2100: A SEA ODYSSEY

A new coastal scenario after sea level rise

Country / City	Italy, Milan
University / School	Politecnico di Milano
Academic year	2018-2019
Title of the project	2100: a Sea Odyssey. A new coastal scenario after sea level rise
Authors	Monica Moschini, Alessandra Paparcone, Francesca Porro

TECHNICAL DOSSIER

Title of the project	2100: a Sea Odyssey. A new coastal scenario after sea level rise
Authors	Monica Moschini, Alessandra Paparcone, Francesca Porro
Title of the course	Master thesis project
Academic year	2018-2019
Teaching Staff	Matteo Umberto Poli, Sara Gangemi
Department/Section/Program of belonging	Department of Architecture and Urban Design Studies
University/School	Politecnico di Milano

Written statement, short description of the project in English, no more than 250 words

2100: a Sea Odyssey tells the story of a territory that has been the middle earth between land and sea. In the Ravennate territory (placed in Emila Romagna, Italy) since XV Century through the action of man, it was possible to transform wet areas suitable for the survival of the human being and thriving in terms of agricultural productivity. Therefore, the action of men tears more and more land to water. Nowadays the situation is changing. Man becomes aware of living in the era Anthropocene era in which the action of man has been the main geological force. The era in which it is necessary to recognize that man's instinct for survival has made possible enormous transformations, perhaps even greater than those caused by catastrophic events - the one destructive to the natural landscapes that host them, the others towards the work of man. All these transformations led to the acceleration of the phenomenon of climate change whose consequences would lead to great changes in the anthropized territories. The story that *2100: a Sea Odyssey* tells is the story of a resilient territory, whose lands once ripped from the waters today are returned to it in order to adapt itself to the rising of the sea. Starting from the assumption that this territory has been in constant motion for centuries - although we understand the drastic nature of the transformations taking place - we have not abandoned an optimistic attitude during our research, and at the end we imagine a reasonable non-apocalyptic scenario.

For further information
Máster d'Arquitectura del Paisatge -DUOT - