and ecological ties.

Above all, we wanted to share ways to practice, change our choreographies, and invest in the subject. Three guests contributed further



thoughts, reflecting on their experiences. Archaeologist and academic [Diego Calaon](#) reminds us about “white gold,” the story of how salt has shaped the history, narratives, architecture, and nature-human transformations in Venice for centuries. The remainder of the crafts developed between those working the salt and the fisherperson is clearly revealed as part of the Venetian story. It is a story that still affects the lagoon’s water and the city’s urban development due to the industrial transformation that occurred in Marghera, on the borders of the lagoon where refineries were set up during the twentieth century, conditioning the natural environment and all living beings around it. Curator and writer [Lodovica Guarnieri](#) invites us on a difficult journey along the toxicities that interlink all bodies of water and the transformations they undertake until they reach us. What pertains to one’s waters, to one’s body, to one’s identity unearths reductionist views of what is perversely called “invasive species.” We dared to question, and those questions then quickly became political exchanges, at a time in which many lives are lost in the Mediterranean waters. Beyond autochthonous and naturalization, and in favor of exchanges, cultural historian [L. Sasha Gora](#), who focuses on food studies, invited us into a journey of flavors that let us grow in each other’s company.



## "SAPID SOIL"

The research program Convivial Tables was a continuation of the inspiring projects “Ciacoe in Tocio: Ideas, Conversations, and Sauces for Eating with the Lagoon” (2021)<sup>1</sup> and “A Live Pantry For A Community In Fermentation” (2021),<sup>2</sup> building on these one-off events to form an ongoing program devoted to care for more-than-humans that is the foundation of the situated practices of fishing, harvesting, cooking, and eating. Following the first edition of Convivial Tables in 2022, 2023 brings The Tidal Garden as guest curators. Led by the Venetian duo formed by eco-designer and chef Lorenzo Barbasetti and curator Lodovica Guarnieri, The Tidal Gardens have developed “Sapid Soil,” a program of activities that will take place at Ocean Space and in outdoor locations in Venice. In this second edition, we plan to double our actions by letting the research inform the catering of events at Ocean Space. The Tidal Garden has contributed to defining the menus of a selection of catering accompanied by the public program at Ocean Space. Action starts with practice. Join us!

<sup>1</sup> “Ciacoe In Tocio: Ideas, Conversations, and Sauces for Eating with the Lagoon”. In Partnership With The Center For The Humanities And Social Change - Università Ca’ Foscari Venezia at Ocean Space, on June 20, 2021. [Online here.](#)

<sup>2</sup> “A Live Pantry For A Community In Fermentation” as part of *Lagoon Micro-Ecologies. Venice as a Model for the Future?* at TBA21–Academy’s Ocean Space, on May 21, 2021. [Online here.](#)



# LISTEN. EAT. WRITE

CHIARA SPADARO

---

My name is typed on the first blank sheet of paper.

The second and third sheets read, “Do you recognize any of the tastes? Where does that memory live in your body?” and “Observe your liver’s reaction to this dish.”

On the third sheet of paper is my name.

Getting lost in order to find oneself in the landscape of the table. This is what we tried to do in the three Convivial Tables organized by TBA21–Academy’s Ocean Space between May and September 2022, in the church of San Lorenzo, Venice. To keep track and not completely lose my bearings, I brought a notebook with me to the first of the three dinners. Joan Didion once wrote a text “On Keeping a Notebook.” She writes that “Since the note is in my notebook, it presumably has some meaning to me. [...] Why did I write it down? In order to remember, of course, but exactly what was it I wanted to remember? How much of it actually happened??” And she comes to the conclusion that those notes serve to preserve “everything observed. See enough and write it down. [...] to *remember what it was like to be me.*”<sup>1</sup> In short, to keep in touch with oneself first and foremost.



But when you sit at the table with other people, you assume that every experience becomes shared. That's what I also thought at the beginning of my research on the politics of food in urban lagoons, when I first sat down at the table of the TOCIA! collective, in the Spiazzi Association headquarters in Castello. It was November 2020, and it was no ordinary table. It had been built out of an assortment of pieces salvaged from the lagoon, eaten by shipworms,<sup>2</sup> disassembled and reassembled so it is adaptable to different situations, as it was later at Ocean Space, a kind of bricolage, to follow Claude Lévi-Strauss's definition of the term—using available materials to make something new—and bring it into cooking.

For TOCIA!, the act of sitting at the table is a stage in a broad relational journey with the lagoon territory and food landscapes. It is a relationship that involves a phase of listening and observation—discovering raw materials with one's body in the landscape and the stories of those who cultivate, harvest, and transform them—and a phase of collective action, which also passes through the fork, toward the construction of a sustainable food system. As Carolyn Steel has written, "The meal on your plate is more than

<sup>1</sup> "Joan Didion, "On Keeping a Notebook," *Slouching Towards Bethlehem* (New York: Farrar, Straus and Giroux, 1968).

<sup>2</sup> In Italian, *Teredinidae*, from the Latin *teredo*, a wood-robbing worm. *Teredinidae* are bivalve mollusks with a vermiform body, called "calamitas navium" by Linnaeus because of their voracity.



just nourishment: it is an emissary from another world – a place we still call ‘countryside’, yet one that rarely resembles the bucolic paradise of our imagination. [...] Whether or not we realise it, our bodies, homes, cities and landscapes are all shaped by food.”<sup>3</sup>

Those who accept the invitation to sit at this table enter into a circular exchange of knowledge, in which the kitchen becomes a peer-led educational laboratory: “The practices of cooking and tasting are activities of a broader formative process, of an ecologically understood education,” writes philosopher Nicola Perullo.<sup>4</sup> This is the “aesthetic-political difference between an education with food and an education about food”: the former is a “communal process” disengaged from hierarchical, situational, and experiential mechanisms, which “arises from attention, care, and knowledge around agriculture and plant life.”<sup>5</sup>

The evolution of the food landscape—and, with it, of our pantries—is one of the topics TBA21–Academy has been exploring since 2021, hosting a series of table talks titled “Tide Tables” at its evocative exhibition venue Ocean Space.<sup>6</sup> The

<sup>3</sup> Carolyn Steel, *Sitopia: How Food Can Save the World* (London: Chatto & Windus, 2020). The neologism “Sitopia” comes from the Greek *sitos*, food, and *topos*, place.

<sup>4</sup> Nicolas Perullo, “Cucinare come educazione estetica e politica,” Massimo Montanari, ed., *Cucina Politica – Il Linguaggio del cibo tra pratiche sociali e rappresentazioni ideologiche* (Bari: Editori Laterza, 2021), 304.

<sup>5</sup> *Ibid.*, 311.

<sup>6</sup> The “Tide Tables” (2021) were curated by cultural historian L. Sasha Gora, with chef Marco Bravetti and food designer Katinka Versendaal.



inspiring question for this course came from a text in which Australian academic Elspeth Probyn asks how we can “eat with the ocean,”<sup>7</sup> extending our interests in food practices from the terrestrial to the aquatic environment. Through the act of eating, considered as a real method of inquiry in the wake of the climate crisis debate, through these convivial moments, food thus became a tool for a critical understanding of the lagoon.

Throughout 2022, the table at Ocean Space continued to be a space for discussion on the complex relationship between what we eat and ecological dynamics, with a focus on water bodies, and encouraging an interspecies approach. “Salinity,” “toxicity,” and “invasive species” were the three topics chosen for “Convivial Tables,” each led by a host who facilitated the collective conversation. Throughout these meetings, the table became a symbol of the cultural landscape, suggesting that when you are in the lagoon, you are not nourished by and in an idyllic landscape, quite the contrary: you are in an environment that requires attention to and care of the ecological relationship with other living things, and that often takes us out of our comfort zone.

As the shipworms continued to nibble at the tables, a human community found themselves collectively eating and reflecting on food landscapes, activating interdisciplinary

<sup>7</sup> Elspeth Probyn, *Eating the Ocean* (Durham: Duke University Press, 2016).



correspondences between people with different interests and from different backgrounds. When I received the invitation to these dinners, and opened it with excitement, knowing that between the lines was an invitation to a dialogue. Sitting at the table, I would find people who were always different and sometimes unfamiliar, with whom I could open a dialogue starting with food and arriving, perhaps, at shared ideas about ongoing research, imagining the Venice of the future, or talking about the present, delicate balance of the lagoon.

During these meetings, there were always notebooks set next to the plates. The writing could finally leave the written page—where it was important to me, following Joan Didion—to become something shared, a part of the discourse, and, above all, a part of the landscape we were reflecting on together. In those three evenings, between May and September 2022, I took notes in a notebook, propped up in place of the cutlery. And on two of those evenings, the tablecloth was a sheet of white paper on which we could write and draw, and on which we could smear food colors: a landscape on which to leave an imprint, a table as a text.

*Talk about salt without adding salt.*

*The salty fate of Venice.*

*Ambivalence: salt preserves foods and balances*



flavors, but erodes and damages the lagoon landscape and buildings.

Salinity increases with high tide and heat.

“Put problems into dishes” —Jane.

“In six or seven years there will be no more *moeches*, because the *moeches* are getting old and there are no young people in the Burano fishing community” —Luigi.

“The first blue crab in the lagoon was discovered in 1948, when I was born” —Luigi.

On May 31, 2022, at the first of the “Convivial Tables,” dedicated to the theme of salinity, chef Marco Bravetti presented us with a plate of white rice covered in water, accompanied by a glass pipette. He was proposing an exercise in reflecting on our relationship with the tides and the lagoon landscape: before we could eat, we had to use the pipette with a delicate hand gesture to remove the excess water from the plate on which he would then pour fish stock. By learning how to “eat with the ocean,” in Probyn’s words, we discover more about the landscape that feeds us, the same landscape we traverse by foot, by boat, or steamer. It is there—under the plate, under the rice, under the water—that “the conflicts, the hierarchies, the differences between the nomadic lives and the steadfast gazes of the plants, the gregariousness of the herds and the fierce, unfettered solitude of



the hunters, there amid differences in light and temperature, the creatures of the deep and those of the surfaces live an equally perfect life.”<sup>8</sup>

Can the table become the place where these conflicts are resolved? The space for interspecies dialogue? To try this, during the second dinner—on toxicity—we drew lines on the white paper that served as the tablecloths, to join the plates and the places the different diners came from.

“Draw lines between plates.”

I make a catalogue of the objects I see on the table that apparently have nothing to do with the act of eating: a brown umbrella, tape recorders, pens, highlighters.

Toxicity is a matter of quantity.

“Do you recognize any of the tastes? Where does that memory live in your body?”—I paste the little white strip on the notebook.

Then I listen to a dialogue between David and Luigi, and jot it down. “Today 90 percent of the fish in the Rialto come from abroad. / Where do you buy fish? / I fish. / I don’t. Where can I buy fish? / There is a stall at the end of Via Garibaldi that has little-known fish.... Because most of the fish you eat in Venice you can also eat in Turin.” According to Luigi, in ten years the Rialto market

<sup>8</sup> Franco Cassano, *Il pensiero meridiano* (Bari: Editori Laterza, 2005), 16.



will disappear. The fish market even sooner.

Toward the end of dinner, before dessert is served, we change seats and, sitting at the head of the table, I find a new question, “Observe your liver’s reaction to this dish.” I try to make up my mind about where my liver is.

“Invasive species”—animal, plant, human—are the stars of the third dinner. This time, I find many lists and question marks in the notebook.

Marginalized / indigenous / invasive / wild / traditional plants?

Alien / invasive / native?

Gentian / mugwort / lemon / Salicornia / clove / orange: Do they make a Venetian spritz, or not?

When is a species considered “invasive?” And by whom?

We are served pasta buttons filled with mugwort. A plant considered *wild*. What is “wild?” Place modifies this concept: wild depends on space.

Invasive monocultures.

There is also a book on the table that evening: *Braiding Sweetgrass*, by botanist Robin Wall Kimmerer.<sup>9</sup> It talks about reciprocity and the fact that “we must look to our teachers among the other species for guidance.”



Habituating one's body to become (return to) indigenous. With practices in the landscape: walking for herbs.

In 2021 and 2022, before the “Convivial Tables,” TBA21–Academy organized a series of walks (curated by Barbara Casavecchia and Pietro Consolandi) that led us to the discovery and procurement of food in the lagoon. In these walks, moving together, we directly and respectfully observed the “living larder” of the lagoon, recognizing, collecting, and tasting berries and wild herbs, that we also then brought back to the table at Ocean Space.

“The rhythm of walking generates a kind of rhythm of thinking, and the passage through a landscape echoes or stimulates the passage through a series of thoughts,” writes Rebecca Solnit in *Wanderlust: A History of Walking*.<sup>10</sup> Following this rhythm—and that of other, necessary boat journeys—created a dynamic in which we recognized ourselves as a food community. “The motions of the mind cannot be traced, but those of the feet can,” Solnit writes, as “one aspect of the history of walking is the history of thinking made concrete.” It is through this concreteness that we can recover a sense of place

<sup>9</sup> Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* (Minneapolis: Milkweed Editions, 2015). The book was recently translated into Italian and published by Mondadori under the title *La meravigliosa trama del tutto*.

<sup>10</sup> Rebecca Solnit, *Wanderlust: A History of Walking* (London: Penguin Books, 2001).



from an active perspective. Before we sat at the table, which involves being still, our movements restrained, we walked—a collective practice that facilitates knowledge of raw materials and the land, and thus its protection, leading humans to become more aware of the value of places from the movement of their bodies in the living environment. That “dance” in the landscape restores our sense of limits, and therefore of opportunities: we know with our feet and hands what the land makes available to us, or not, from a food point of view.

Back at the table, sitting in our chairs, this identity of the landscape—with which we must always reckon—changes pace, becoming more imperceptible, like that of the shipworms that keep nibbling at the living wood. We have to care in order to listen to it. During the dinner dedicated invasive species, we were read a sentence from Kimmerer’s book: “The plants can tell us her story; we need to learn to listen.” Caught up in the frenzy of jotting it down in my notebook, I hadn’t even noticed that everything around me had gone silent.





SALINITY

---



# WE ARE HERE, FOR VENICE AND THE WORLD JANE DA MOSTO

---

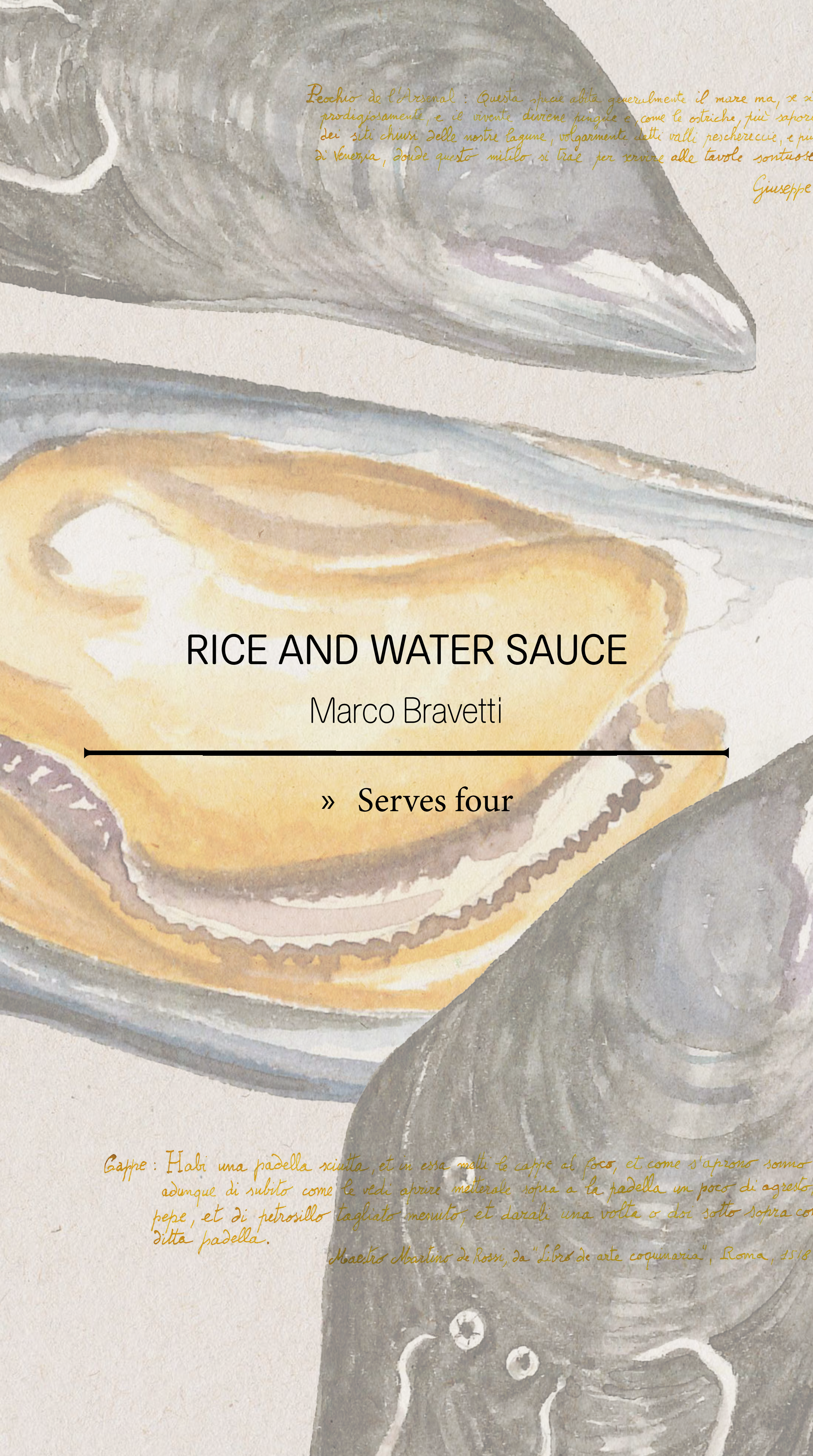
Ocean Space, as ever, proposed a novel format for exploring a recurrent theme: where are we and what can be done for the future, with special reference to our ocean, including offshoots like the Venice Lagoon and its canals through the historic city.

The Venice Lagoon system is an inspiring example of the fine-tuning of human occupation within the constraints of—and thanks to the possibilities offered by—the natural dynamics of complex processes especially the ecological functions of the salt marsh (*barene*), together with associated habitats like mudflats and open waters.

The extraordinary dishes prepared by Marco Bravetti tickled our senses and awakened our thoughts, conversations moved from the variability in saltiness to the fateful interactions of sediments, currents and organisms in this enormous transitional zone where saltiness ranges from Adriatic seawater to freshwater from river tributaries, rainfall as well as effluents and urban wastewater.

The fact that an institution hosted by Venice also advocates for Venice cannot be taken for granted, so herewith our deep appreciation for this initiative. Venice carries the hopes of humanity and peoples' belief in eternity.





*Peccchio de l'Arsenal : Questa specie abita generalmente il mare ma, se si  
prodigiosamente, e il vivente diviene fungue e, come le ostriche, più saporito  
dei siti chiusi delle nostre lagune, volgarmente datti valli peschereccie, e più  
di Venezia, donde questo mitilo si trae per servire alle tavole sontuose*

*Giuseppe*

## RICE AND WATER SAUCE

Marco Bravetti

» Serves four

*Cappe : Habi una padella sciutta, et in essa metti le cappe al foco, et come s'aprono sommo  
adunque di subito come le vedi aprire metterale sopra a la padella un poco di agresto,  
pepe, et di petrosillo tagliato menuto, et darali una volta o doi sotto sopra con  
ditta padella.*

*Maestro Martino de Rossi, da "Libro de arte coquinaria", Roma, 1518*



# INGREDIENTS

---

Vialone nano rice

Koji butter

Sea water

Mussel cooking water

*Pecchio de l'Arsenal: Questa specie abita generalmente il mare ma, se si trasporti sui fondi fangosi delle lagune, cresce prodigiosamente, e il vivente divenne fungo e, come le ostriche, più saporito. Questo fenomeno si verifica in alcuni dei siti chiusi delle nostre lagune, volgarmente detti valli peschericce, e più che altrove nelle acque racchiuse dell'Arsenale di Venezia, donde questo mitilo si trae per servire alle tavole sontuose.*

*Giuseppe Olivi, da "Zoologia Adriatica", Chioggia, 1792*



# RECIPE

---

- FOR THE KOJI BUTTER -

- » Inoculate the butter with aspergillus Oryzae and leave at room temperature for 36 hours.
- » Store in the fridge.

- FOR THE MUSSEL WATER -

- » Cook the cleaned mussels in a lidded saucepan over a gentle heat until they open.
- » Strain the released cooking water and store the mussels for other recipes.

*Cappe: Haber una padella asciutta, et in essa metti le cappe al foco, et come s'aprono sono cotte; adunque di subito come le vedi aprire metterale sopra a la padella un poco di agresto, et di pepe, et di petrosillo tagliato menuto, et darali una volta o doi sotto sopra con la ditta padella.*

*Maestro Martino de Rossi, da "Libro de arte coquinaria", Roma, 1518*





## PREPARATION & PLATING

---

- » Cook the risotto rice, toasting it dry and moistening with water until al dente.
- » Place a knob of koji butter in the bottom of each serving bowl.
- » Cover with the uncooked risotto. Cover the risotto with two fingers of seawater.
- » The dish will then be served watered down and diners will be asked to remove the excess water with the help of a spoon or pipette.
- » A ladleful of the hot mussel cooking water will then be poured into the bowls and guests will be asked to stir it into the risotto.



*Il riso è un nutrimento laudabile, adatto ad ogni età, ma più ai temperamenti caldi e umidi. Si chiederà al mercante la qualità margaritino bianco, che cresce con la cottura. Cucinato nel latte vaccino, o nel latte di mandole dolci, o nei brodi di carni grasse, si digerisce più facilmente e diventa più diletto al palato. È di buon giovamento nei casi di bruciori di stomaco e di dissenteria, mentre fa danno a chi soffre di coliche e agli stitici. (anonimo del sec. XV)*

*Se tu voy fare riso in bona maniera toy do libre de riso e do de mandole e meza libra de zucchero; to' lo riso ben mondo e ben lavato e le mandole ben monde e masenate e destempera con l'acqua chiara in stamegna. Toy lo riso e metilo al fogo in acqua chiara, e quando è levato lo primo bolire scolavi fuora l'acqua e metili el late de le mandole e fai coxere su la brasa da lonze e mescla spesso intorno. Quando è preso che cocto, mitige quantita del zucchero che questa vivanda vuol esser bianca e molto spessa e pulveriza col zucchero per suso. (anonimo veneto sec. XIV)*



# SALT: THE ORIGINS OF VENICE

DIEGO CALAON

---

## STOREHOUSES OF SALT

From the fourteenth century, the Republic of Venice had storehouses of vital importance installed in the Punta della Dogana area, almost opposite the magnificent Saint Mark's Basilica and Square and in a central position at the entrance to the city—medieval Europe's largest trading port and a hub for the most important long-range trading routes in medieval Mediterranean history. These warehouses were used to store salt, and their location was far from coincidental. The tip of Punta della Dogana had always been the focal point of the Port of Venice, meaning that the stockpiles were accessible to ships arriving from long voyages across the Adriatic and Mediterranean seas, while the Zattere district was connected to the mainland via the rivers of the Po Valley. The storehouses were a stone's throw from the centers of power, and salt became a state monopoly for Venice. This meant that the profits deriving from the salt trade could help bolster Venice's dwindling public coffers, with most of these proceeds being used for infrastructure, together with landscaping and urban improvements. Salt, therefore, was perceived as a crucial public good.

The importance of salt in ancient times and throughout the Middle Ages appears obvious.



What had become known as “white gold” was essential in the long-term preservation of food. However, its use was not limited to food preservation and other culinary purposes; salt was also an industrial product used in the leather tanning and textile industries, as well as in the preparation of cosmetic and pharmaceutical products. It was also indispensable to the production of livestock feed and other agricultural practices, including the production of fertilizer.

## VENETIAN SALTWORKS

The salt housed in the medieval storehouses was in part sourced from the Venice Lagoon, but the majority came from other territories controlled by the Venetian Republic: from the salt pans of Chioggia (the closest), to those situated around the Po estuary (Comacchio and Cervia) and in more distant locations along the shores of the Adriatic and Mediterranean, where Venice traded in abundance. In fact, it was often cheaper to transport large quantities of salt from afar, as it was also be used as ballast to stabilize ships carrying large volumes of lightweight products, such as fabric, in an ingenious arrangement designed to profit from having to carry ballast. There are numerous documents describing the many saltworks that were active around the lagoons of Venice at that time, especially between the tenth and fourteenth centuries.



Sources tell us of the embankments in which they were contained and the salt “foundations,” namely lagoon areas located near the coast, where seawater would be allowed to enter and the salt would be extracted from it by means of a drying and draining process. We know that the saltworks largely belonged either to the state itself or to monastic institutes, and were rented out and operated by private subjects. In short, salt remained a matter of public jurisdiction. Ancient maps provide us with a glimpse back to the Middle Ages, when the semi-lagoon environment came to experience a gradual decline in the salinity of its water. Indeed, the quality and quantity of salt produced around Venice progressively decreased to the extent that all local production sites were abandoned, with the population relying instead on those located further south, or overseas.

## THE LAGOON AND SALT: A VERY SPECIAL ENVIRONMENT

The history of salt production in Venice is clearly linked to the lagoon environment. In ancient times, before the rivers that once flowed through the city were diverted, the low volume of water in the basin surrounding the city of Venice was characterized by medium or hybrid salinity, regulated by both the incoming supply of seawater and the fresh water that flowed in from rivers. It was this particular kind of salinity—considered to



be ideal—that Vitruvius described when writing about Altinum, an ancient Roman city founded near the lagoons. The sea salt ensured that the waters were good for people’s health, while the variability of the fresh water simultaneously increased the biodiversity of living organisms (both fish and plant species), making the lagoon a unique habitat.

If in marshes walls are laid out, and these marshes are along the sea, and they look towards the north or between the north and east, and these marshes are higher than the sea coast, they will seem to be reasonably laid out. For if dykes are cut, there is made an outlet of water to the beach; and when the sea is swollen by storms, there is an overflow into the marshes, which being stirred and moved about and mixed with sea salt, does not permit the various kind of marsh creatures to be born there: moreover, those which, by swimming from higher parts, arrive near the coast, are killed by the unfamiliar saltiness. An instance of this may be found in the Gallic marshes which are round Altinum, Ravenna, Aquileia and other townships in like places which are nearest the marshes. For owing to these causes, they have an incredible salubrity.<sup>1</sup>

There was a higher salt content in the waters near what are now the entrances to the port, that is, close to the shores, and this is what dictated the



precise location of the saltworks in ancient times. We can reconstruct how, throughout the Middle Ages, the major salt processing hubs were located in the southern lagoon near Chioggia, and the northern lagoon toward the present-day town of Jesolo. Recently, however, archaeological research into the waters around Murano, Burano, Torcello, and Lio Piccolo has led to the rewriting of the history of the northern lagoon. It seems that the genesis of the saltworks in this area, in very ancient times (around the first century CE), may line up with the history of Venice's origins.

## VENICE, BORN OF THE SALT PANS?

First of all, we must forget the notion that lagoon settlements predominantly developed following the barbarian invasions and the resulting migration of ancient Romans toward the coastal islands. This myth, which developed in the Venetian Republic to explain the complex phenomena surrounding the emergence of settlements in the areas around Venice, does not take into account any environmental transformations, about which history rarely has

<sup>1</sup> “Quando si vorrà costruire un abitato nelle lagune, dove queste siano in prossimità del mare aperto. [...] Infatti, scavando dei canali le acque lagunari avranno modo di giungere ai lidi, ed inoltre dal mare, gonfiato dalla tempesta entrerà nelle lagune una così grande massa di acqua salata da impedire la nascita di bestie palustri, mentre le altre, provenienti a nuoto nelle zone più alte avvicinate ai lidi moriranno per l'inconsueta salinità. Per queste caratteristiche si possono citare le lagune [...] che circondano Altino, Ravenna, Aquileia, [...] dove per tali ragioni si gode di incredibile salubrità” (Vitruvius, *On Architecture*, Book I, 4.11).



much to say.

Archaeological studies have confirmed that the areas around Lio Piccolo and Torcello were rather busy in ancient times. These were not empty or abandoned places, but constituted the ports and coastal maritime infrastructure serving Roman settlements further inland, namely Altinum and Patavium (now Padua). They were not, therefore, uninhabited spaces in which to take refuge, but instead areas of activity in which to produce.

#### PRODUCE WHAT EXACTLY?

The productive activities, namely fishing and salt processing, took advantage of the lagoon water. Based on Roman sources and the names inscribed on the funerary monuments left by the ancient inhabitants of Altinum, historians of yesteryear had already hypothesized that many of them were involved in fishing and salt production. However, it was still not clear where these saltworks might have been located. Beginning in the 1990s, thanks to discoveries made by archaeologist Ernesto Canal and later research carried out by the Superintendence of Archeology, Fine Arts and Landscape for the City of Venice and Lagoon, an incredible number of submerged sites with peculiar structures have been uncovered. They are “embankments,” almost always made up of a double row of wooden poles planted in the mud, which were filled with clay matte (especially semi-



whole amphorae), bricks, fragments of limestone, and fragments of tiles. The whole thing was then covered in clay. Hundreds of fragments of these banks have been discovered to date, leading to the recovery of hundreds of thousands of fragments of amphorae.

## WHY SO MANY AMPHORAE?

We must remember that in Roman times the amphora was the container of choice for almost all sea transport. Foodstuffs from all over the Mediterranean were transported in these objects. A large city with many inhabitants like Altinum would produce an incredible quantity of amphorae, which would then become waste once emptied of their contents. Somehow or other they had to be disposed of, and a good system was to use them in these embankment structures as material to compact the terrain.

## EMBANKMENTS?

The first structures identified through archaeological research were originally understood to have been road embankments, namely infrastructure for moving around the lagoon or for towing. However, with subsequent discoveries, considering the number of these structures and their various orientations, we now know that they are actually fragments of a vast network of structures that served to create bodies



of water, each one separated from the next. They created bodies of water that could be used as fishing grounds, rectangular bodies of water in which it was possible to “cultivate” the lagoon, and bodies of water for salt marshes. As is still the case today in the modern saltworks of the eastern Adriatic, the lagoon mud was flattened with rollers and cultivated using special algae to make it smooth and ideal for separating the clay from the sodium chloride. The embankments constituted the contours of large salt pans, and must have also contained smaller dividers made of clay and mud to be used as water drainage channels. The saltwater would flow into these salt pans, and by opening sluices when the tide rose, the flow was then expertly guided along through gently sloping pools to allow the water to evaporate in the sun, leaving behind the salt to be collected.

#### HOW OLD ARE THE SALT FLATS?

The archaeological structures, which almost all date back to between the first and third centuries CE, probably belonged to large public or semi-public organizations that worked the coastal territory, their management being entrusted to imperial officials, sometimes even former imperial army soldiers. These organizations were often based in villas (in this case seafront villas), from which the management of imperial state-owned assets, including the coasts, had been overseen



since Roman times. Large businesses produced salt and farmed fish in fishponds, but there were also businesses which managed coastal assets such as forests and coastal woodlands. The wealthy managers of these villas must have been assisted by numerous groups of workers—or enslaved people, to be precise—who resided there either throughout the year or on a seasonal basis. It was these workers who knew the exact procedures for extracting the white gold from the lagoon water, who operated so easily in such a unique environment, and who hardly walked—preferring small boats instead—or stood with their feet in the water while working. These workers had a deep knowledge of the environment in which they worked.

## LAGOON WORKERS

It is no coincidence that one of the most vivid surviving historical accounts of this territory in ancient times is in fact the description of Venetian industry penned by Cassiodorus, who served in the administration of Gothic Emperor Theodoric the Great in the sixth century and left us the following description of the environment and its inhabitants:

The inhabitants have one notion of plenty, that of gorging themselves with fish. Poverty therefore may associate itself with wealth on equal terms. One kind of food refreshes all;



the same sort of dwelling shelters all; no one can envy his neighbor's home; and living in this moderate style they escape that vice [of envy] to which all the rest of the world is liable. Your whole attention is concentrated on your salt-works. Instead of driving the plough or wielding the sickle, you roll your cylinders. Thence arises your whole crop, when you find in them that product which you have not manufactured. There it may be said is your subsistence-money coined. Of this art of yours every wave is a bondservant. In the quest for gold a man may be lukewarm: but salt every one desires to find; and deservedly so, since to it every kind of meat owes its savor.<sup>2</sup>

## THE SALT WARS

Cassiodorus's description is somewhat idyllic and would suggest that the Venetians lived in peace with their environment, so it may be no coincidence that the nascent Venice was more

<sup>2</sup> “Dunque vi è una sola cosa in abbondanza per gli abitanti, che si saziano di soli pesci. Lì la povertà convive con la ricchezza allo stesso modo. Un unico cibo sfama tutti, case simili ospitano tutti. Non conoscono invidia per la casa e in questo modo chi ha meno evita il vizio al quale si sa che il mondo è soggetto. [...] Tutto il vostro impegno è rivolto alla produzione del sale: fate girare i rulli al posto dell'aratro e delle falci: da qui nasce ogni vostro guadagno dal momento che in ciò possedete anche le cose che non avete. Lì in qualche modo viene coniata una moneta che vi permette di vivere. Ogni flutto è al servizio della vostra arte. Qualcuno forse può non cercare l'oro, ma non c'è nessuno che non desideri avere il sale e giustamente, dal momento che ogni cibo che ha buon sapore lo deve a questo.” (*The Letters of Cassiodorus*, trans. by Thomas Hodgkin, Letter XII, 518)



concerned with trading than with waging war. There was one place, however, in which the Venetians would be subject to belligerence: Comacchio. The wars of 881 and 932 (Giovanni Diacono III, 28 and 44) were characterized by a certain saltiness, and seem to have been motivated by a (successful) attempt by the Venetians to gain control and establish a monopoly over Comacchio's trade with the Po Valley, which of course included the fundamental salt trade. In 881, the Venetian doge Giovanni attempted, through diplomatic channels, to take control over the Comacchio committee by sending a formal request to Pope Adrian III. The request was denied and war ensued, culminating in 932 when the settlement on the mouth of the Po was destroyed and set ablaze. According to the great historian Frederic Lane, the Venetian victory over Comacchio marked a turning point in the economic policy of the lagoon—gaining control over all commercial space in the upper Adriatic region, including the essential salt trade along the Po, would allow Venice to become the “queen” of the Mediterranean. Comacchio, on the other hand, would face a history of progressive decline during the Middle Ages, which would put it at risk of being memorable only for its “slippery customers.”



## SALT WORKERS AND FISHERMEN: MEN WHO KNEW HOW TO LIVE ON WATER

The groups of people described by Cassiodorus, namely the workers who resided in the lagoon, were an essential factor in the formation of the lagoon settlement. They knew how to operate within an ever-changing environment. They knew how to exploit water resources. They built both small boats and large ships. They fished. They produced salt. And their technological expertise would prove indispensable when, between the sixth and seventh centuries CE, the inhabitants of Altinum were gradually forced to look for new locations in which they could build a port for the city. In fact, the ancient port, the Roman port within the lagoon, was no longer functional due to environmental change, with the accumulation of debris and the diversion of rivers. The ancient port had now been filled in and the high waters, namely the deeper channels suitable for navigation, were to be found around the islands close to the shore. Thus, the late ancient and early medieval port of Torcello was born, followed a few centuries later by another early medieval port that emerged on the banks of a deep channel in an area known at the time as Rivoaltus. Such ports were highly desired by the local authorities such as the bishops, the monasteries, and the dukes of the nascent Venice. But who would be capable of building such infrastructure? Perhaps that group of people, the descendants of those who previously, when they were enslaved, cultivated



the lagoon for fish and salt.

### Short bibliography

Marianna Bressan, Diego Calaón, and Daniela Cottica, “Vivere D’acqua Archeologie Tra Lio Piccolo E Altino,” *Quaderni del Polo Museale del Veneto*, vol. 3 (Venice: Antiga Edizioni, 2019).

Diego Calaón, “Ecologia della Venetia Prima di Venezia: Uomini, Acqua e Archeologia,” *HORTUS ARTIUM MEDIEVALIUM. Journal of the International Research Center for Late Antiquity and Middle Ages*, vol. 20, no. 2 (2014): 804–16.

Diego Calaón and Daniela Cottica, “Tutta un’altra Storia? Spazi e funzioni tra Altino e il litorale in Epoca Antica,” *Archeologi nelle Terre di Bonifica. Paesaggi Stratificati e Antichi Sistemi da Riscoprire e Valorizzare*, eds. M. S. Busana, E. Novello, and A. Vacilotto (Padua: Cleup, 2020), 35–62.

Giovanni Caniato, Eugenio Turri, and Michele Zanetti, *La Laguna Di Venezia* (Verona: CIERRE, 1995).

Jean Claude Hocquet, *Le Saline dei Veneziani e la Crisi del Tramonto del Medioevo* (Rome: Il Veltro, 2003).

Frederic C. Lane, *Venice: A Maritime Republic* (Baltimore: Johns Hopkins University Press, 1973).





TOXICITY

---



# TOXICITY IS COMMUNAL

## CAMILA MARAMBIO

---

Belly burning,  
bile rising,  
blistered mouth.

We don't want any more of that.

No upset stomach,  
no pesticides, glyphosates, or phthalates,  
no more death.

Consider toxicity a quality that invites counteraction.  
Map the flows within and outside your body,  
see yourself enveloped in chains of commerce and  
extractivism

that can be altered.

If we choose less,

learning from our mistakes,

and eat wildly, *orando*, knowing we are always eating  
with others,

commensality could become a remedy to toxicity in and  
around us.

To turn from eating food that harms  
is a radical act of kindness.

*A conocimiento.*

Constant biochemical information  
seeps into your consciousness.

Wade through it,

not with avoidance,

but with curiosity.

Your body, a laboratory.



How does an artichoke interact with your liver?

A microscopic purge of the irascibility, of clouded judgment, and of the melancholia pent up inside your organ is suddenly let loose by cynarine. To notice may require persistence, *gusto* even.

*La Purga* is an ancient art, not to be taken lightly. Performed by those early food knowledge-holders, *curanderas* and *cocineras*, who sing to seeds, speak to the trees and shower the Earth with flattery.

Food is culture, *mi plantita*.

Living culture.

*Agriculture*.

How then do we decolonize our palates?

If to eat is to join ourselves *with* the world, we ingest our own doing.

Since our world is sickened by our greed, our self-serving attitudes, and perhaps most of all by our reluctance to spend time learning the languages of the nonhuman, we ingest our ignorance.

Let us not assume that everything is edible or ours to consume at will.

Let us learn how to transform certain elements from harming to healing, by roasting, stewing, pickling, poaching. Pause, observe, listen, measure (yourself).



A medicinal appetizer.

A bitter leaf,

a tongue-numbing flower,

a shellfish exposed to effluents of our own doing,

a fungal bloom,

mold.

Bless this table, we eat together, all of us.



*Quando i marinai greci stimavano che la stagione buona per navigare al largo cominciava, la foglia novella del fico era grande come l'impronta lasciata per terra da una  
a.*

## TOXIC SALAD

Marco Bravetti

» Serves four

*Frutti dell'albicocco selvatico (*Prunus dulcis*), dal quale è  
amara, le cui mandorle contengono l'acido cianidrico.  
L'albicocca dolce viene invece prodotta dal *Prunus armeniaca*.*



# INGREDIENTS

---

Bitter almond milk

Parsley oil

Elderflowers

Young fig leaves

Hyssop

Salt marsh wormwood

Marine Inula

Sea fennel flowers

Flowers and leaves of a  
paracress

Malabar spinach

Tagetes (Marigold)

Orange lemon balm

Vietnamese cilantro



*Il migliore assenzio sembra essere quello del Ponto, che è di foglie e fiori più piccoli degli altri assenzi e, nell'odore, non abominabile come quelli, ma piuttosto alquanto aromatico. Giova per lo stomaco freddo, fa bene al fegato occluso, mette appetito e uccide i vermi.*

*anonimo, fine del XIV° secolo*

*Ai tempi di Eriodo i marinai greci stimavano che la stagione buona per navigare al largo cominciava quando la foglia novella del fico era grande come l'impronta lasciata per terra da una cornacchia.*



## RECIPE

---

- FOR THE BITTER ALMOND MILK -

- » Soak 200 g almonds and 50 g bitter almonds overnight in 1/2 liter of water.
- » The next day, drain and blend with another 1/2 liter of water, then strain.

- FOR THE PARSLEY OIL -

- » Blend equal weight of seed oil and parsley leaves, washed and dried.
- » Leave to infuse for 24 hours in an airtight container.
- » Strain through a fine sieve.



## PLATING

---

- » Assemble the salad of leaves and edible flowers and dress with the bitter almond milk and parsley oil.

*Frutti dell'albicocco selvatico (Prunus dulcis), dal quale è stata selezionata, da secoli, una varietà amara, le cui mandorle contengono l'acido cianidrico.  
L'albicocca dolce viene invece prodotta dal Prunus armeniaca, da cui il termine veneziano di "armelìn".*





# TO INGEST THE SUBMERGED

## LODOVICA GUARNIERI

---

### I. WETNESS

It is a hot summer afternoon in Venice. Humidity dampens the air, the trees, the buildings' facades. I bury my feet in the fresh mud of the Lagoon,<sup>1</sup> spreading my toes, watching the dark brown sand as it moves underwater, clouds of grains slowly settling on my skin. I close my eyes, recording the encounter of my body with the slimy and watery environment. Other feet extend below mine. Clams move their shells, their valves opening and closing. The tiniest watery changes transition the toxicity stored in sediments from dormant to activated,<sup>2</sup> creating a mixture that returns pollutants to the environment and the bodies within it. Enmeshed in wet relations, the clams and I are embroiled in non-consensual entanglements with the toxic legacy of a state-imposed industrial project.

The Venice Lagoon is the biggest humid area in

<sup>1</sup> The use of the capital letter when I refer to the Lagoon comes from the work of two thinkers that have influenced the development of my argument. First, the capital letter recognizes the Lagoon of Venice as a specific geographic location, as Venetian archaeologist and activist Lidia Fersuoch reminded me. Second, it attends to the specific and place-based relations that make up the Lagoon as an environmental, social, and temporal entity, as I learned from Indigenous thinker and scientist Max Liboiron.

<sup>2</sup> Sarah Pizzini, Elisa Morabito, Elena Gregoris, Marco Vecchiato, Fabiana Corami, Rossano Piazza, and Andrea Gambaro, "Occurrence and source apportionment of organic pollutants in deep sediment cores of the Venice Lagoon," *Marine Pollution Bulletin*, vol. 164 (2021).



the Mediterranean and, with the constellation of deltas, lagoons, and marshlands that punctuate the north-east coast of Italy, it forms part of one of Europe's largest wetlands. Stretched along these bodies of water is also the area called the "Quadrilateral of Chemistry," one of Italy's principal petrochemical complexes built around oil refining and the processing of its waste.<sup>3</sup> Since the 1950s, pipelines have run through the slushy soil of reclaimed land, distributing across multiple industrial sites the refined oil and methane pushed from Porto Marghera, Venice's petrochemical site. There, until the early 2000s, oil cracking, chlorine and polyvinyl chloride production cycles, and other chemical processes gave birth to countless products that defined the encounter between petrocapi-talism and the Italian nation-state. Some were introduced in the countryside in the form of fertilizers used by farmers, or accessed the home as plastic utensils for cooking, cleaning, and bonding the nuclear family. Others infiltrated the human and more-than-human bodies, soil, and water of the Lagoon as toxic chemical pollutants, causing one of the worst environmental and social crimes in the history of modern Italy.<sup>4</sup>

Although nowadays much of the industrial activity has been decommissioned, with processes ceased and smokestacks extinguished,

<sup>3</sup> Diego Marazza, "Il Quadrilatero Della Chimica in Pianura Padana," *Ecoscienza*, vol. 4 (2016): 56–57, [online here](#).



the industrial exuberance of the last century remains present in an inescapable toxicity that saturates the Lagoon's bodies and ecologies. Polychlorinated biphenyls (PCBs), dioxins, furans, and countless other industrially produced chemicals lie dormant in the Lagoon's beings, extending the oil frenzy of the past into the present.

PCBs, dioxins, and furans are part of a group of industrially produced toxic chemicals named Persistent Organic Pollutants (POPs). These enter the environment as a result of a variety of industrial production processes and combustions, through the use of pesticides, and via slow release from a wide range of consumer products. Carcinogens and endocrine disruptors, POPs affect the hormone systems impacting fertility, reproduction, and eventually, fetal development.<sup>5</sup> For this reason, POPs differ from other industrial

<sup>4</sup> For reason of space, I could not expand on the history of Porto Marghera and specifically the trial (1998–2004) that cited Montedison, Enichem, and Edisonas—the three “giants” of Italy’s chemical industry—as responsible for 157 deaths from cancer and 103 cases of cancer among the workers in the CVM (vinyl chloride monomer) departments of the “Petrolchimico.” Further reading on the trial: Gianfranco Bettin, Maurizio Dianese, *Petrolkiller* (Milan: Feltrinelli Editore, 2002); Felice Casson, *La Fabbrica Dei Veleni* (Milan: Sperling & Kupfer, 2007); “I Veleni Di Porto Marghera,” *Galileo* (June 18, 1998), [online here](#).

<sup>5</sup> “Specific effects of POPs can include cancer, allergies and hypersensitivity, damage to the central and peripheral nervous systems, reproductive disorders, and disruption of the immune system. Some POPs are also considered to be endocrine disruptors, which, by altering the hormonal system, can damage the reproductive and immune systems of exposed individuals as well as their offspring; they can also have developmental and carcinogenic effects.” Stockholm Convention on Persistent Organic Pollutants Website, “The POPs,” n.d., [online here](#).



chemicals. They remain latent in the environment and in bodies for long periods of time, where even low levels of contamination prolong and distribute their toxicity slowly across multiple geographies and generations. POPs travel through air and humidity to regions far from any major source,<sup>6</sup> becoming part of the environment as they deposit in sediments, glaciers, and soil. “From there, they enter the food system, materializing symptoms indirectly, belatedly, and remotely across time and species. They persist through phase changes, mutating over time and in body fat. They concentrate, they multiply.”<sup>7</sup> They magnify as a predator eats polluted prey or a cow eats contaminated grass and is in turn eaten.<sup>8</sup> Or when a child is nourished with the contaminated milk of their mother. Embodied in the tissues of every living being on the planet,<sup>9</sup> POPs substantiate not only the conditions of

<sup>6</sup> “POPs concentrate in living organisms through another process called bioaccumulation. Fish, predatory birds, mammals, and humans are high up in the food chain and so absorb the greatest concentrations. When they travel, the POPs travel with them. As a result of these two processes, POPs can be found in people and animals living in regions such as the Arctic, thousands of kilometers from any major POPs source.” Ibid.

<sup>7</sup> Lodovica Guarnieri with Leigh H. Brown, “When I Breathe, I Swallow the Lagoon,” commissioned by TBA21–Academy with the support of S+T+ARTS, June 2021.

<sup>8</sup> As a result of releases to the environment over the past several decades due especially to human activities, POPs are now widely distributed over large regions (including those where POPs have never been used) and can be found around the globe. This extensive contamination of environmental media and living organisms includes many foodstuffs and has resulted in the sustained exposure of many species, including humans, for periods of time that span generations, resulting in both acute and chronic toxic effects. See Stockholm Convention on Persistent Organic Pollutants Website, “The POPs.”



living in a pervasively polluted world,<sup>10</sup> but also, as the latency of their toxicity extends harm intergenerationally, they bound the future in an inescapable condition of alteration.

The extent of POPs' presence in the Venice Lagoon began to emerge in the 1980s, when millions of cubic meters of contaminated sediments were identified, distributed across 1000 hectares of Lagoon bed. To these were added the daily cubic meters of polluted water being spilled into industrial canals, the tons of industrial pollutants released into the air by industries, and those that leaked from illegal industrial landfills.<sup>11</sup> Used as the dumping ground for petrochemical industrial waste since the 1950s,<sup>12</sup> the Lagoon accumulated different concentrations of POPs, which in turn contaminated all its emerged and submerged inhabitants. A series of toxicological analyses concluded that POPs were in the blood and breast milk of Venetians, with higher levels among those who regularly eat fish,<sup>13</sup> while Lagoon fish and bivalves had POPs in their fat

<sup>9</sup> Stockholm Convention on Persistent Organic Pollutants. "Global Monitoring Report under the Global Monitoring Plan for Effectiveness Evaluation," n.d., [online here](#).

<sup>10</sup> Reena Shadaan and Michelle Murphy, "EDC's as Industrial Chemicals and Settler Colonial Structures," *Catalyst: Feminism, Theory, Technoscience*, vol. 6, no. 1 (2020), [online here](#).

<sup>11</sup> Stefano Ciafani and Giorgio Zampetti, eds., "La Chimera Delle Bonifiche. L'urgenza Del Risanamento Ambientale in Italia, I Ritardi Del Programma Nazionale E Le Proposte Di Legambiente," *Yumpo* (Rome: Legambiente, 2005), [online here](#).

<sup>12</sup> Piero Bevilacqua, *Venezia E Le Acque : Una Metafora Planetari* (Rome: Donzelli, 2000).



tissues and blood, with higher concentrations for those living in proximity to the industrial discharges. By simply dwelling in the Lagoon bed, shaking its sediments to find refuge, look for prey, or transit, clams, fish, and algae have been constantly activating the toxicity of POPs, their valves and tissues regularly exposed to the low and slow violence of these contaminants.

Although food webs emerged as the main means of contamination, chemical exposure to POPs has also been unavoidably connected to common daily actions.<sup>14</sup> Stretching one's toes in the soft sand of the Lagoon bed, or moving one's hands inside the sediments harvesting for valves are only some of the gestures that continuously activate the latent toxicity of POPs. By distributing through the Lagoon and its relations, including food relations, POPs have been binding bodies and environments to contamination, embroiling future generations in non-consensual entanglements with their toxic afterlife.

## II. TOXICITY AS STRUCTURE

Because of their interspecies and trans-

<sup>13</sup> Stefano Guerzoni and Stefano Raccanelli, eds., *La Laguna Ferita. Uno Sguardo Alla Diossina E Agli Altri Inquinanti Organici Persistenti (POP) a Venezia* (Venice: Libreria Editrice Cafoscarina, 2003). See also Roberta Brunetti, "Diossine, Pesce Di Laguna Più Pericoloso Del Petrolchimico," *Il Gazzettino Di Venezia* (March 18, 2008), [online here](#).

<sup>14</sup> Pizzini et al., "Occurrence and source apportionment of organic pollutants."



generational damage, POPs should not be understood as an unintended outcome of the oil industry but as an ongoing enactment of “structural violence in an unevenly polluted world.”<sup>15</sup> In this regime, communities living close to petrochemical sites are bound to non-consensual relations to harmful processes that compromise the conditions for their future survival. As Indigenous scholar and scientist Max Liboiron contends, pollution should not be considered an environmental damage but rather the ongoing enactment of colonialism, petrocapiatalism, and extractive capitalism. Understood as a “set of specific, structured, interlocking, and overlapping relations”<sup>16</sup> to Land,<sup>17</sup> these regimes allow the transformation of specific socio-ecological horizons into the sinks for the toxic sludge of extraction. “Pollution”, Liboiron states “*is colonialism*”<sup>18</sup> (emphasis added) because it disrupts the relations through

<sup>15</sup> Shadaan and Murphy, “Endocrine Disrupting Chemicals (EDCs) as Industrial and Settler Colonial Structures.” See also: “Environmental justice praxis identifies the systems and processes that render some life polluted, and therefore expendable - or conversely, some life as expendable, and therefore, pollutable [...] we call for a conceptualization of EDCs not merely as a class of chemicals, but as a structural relation of violence that manifests the intergenerational, Land-based, and targeted violences of settler colonialism, racial capitalism, heteropatriarchy, and fossil fuel extraction. As Liboiron, Tironi, and Calvillo (2018) assert, “Structures define toxicity.” Shadaan and Murphy, “Endocrine Disrupting Chemicals (EDCs) as Industrial and Settler Colonial Structures.”

<sup>16</sup> Max Liboiron, *Pollution Is Colonialism* (Durham and London: Duke University Press, 2011).

<sup>17</sup> The use of the capital letter follows Liboiron’s addressing of Land as an entity considered in all its relations and not just as a territory.

<sup>18</sup> Liboiron, *Pollution Is Colonialism*.



which Land reproduces itself in the inseparability of food, humans, nonhumans, water, soil, air, ancestors, and futures.

To think about the Lagoon's contamination through Liboiron's framework helps us recognize POPs not simply as a class of chemicals,<sup>19</sup> but rather as part of a set of relations that target water as a distributed being. The privatization of canals and portions of water; land reclamations; the expulsion of island dwellers to the mainland; the loss of saltmarshes; and the introduction of limitations on fishing are only some of the processes through which the Lagoon as an ecological, cultural, and labor habitat has been rendered expendable at the advantage of the ever-intensifying industrial use of its ecologies. The ongoing othering of water<sup>20</sup> that underlies these processes is entwined with making the Lagoon into a terra nullius dumping ground for waste<sup>21</sup> as it separates the emerged from the submerged, the fish from the human, the city from the water, suppressing the relations that the Lagoon distributes across these realms.

Environmental solutions to POPs contamination have also reproduced these processes. Using the Lagoon as a sink for waste, these strategies

<sup>19</sup> Shadaan and Murphy, "EDC's as Industrial Chemicals and Settler Colonial Structures."

<sup>20</sup> Ibid.

<sup>21</sup> Liboiron, *Pollution Is Colonialism*.



have been building the supposed “purity” of some lives on the annihilation of watery life-worlds.<sup>22</sup> The disposal of part of the contaminated sediments in dedicated islands and saltmarshes in the Lagoon, or the imposition of fishing bans in areas deemed too hazardous for humans is an ongoing disruption of the ability of communities to maintain obligations to food, fish, and waters.

The harm caused by POPs is thus not just a discrete chemical reaction affecting a single body. Rather, it extends the intergenerational<sup>23</sup> life-negating conditions of petrocapi-talism rooted in the suppression of the Lagoon’s amphibious life-worlds.<sup>24</sup>

### III. REPAIR

For practices of repair in the Venice Lagoon to not extend life-denying processes in the future, requires to radically reimagine individual and communal modes of existing in attendance to the pervasive and uneven toxic entanglements between human and nonhuman communities. Technoscience scholar Michelle Murphy

<sup>22</sup> “Dichiarazione Finale Del Relatore Speciale ONU Su Diritti Umani E Sostanze E Rifiuti Pericolosi.” ONU Italia. December 13, 2021. See also Ilaria Sesana 2022. “L’Italia Non è Stata in Grado Di Proteggere Le Persone Dalle Sostanze Tossiche.” *Altreconomia*, (September 21 2022), [online here](#).

<sup>23</sup> Shadaan and Murphy, “EDC’s as Industrial Chemicals and Settler Colonial Structures.”

<sup>24</sup> Clara Zanardi, *La Bonifica Umana. Venezia Dall’esodo al Turismo* (Milan: Edizioni Unicopli, 2020).



introduces the concept of alterlife to describe “the struggle to exist again but *differently* when already in the conflicted, damaging and deadly conditions” (emphasis added) of the oil industry.<sup>25</sup> Holding together “the tensions between violence and possibility, the organic and inorganic, body and land,” alterlife attends “to a potential for recomposition that exceeds the ongoing aftermath” of toxicity because it understands life as embroiled in the “indistinctions between infrastructures and ecologies”.<sup>26</sup> To understand—and accept—life as already altered allows to imagine its future possibilities to emerge from the web of relations that worlds the world.

To think about repair through Murphy’s concept of alterlife allows us to understand this practice as not only directed toward the individual body, but to the web of ecological, social, and infrastructural relations that life alters and is altered by, through, and with. As the life-negating conditions of petrocapiatalism are imposed on the Lagoon through an ongoing separation of land and water, any collective imagination of repair might begin with acknowledging and defending the amphibiousness of all Lagoon inhabitants and ecologies. Humans and fish, sediment and mussels, POPs and algae, “in all their phases and returns, are bound by water and infrastructure.

<sup>25</sup> Michelle Murphy, “Alterlife and Decolonial Chemical Relations,” *Cultural Anthropology*, vol. 32, no 4 (2017): 494–503, [online here](#).

<sup>26</sup> *Ibid.*



They are bound up in each other's possibility, flourishing, and destructions."<sup>27</sup> In these amphibious conditions, humans are part of the Lagoon, and since the 1950s, they have been part of POPs too.

Accepting the eerie condition of submergence is something to come to terms with. "However, this painful process is necessary to account for the damage. And it might be necessary also to become something else, to defend and persist in the ongoing aftermath"<sup>28</sup> of the petrochemical industry. In the case of food webs and their contamination, in their understanding through a submerged perspective, digestion emerges as a process through which one's body and future enmesh with the infrastructures, histories, and policies of the oil industry, as well as with water as a distributed being. When someone eats contaminated fish, the alterations of their cells and tissues are inseparable from those of the fish that has been caught, the sediments

<sup>27</sup> Ibid.

See also: "If there is to be multispecies ecojustice, [...] it is high time that feminists exercise leadership in imagination, theory, and action to unravel the ties of both genealogy and kin, and kin and species. [...] Kin making is making persons, not necessarily as individuals or as humans. [...] all earthlings are kin in the deepest sense, and it is past time to practice better care of kinds-as-assemblage (not species one at a time). Kin is an assembling sort of word. All critters share a common 'flesh,' laterally, semiotically, and genealogically. Ancestors turn out to be very interesting strangers; kin are unfamiliar (outside of what we thought was family of gens), uncanny, haunting, active." Donna Haraway, *Staying with the Trouble: Making Kin in the Chthulucene* (Durham and London: Duke University Press, 2016), 102–103.

<sup>28</sup> Guarnieri with Brown, "When I Breathe, I Swallow the Lagoon."



where they have taken refuge, and the Lagoon they have breathed and digested. Nourishment enfleshes one's body in the "uneven relations and infrastructures that shape what forms of life are supported to persist, thrive, and alter, and what forms of life are destroyed, injured, and constrained."<sup>29</sup>

To rethink food politics from the inescapable conditions of submergence and the alteration it brings would establish practices of care by which amphibious worlds reemerge, persist, and redistribute in the future rather than being suppressed. This condition would allow communities to honor their obligations to water, fish, mussels, and other humans while defending the amphibious "collective conditions that sustain life and endurance over time in the midst of life-denying structures."<sup>30</sup> As food webs are the means through which specific life-worlds are redistributed into the future—or, conversely, are prohibited from reproducing—our food habits acquire the ability to compose, decompose, and recompose humid geographies. Eating becomes a practice of imagination and care for other worlds, both "those that exist precariously now and those we need to bring into being [...] for still possible recuperating pasts, presents and futures."<sup>31</sup>

<sup>29</sup> Michelle Murphy, "Against Population, Towards Alterlife," *Making Kin Not Population*, eds. Adele Clarke and Donna Haraway (Chicago: Prickly Paradigm Press, 2018), 101–124.

<sup>30</sup> *Ibid.*

<sup>31</sup> Donna Haraway, *Staying with the Trouble*, (Durham: Duke University Press, 2016), 50.



“Observe the liquid soil, the submergence of islands, the collapse of the past and into the future in a continuous present.”<sup>32</sup> You are submerged. Digesting a mollusk turns your lungs into their valves. “Your own viscous body is enfleshed with water as a distributed being, and with the toxicity that this distribution brings.”<sup>33</sup> Taste salt, your tongue becoming the soft bed beneath your feet. Reengage with your infinite in-humanity, opening you up to the countless possibilities of living and dying differently on this damaged earth. Swallow, to reinvent new practices of imagination resistance, revolt, reparation and mourning.<sup>34</sup> You are flooded with these many worlds.

<sup>32</sup> Guarnieri with Brown, “When I Breathe, I Swallow the Lagoon.”

<sup>33</sup> Ibid.

<sup>34</sup> Haraway, *Staying with the Trouble*.





"INVASIVE SPECIES"

---



# FROM INVADING TO ROOTING?

ANNA PERDIBON

---

At the third dinner of Convivial Tables, we sat around the table with a bundle of questions about invasive species: What makes a species local, indigenous, alien, invasive, naturalized, or imported to a specific ecology? How do species, including humans, root in places they are not originally from? With the end of the summer being the season when fishing stops, the chef and I decided to take on a journey with (mainly) plant stories, focusing on their migration and rooting in different ecologies.

While eating a dish of nixtamalized tomatoes with wakame salad, we reflected about wakame being one of the main "invasive species," over-populating polluted areas of the lagoon and suffocating the local flora. While, reminding us about the colonial history that brought tomatoes—together with a plenty of botanical beings—from the Americas, we considered the meaning of becoming "naturalized" to local ecologies.

Along this journey, we turned to those humble and tenacious, perseverant spontaneous plants that kept living for centuries in the lagoon, at the edges, and often regarded as "weeds"—invading plants to be eradicated. By telling and listening to old and new stories of mugwort, *Salsola soda*, goosefoots, and blackberries, we tried to reconnect to the tidal and seasonal time of the lagoon, to re-attune to the specific ecology of a constantly changing place.



"WHAT IS THE MOST DELICIOUS WAY TO FIGHT AGAINST ALIEN SPECIES? LET'S EAT THEM!"

*Modo di cuocere li pomi d'oro. Que  
sequente: piglia li detti pomi, tagliali in pe  
farai soffriggere col rivoltarli spesso e s  
Francesco Gaudentio, cuoco*

## NIXTAMALIZED TOMATOES WITH WAKAME SALAD

Silvia Rozas and Marco Zambon

---

» Serves four

» Preparation time: 27 hours

*...o. Questi frutti sono quasi simili alle mele, si coltivano nei giardini e si cuociono nel modo  
...iali in pezzetti, mettili in tegame con olio, pepe, sale, aglio trito e mentuccia di campagna. Li  
...o e se ci vorrai aggiungere un poco di molignane tenere, ci faranno bene.  
...tio, cuoco toscano, 1795*

*Pomi d'oro, pomodoro o pomi d'amore so  
ad una cipolla o mela, di colore ro  
Dizionario del dialetto veneziano o*





# INGREDIENTS

- FOR THE TOMATOES -

- 4 big tomatoes
- 20 g calcium oxide
- 7 liters water
- 400 g sugar

- FOR THE MOUSSE -

- 400 g cherry tomatoes
- 100 g cream
- 250 g mayonnaise
- 1 egg yolk
- 35 g Grana Padano miso

- FOR THE WAKAME SALAD -

- 120 g fresh wakame seaweed
- 20 g salicornia
- 25 ml oil
- 12 ml sesame oil
- 25 ml soy sauce
- 50 ml rice vinegar
- 12 ml honey
- 1 clove garlic
- 10 g ginger



*Moodo di cuocere le pome d'oro. Questi frutte sono quax simili alle mele, si coltivano nei giardini e si cuociono nel modo seguente: piglia le dette pome, tagliale in pezzetti, mettili in tegame con olio, pepe, sale, aglio trito e mentuccia di campagna. Li farai soffriggere col rivollarli spesso e se ci vorrai aggiungere un poco di melignane tenere, ci faranno bene.*  
Francesco Gaudenzio, cuoco torinese, 1795

*Pomi d'oro, pomidoro o pome d'amore sono una sorta d'ortaglia di sapore acidulo, che produce un frutto simile ad una cipolla o mela, di colore rosso o ranciato.*  
Dizionario del dialetto veneziano di Giuseppe Boerio, Venezia 1829

*In laguna veneta le piante di salicornia (S. veneta, S. fruticosa, S. europea, S. soda, S. kali) si conoscono col generico nome di "zòscani".*



## RECIPE

---

- FOR THE TOMATOES -

- » Wash tomatoes.
- » Make a cross-shaped cut in the skin of the tomatoes and blanch them in boiling water. Put them in a container with iced water and remove the skins carefully. Pour 5 liters of mineral water to a container and add the calcium oxide (it's important to add calcium oxide into the water, not the other way around, or it can cause an immediate rise in temperature). Add the tomatoes and leave them for three hours, stirring the water every half an hour as calcium oxide tends to precipitate to the bottom.
- » Put the remaining 2 liters of water with the sugar in a pot and bring to a boil. Add tomatoes, turn the heat to a minimum and cook for another three hours.
- » Cut the tomatoes just under the stalk so that they can be emptied. Remove the seeds and pulp, taking care not to break the flesh.
- » After this time, place the tomatoes on a perforated baking sheet and leave them to dry for 24 hours at 70 degrees.





- FOR THE MOUSSE -

- » Place the cherry tomatoes in a very hot pan with a little bit of oil until they acquire a delicious brown-to-black color. Lower the heat and cover. Let them cook for 10 minutes until they are soft. Transfer to a blender, add the rest of the ingredients, and blend. Strain through a sieve and fill a big siphon. Close and charge twice. Let rest for at least four hours.

*L'Undaria pinnatifida è un'alga bruna originaria dal Giappone, presente nella laguna veneta dal 1992, dove ha il suo massimo sviluppo ancorata alle strutture solide lungo le rive urbane, nei soli mesi tardo-invernali-primaverili. Per i pescatori è solo una delle varie alghe "foreste" arrivate negli ultimi tempi, prive di un nome particolare, mentre i più competenti conoscono il termine giapponese "wakame".*

- FOR THE WAKAME SALAD -

- » For the dressing mix all the ingredients except the wakame and salicornia. Season the wakame and salicornia salad at least 30 minutes before serving so it soaks up all the flavors of the condiment.

## PLATING

- » Heat the siphon in a water bath at 50 degrees.
- » Place the salad at the bottom of the plate.
- » Open the tomatoes and fill them with the mousse.
- » Finish with a drizzle of good quality olive oil and it is ready to serve.





# LET THEM EAT (BLUE) CRAB

L. SASHA GORA

---

Dinner often begins with a question. “What to eat?” you ask yourself. Or you scale it up by posing it to others, sounding your appetite as part of a choir. But a different type of question directs this dinner. A different chorus. First come a *spritz* of Sant’ Erasmo’s purple artichoke discards mixed with artemisia and orange, lemon and clove, and a *cichetto* of fig and blue crab. Then come the questions: “What does ‘traditional’ signify when speaking of a place?” If Venice and its lagoon are a crossroad, who decides what belongs?

The first day of September, Ocean Space became a dining hall where chef Silvia Rozas and anthropologist Anna Perdibon served an “Invasive Species” meal. Each dish ended with a question that loitered on the tongue.

Just as culture translates flora and fauna into food, words mediate between experiences and the labels we stick to them like post-it notes. But I’ve been unsure about how to translate these “invasive species” tastes into text, about where to begin. My first attempt was on land, in my office in Germany. My second was in the air, en route to the country that issued my passport—the lands now called Canada. Above the ocean is as good a place as any, I reckoned, to commit words to concept, to craft a text that reckons with

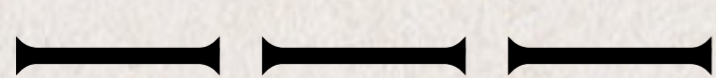


the (culinary) politics of what and who belongs where. My third attempt is now on São Miguel, an island in the middle of the Atlantic, on land that never denies the importance of water. And water leads me back to Venice.

Anna calls the *spritz e cichetto* “an impossible starter” that tries to pin down Venice’s ecology. Where does this ecology begin and end and what does it include and exclude? Is Venice really where East meets West, where West meets East? Where the Silk Road is no longer a road but a sea?

Luigi Divari passes around his watercolors. There are twin fish tangled in sea grass, a school of shiny anchovies, and one crab: *Callinectes rapidies* = *granchio azzurro*. Its claws are a rainbow of orange, blue, and gray.

“What is local in Venice?” asks the fig and blue crab. And “when does a species stop being invasive?” The fig is native to the Mediterranean—so is the Mediterranean green crab, as its name makes clear. The blue crab is not. But in recent years, more and more blue crabs have been making the Venetian Lagoon home. Maria Mercedes Lopez, a marine biologist who studies species biodiversity in the salt marshes, tells us the blue crab competes with the green one, from which Venetians make *moeche*.





We eat in the company of Diana Policarpo's installation *Ciguatera*, which transforms her research on the Portuguese archipelago of Ilhas Selvagens into rock-like sculptures animated by film and audio. Designated as a nature zone, the "Savage Islands" are uninhabited with the exception of staff and scientists. *Ciguatera* layers and exposes how colonialism and science overlap.

On another North Atlantic island claimed by Portugal, I visit a pineapple farm. But there shouldn't be pineapples here. São Miguel's geography is not an appropriate host. Its climate is not what this fruit—indigenous to Central and South America—wants. The first pineapples were status symbols. Ornaments planted in pots to show off. Then in 1860, in response to a citrus crisis in São Miguel (gummosis attacked its oranges, an important economic crop), Portuguese industrialist José Bensaude started cultivating pineapples in greenhouses on the island. Pineapples are not invasive, but neither are they native nor naturalized. So is invasive, in part, also a question of dependency—species that do not need humans to intervene, to come to their rescue?

A pineapple print decorates Edgar's short-sleeved shirt—nearly-ripe fruit crowned with flowers. He shows me around the farm. "The man who introduced pineapples to São Miguel was a hero," Edgar narrates, "but today he would be a criminal." There are now strict laws about the flora



and fauna that may cross borders. Humans have both deliberately and accidentally escorted species around the world. Others have hitched onto waves or winds, arriving by water, land, and air.

Pineapples have changed how I see the landscape. Each plant becomes a question. The soccer ball-sized hydrangeas flanking the roads? They, too, are from elsewhere. The tea that's been waking me up each morning. Yes, it now grows here, but does that mean that it is from here? Endemic, invasive, native, foreign. I'm throwing these words around like dice, waiting to see which one will land heads up. It is a guessing game with a fifty-fifty chance.

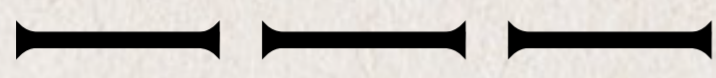
The dinner asks another question: "Alien meets native: what is what? What makes a species local, indigenous, alien, invasive, naturalized, or imported?" Around the Ocean Space table I learn that artemisia promises good dreams. I think about America as the land of dreams, how dreams still define the country, maybe even the continent. The DACA (Deferred Action for Childhood Arrivals) immigration policy, for example, calls children who entered the US illegally "Dreamers."

Historian Peter Coates unravels "how ideas of nationality have influenced our understandings of the nonhuman world of nature."<sup>1</sup> He asks: "Why are some overseas species embraced while

<sup>1</sup> Peter Coates, *American Perceptions of Immigrant and Invasive Species: Strangers on the Land* (Berkeley, Los Angeles, and London: University of California Press, 2006), 3.



others struggle for acceptance, no matter how firmly established they become? Are the problems associated with nonnatives primarily of a material order—ecological and economic, in other words? Or are social and cultural factors—especially notions of nationality—uppermost in identifying troublesome species?”<sup>2</sup>



Native and invasive are relational terms. They are co-dependents: one needs the other. Invasive is but one of many names for flora and fauna (and people) from elsewhere. There is alien and nonnative, invader and interloper, migrant and vagabond, immigrant and stranger, foreigner and carpetbagger. The term “invasive” carries a trio of definitions: biological, cultural, and culinary. There is also the question: Invasive for whom and where? It can be a question of time, of what it means to overstay your welcome, of how long it takes to go from being a guest to a host. But other times it is not. A species might naturalize—meaning that it is independently capable of self-producing—but that does not mean it loses its foreigner status.

If dirt, as anthropologist Mary Douglas describes, is “matter out of place” are “invasive” plants and animals “out of place”?<sup>3</sup> Is the blue crab out of

<sup>2</sup> Ibid., 5.

<sup>3</sup> Mary Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (London: Routledge, 1996), 36.



place in the Venetian Lagoon?

Although the blue crab's Latin name translates as "beautiful savory swimmer," this description is not universal. In the western Atlantic, its home, blue crab is not only a keystone species, but also culturally and culinarily significant. In Italy it is an aggressive "alien" "colonizing" the Mediterranean. But in their waters, North Americans say the same about the European green crab.

This example, however, is not the rule. "As biologists themselves have pointed out," relays environmental humanities scholar Ursula K. Heise, "the invasive among introduced species tend to be the exception rather than the rule. Most introduced species disappear quickly or end up coexisting with native species."<sup>4</sup> Yet, these names stick, backing up science writer Fred Pearce's belief that the demonization of "alien species" "says more about us and our fears of change than about them and their behavior."<sup>5</sup>

In 2018, fifteen years after the restaurant Noma opened, its cofounder and chef René Redzepi admitted the kitchen was "still figuring out what it means to be a cook in this part of the world.

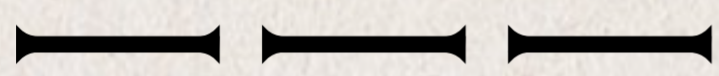
<sup>4</sup> Ursula K. Heise, *Imagining Extinction: The Cultural Meanings of Endangered Species* (Chicago and London: The University of Chicago Press, 2016), 29.

<sup>5</sup> Fred Pearce, *The New Wild: Why Invasive Species will be Nature's Salvation* (Boston: Beacon Press, 2015), 10.



Our original idea was to use only local products eventually started to collapse under the weight of new questions: When is an ingredient truly local?”<sup>6</sup> He points out that if you go back far enough, “almost everything in your everyday pantry actually came from somewhere else.”<sup>7</sup> “The way I see things today,” concludes Redzepi, “if something grows here, it belongs here.”<sup>8</sup>

Eating is about ecology. Humans make and unmake ecosystems by introducing some species and depleting others to serve their appetites. But these species, too, leave their ecological marks. Invasive species, therefore, challenge who is in control.



The mouth is both public and private. Lips are veils and curtains. Teeth are gates and watchguards. Just think about a child or dog caught in the act of eating something they shouldn't and a stern voice demanding “open your mouth.”

My mouth is full of pasta, of *Bottoni di artemisia*, *crème fraiche al miso di borlotti e erbetta di laguna* (Bottoni pasta filled with artemisia, crème fraiche and borlotti miso, and lagoon herbs). A

<sup>6</sup> René Redzepi, “If It Does Well Here, It Belongs Here,” *You and I Eat the Same: On the Countless Ways Food and Cooking Connect Us to One Another*, ed. Chris Ying (New York: Artisan, 2018), 88.

<sup>7</sup> *Ibid.*, 88.

<sup>8</sup> *Ibid.*, 90.



pasta that departs from weeds—from plants in the margins—to ask, “Which are the wild herbs of the lagoon? Are they invasive somewhere else? What stories do they tell us about marginalized, traditional, and Indigenous knowledges and ways of life?” The borlotti bean is an example of a migrating plant. It was first cultivated in Colombia, but is now a staple in Italy.

Before pasta there were tomatoes—a salad that could have been dessert: *Insalata di pomodoro in diverse consistenze e wakame* (nixtamalized tomatoes with wakame salad). This became a conversation starter about what happens when a food journeys without its local knowledge. Thanks to the so-called Columbian exchange, corn traveled to Europe, but not knowledge about the importance of nixtamalization: the process of soaking and cooking corn and other grains—or in this instance tomatoes—in an alkaline solution. Nixtamalization is what distinguishes cornmeal from *masa*. It reduces mycotoxins and increases nutritional value. The salad’s sweetness is a reminder that tomatoes are fruit. And that tomatoes, like corn and beans, come from elsewhere.

“We try to cook ourselves better somehow – maybe into a different body,” explains food writer Ruby Tandoh, “or a bigger kitchen or a more perfect persona.”<sup>9</sup> Or, perhaps, a more balanced ecosystem. But who defines that balance? Ecosystems, after all, are not stable. They



constantly change. Fires and floods remake them, so do diseases, humans, and other species. It is for this reason that Pearce speaks about what he calls “the new wild,” which is very different from the old one. “We have changed our planet too much,” he outlines, “and nature never goes backward.”<sup>10</sup> “Invasive” species—like wakame and blue crab—play an important role in this new wild, exhibiting how ecosystems shift and slide, and how the acceptance of these shifts and slides can taste.

<sup>9</sup> Ruby Tandoh, *Eat Up! Food, Appetite and Eating What You Want* (London: Serpent’s Tail, 2018), n.p.

<sup>10</sup> Pearce, *The New Wild*, 9.



# RESEARCH PROJECTS ON THE VENICE LAGOON AND ITS FOOD SYSTEMS

---

We invite you to explore the lagoon in more detail in [the following map](#).

## LEGEND:



PRODUCE



BOOK



DISTRIBUTOR &  
PRODUCER



ARTWORK



PROJECT



RESTAURANT



ACADEMIA



[BARENA BIANCA](#)

## Fabio Cavallari and Pietro Consolandi

The collective Barena Bianca was formed in the summer of 2018 as a shirt-wearing activist group in the Venetian Lagoon, striving to bring to light many of its ecological and sociological issues, adopting the Barena—the typical venetian salt marsh, essential to the survival of the city—as its emblem. Barena Bianca is characterized by an anti-mimetic poetic approach, a willingly dysfunctional camouflage, refusing to disappear. It seeks to emerge in every situation, to be clearly visible, increasingly impossible to ignore. Its work mostly happens in public spaces in the shape of hybrid collaborative actions, installations, and happenings communicated mainly through video.



 BIRRARIA LA CORTE

**Silvia Rozas, Marco Zambon**

S. Polo, 2168, 30125 Venezia VE, Italy

 BIOCULTURAL DIVERSITY LAB

**Jimlea Nadezhda Mendoza**

This research project in the Biocultural Diversity Lab at Ca' Foscari University of Venice aims to record plant uses and to describe changes in fisheries and plant composition and their drivers based on the fishers' local ecological knowledge in the Venice Lagoon and the Laguna de Bay, Northern Philippines, for their sustainable environmental management.

 CATERINA VIANELLO, MARCO BOZZATO, CATERINA SALVAGNO

*Erbario lagunare. Viaggio gastronomico sentimentale tra le erbe spontanee del territorio veneziano* (Lagoon Herbarium. A sentimental gastronomic journey through the spontaneous herbs that grow in the Venetian territory), Il Leggio, 2022.

 CHIARA SPADARO

*L'arcipelago delle api* (The Archipelago of Bees), Wetlands, Venice, 2022.



## DIGE: ETHNOBOTANY OF DIVIDED GENERATIONS IN THE CONTEXT OF CENTRALIZATION

**Renata Sõukand**

The use of plants is part of a complex relationship between human culture and local ethnobotanical heritage, specific to a place and the people inhabiting that place. Understanding the logic of obtaining, managing, and perceiving local natural resources, particularly plants, is crucial for ensuring the sustainability of human life, as the use of plants is key for human survival. The main goal of this project is to understand the dynamics of knowledge transmission and the influence of specific factors on changes in the use of local ecological resources.

## "DON'T LEAVE THE MODELER ALONE: INTEGRATING TIME-SERIES ANALYSIS WITH STAKEHOLDER ENGAGEMENT TO IDENTIFY CAUSES OF CHANGE IN COASTAL ECOSYSTEMS"

**Alberto Barausse**, department of biology, the University of Padova.

This project aims to integrate scientific data and methods with the local ecological knowledge of fishers, including in Burano, Venice, and Chioggia, to better understand how the Venice Lagoon and Adriatic ecosystems and the services they provide, such as fishery production, are



changing in response to climate and human pressures.

~ [The Department of Biology](#)

 [CIBO E LAGUNA: TOWARD AN ATLAS](#)

Scientific committee: **Marta De Marchi** (Iuav), **Maria Chiara Tosi** (Iuav), **Shaul Bassi** (Ca' Foscari), **Francesco Vallerani** (Ca' Foscari).

Organization team: **Amina Chouairi** (Iuav), **Chiara Spadaro** (University of Padova, Ca' Foscari).

This workshop was part of the activities of the Cities2030 project, financed by the European Union Horizon 2020 program. The first cycle of the workshop investigated the complex food system within the Venice Lagoon, aiming to define places, spaces, actors, and flows' circularity. The primary objective of the workshop was to initiate the work of the living lab through the conception of possible forms for a Food Atlas of the Venice Lagoon, to be discussed with the institutional and non-institutional actors that have been involved.

~ [Instagram](#)

 [ITTICO SOSTENIBILE](#)

Federico Riccato, researcher and writer  
Upper Adriatic fish market, according to the  
criteria of environmental sustainability.

~ [Website](#)



 LAGUNA NEL BICCHIERE - LE VIGNE  
RITROVATE

Non-profit association that aims to recover the abandoned vineyards of the Venice Lagoon, safeguard a tradition, and protect an original and almost unknown landscape, revealing its hidden city-countryside relationship.

~ [Website](#)

 "LIVING ON WATER 2022: ARCHAEOLOGIES  
BETWEEN LIO PICCOLO AND ALTINUM"

**Diego Calaon and Daniela Coticca**

Project directed by Prof. Diego Calaon and Prof. Daniela Coticca of the University of Ca' Foscari, Venice, with the collaboration and funding of the Municipality of Cavallino-Treporti and the support of the Ca' Foscari University Foundation. The latest discoveries at the Roman maritime villa of Lio Piccolo focus on the part of the villa used for production, and in particular, on the function of a large building on wooden stilts that could have been a large salt storehouse, located in an area that has always been devoted to this production, as the place name "Le Saline" also attests to.

~ [Website](#)

 LUIGI DIVARI

*Tra il mare e Rialto. Pesci e pesche venete in epoca moderna e recente* (Between The Sea And Rialto:



Venetian Fish and Peaches in Modern and Recent Times), Mare di Carta, 2022

“*Quattro risi.*” *Piatti e storie di vecchia cucina veneziana* (“Four rices”: Dishes and stories of old Venetian cuisine), Il Leggio, 2020

## MANOS. RASSEGNA DI AUTOPRODUZIONE ALIMENTARE

Self-production showcase organized by Spiazzi on the last weekend of every month through April.

~ [Instagram](#)

## "MARINE INVASIVE SPECIES AND FISHERIES IN THE LAGOON OF VENICE AND NORTHERN ADRIATIC SEA"

**Filippo Piccardi** (University of Padova; supervisor: **prof. Mazzoldi**, co-supervisor: **prof. Barausse**).

This research aims to investigate the biology of two invasive species, the sea walnut *Mnemiopsis leidyi* and Atlantic blue crab *Callinectes sapidus*, present in the Venice Lagoon and northern Adriatic Sea, assess their impacts on local ecosystems and fishery production, design and test mitigation actions, and identify emerging solutions to aim for greener and more resilient fisheries.



## MICROCLIMA

**Paolo Rosso, Alice Ongaro Sartori**

A research-driven program that focuses on the natural world, cultural heritage, and the public sphere, Microclima is housed in the Serra dei Giardini, a greenhouse built in 1894 for the Biennale to preserve the exotic plants that decorated the first International Exhibition of Art. Microclima also has branches in Guwahati (India), Santiago de Cuba, and Ulaanbaatar (Mongolia), and organizes events in various other places. They are also currently running a project dedicated to citrus with Todolìcitrus Foundaciò in Spain.

~ [Website](#)

## PROMETHEUS OPEN FOOD LAB

**Lorenzo Barbasetti di Prun**

Prometheus\_Open Food Lab is a project whose purpose is to generate, recover, and redistribute food-related knowledge. The ultimate goal is to support resilience in remote territories, beginning in the remote spaces of our minds.

~ [Website](#)

## SEPOLINE

Coordinated by CESTHA in collaboration with the University of Padova. FEAMP grant (Regione Veneto) which aims at mitigating the mortality of cuttlefish (*Sepia officinalis*) eggs in



artisanal fishery through collaborations with local fishers, including lagoon fishers, and at the development of a sustainability label for cuttlefish for responsible fisheries.

 SONIA LEVY


*We Marry you, o sea, as a Sign of True and Perpetual Dominion* (working title), film, 2023. Additional materials from contributors Heather Anne Swanson, Meredith Root-Bernstein, and Alexandra Arènes.

This project originates in a residency with environmental anthropologist Heather Anne Swanson, ecologist Meredith Root-Bernstein, and landscape architect Alexandra Arènes, and aims to engage with Venice and its lagoon “from below,” to bring attention to the city’s submerged, life-giving, and altered bio-geomorphological processes. What insights can be gathered by attending to these muddy land-waterscapes? “From below” is a reference to History from below, a form of historiography that focuses on the experiences and outlooks of ordinary and often marginalized people rather than those in power. The project extends this approach, shifting perspective to broaden the understanding of who makes history, including more-than-human worlds, to examine Venice from the perspective of its worlds below the waves. Via these submerged perspectives, the project seeks to ask: How can alternate understandings of history, agency,



management, and politics emerge from thinking materially and analytically “from below”?

Commissioned by TBA21–Academy with the support of S+T+ARTS, an initiative of the European Union, and with the local support of the Marine Biology Station Umberto D’Ancona, University of Padova.

 TBA21–ACADEMY THE CURRENT III  
MEDITERRANEANS: “THUS WAVES COMES IN  
PAIRS” (AFTER ETEL ADNAN)

### **Barbara Casavecchia**

Departing from the Mediterranean, *The Current III*, 2021–2023, led by Barbara Casavecchia, is a transdisciplinary and transregional exercise in sensing, thinking, and learning with—by supporting situated projects, collective pedagogies, and voices along the Mediterranean shores across art, culture, science, conservation, and activism.

 THE TIDAL GARDEN

### **Lorenzo Barbasetti Prun, Filippo Grassi, Lodovica Guarnieri**

The Tidal Garden is a Venice-based cultural and spatial agency that explores the edible potential of halophytes as a tool for cultural adaptation to climate change. Led by a team of chefs, curators, farmers, and scientists, the project supports the emergence of new food habits as means of



preservation of the Lagoon's landscape in times of rising sea levels.

~ [Website](#)

## [TOCIA! CUCINA AND COMUNITÀ](#)

**Marco Bravetti**

TOCIA! Cuisine and Community is a proactive collective born of interdisciplinary and convivial research. Through the languages, practices, ingredients, and rituals of food and cooking, TOCIA! investigates the lagoon's landscapes and the human relationships that inhabit them.

~ [Instagram](#)

## [TÒCIO](#)

**Giulia Busato**

Tòcio is a laboratory based between Venice and Noale that bakes nomadic bread from sourdough and beautiful grains, made with love and out of love for the planet and each of its inhabitants.

~ [Website](#)

## [TURBA TOL HOL-HOL TOL](#)

The Chilean Pavilion at the 59th Venice Biennale

**Ariel Bustamante, Maria Costan Davara, Camila Marambio**

Turba Tol Hol-Hol Tol seeks an experimental path toward the effective conservation of peatlands, an effort that is intrinsically linked to the future



well-being of humanity and, in Patagonia, to the rebirth of the Selk'nam people.



### VENISSA RESTAURANT

**Chiara Pavan, Francesco Brutto**

Fondamenta di Santa Caterina, 3, 30142

Venezia VE



### VINO VERO

**Lorenzo Barbasetti di Prun**

Fondamenta de la Misericordia, 2497, 30100

Venezia VE



### WE ARE HERE VENICE

**Jane Da Mosto**

We are here Venice is a third-sector organization (TSO) registered in the Joint National Register of the Third Sector, which is dedicated to the conservation of Venice as a living city. Founded in 2015, it operates both as a research collective and activist platform, reinforcing connections between the best available sources of information, stakeholders, and the local community.

~ [Website](#)



# CONVIVIAL TABLES

THE CROSS BETWEEN FOOD AND ECOLOGY  
ENTRÉE: THE PANNIER OF THE VENICE LAGOON

---

Convivial Tables is TBA21–Academy's active research program dedicated to the ties between food and ecology and how these affect bodies of water. Its first edition, "Entrée: The Pannier of the Lagoon," took place at Ocean Space, Venice, in 2022, in close collaboration with chef Marco Bravetti and TOCIA!. Local chefs, producers, activists, and researchers participated in the discussions at the table, in workshops, and as part of a public program aiming to cultivate an active network with several Venetian groups and associations involved in designing and reflecting on other forms of relating to the environment as we nourish ourselves.

This research program is aligned with the principles of regeneration and more-than-human rights promoted by the project Zoöp, which TBA21–Academy is a partner in.

Commissioned by TBA21–Academy.

OCEAN SPACE  
Chiesa di San Lorenzo  
Castello 5069  
30122, Venezia

May 28–October 1, 2022



## CURATORS

María Montero Sierra and Barbara Nardacchione with Markus Reymann, in collaboration with TOCIA! Cucina e Comunità

## CHEFS

Lorenzo Barbasetti di Prun (Prometheus\_Open Food Lab), Marco Bravetti (TOCIA! Cucina and Comunità), Giulia Busato (Tòcio), Fabio Cavallari (Barena Bianca), Chiara Pavan (Venissa), Silvia Rozas, Marco Zambon (Birraria La Corte)

## CONDUCTORS

Camila Marambio, Jane Da Mosto, Anna Perdibon

## CONTRIBUTORS

Matti Aikio, Lorenzo Barbasetti di Prun, Alberto Barausse, Marco Bravetti, Ariel Bustamante, Diego Calaon, Janet Cardiff, Simone Carraro, Barbara Casavecchia, Maria Costan Davara, Luigi Divari, L. Sasha Gora, Lodovica Guarnieri, Taloi Havini, David Hrankovic, Ursula Johnson, Sonia Levy, Mercedes Lopez, Camila Marambio, Jane Da Mosto, Jimlea Nadezhda Mendoza, Meredith Root-Bernstein, Anna Perdibon, Diana Policarpo, Ritu Sarin, Tenzing Sonam, Renata Sõukand, Chiara Spadaro, Davide Tagliapietra, Marco Zappalorto.

## ASSISTANTS

Beatrice Brighenti, Graziano Meneghin

## RUNNERS

Chandana Fernando, Prasanna Mayadunnage



# PROGRAM

// Tuesday, May 31, 2022, 8:00 pm

## SALTINESS

Research group at the table. With chef Marco Bravetti (TOCIA!) and conducted by Jane Da Mosto (We Are Here Venice).

// Thursday, June 9, 2022, 7:00 pm

## TOXICITY

Research group at the table. With chef Marco Bravetti (TOCIA!), conducted by Camila Marambio (Ensayos).

// Wednesday, July 6, 2022, 6:00 pm

## WILD PANTRY

Foraging Session at Sant'Erasmus with Marco Bravetti. An experience of intimate connection with the landscape through the recognition, collection, and convivial tasting of spontaneous plants characteristic of the lagoon ecosystem.

// Thursday, September 1, 2022, 7:00 pm

## "INVASIVE SPECIES"

Research group at the table. With chef Silvia Rozas and Marco Zambon (Birraria La Corte), conducted by Anna Perdibon.



// Saturday, October 1, 2022, 3:00–10:00 pm

## CONVIVIAL TABLES: TALES OF THE LAGOON IN CAMPO!

A special day dedicated to the lagoon, its produce, and the Venetian community through permaculture workshops, book presentations, and meetings with local producers, all accompanied by gourmet cicchetti inspired by the three themes of our program, in collaboration with TOCIA! cucina e comunità and the Municipality of Venice, Murano, Burano, with the participation of Michele Savorgnano and Riccardo Varini, Wetlands books, and COMBO Venice.

**In addition to the Convivial Tables program, Ocean Space hosted:**

// Thursday, July 7, 2022, 6:30 pm

## SEEDS AND THE LAGOON

A conversation between Andrea Giubilato, farmer from the organic company Madre Terra in Santa Maria di Sala (Venice), and Chiara Pavan, chef at Venissa (Mazzorbo). Moderated by Marco Bravetti (TOCIA! Cuisine and community).

The fourth session of the workshop “Cibo e Laguna. Towards an Atlas” curated by Amina Chouairi, Marta De Marchi, and Chiara Spadaro and coordinated by Università Iuav di Venezia and Ca' Foscari, supported by the project “Cities 2030,” European Union Horizon 2020 research and



innovation program, in collaboration with TBA21–Academy and Museo del Novecento M9.

// Friday, September 2, 2022, 6:00 pm

## CONVIVIO ACQUATICO—FLOATING CINEMA

Convivio Acquatico, the culinary offerings of the Floating Cinema curated by TOCIA! cucina e comunità, inviting chefs and cooks who work in the lagoon to breathe life to an experiment in collective, popular cuisine devoted to sustainability. The menu for September 2—designed in collaboration with Lorenzo Barbasetti di Prun (Prometheus Open Food Lab) and Fabio Cavallari (Barena Bianca)—was connected to one of Convivial Tables themes: “invasive species”.



# PUBLICATION

---

EDITORS: María Montero Sierra and Barbara Nardacchione

TEXTS: Diego Calaon, L. Sasha Gora, Lodovica Guarnieri, Camila Marambio, María Montero Sierra, Jane Da Mosto, Barbara Nardacchione, Anna Perdibon, Chiara Spadaro

RECIPES: Marco Bravetti, Silvia Rozas, Marco Zambon

DRAWINGS: Simone Carraro (pp. 1, 21, 38, 58), Luigi Divari (pp. 23–25, 42–44, 60–63)

COPYEDITOR: Orit Gat

TRANSLATIONS TO ENGLISH: Vashti Ali, Edward Dormandy, and Joe Sartorius

DESIGN: Lana Jerichova

TYPEFACES: Amare, Cronos Pro

© TEXTS: the authors

© DRAWINGS: the artists

All rights reserved, including the right of reproduction in whole or in part in any form.

Published by: Fundación TBA21

C/ Amor de Dios 1,  
28014 Madrid, Spain

[tba21.org](http://tba21.org)

[tba21.org/academy](http://tba21.org/academy)

[Ocean-archive.org](http://Ocean-archive.org)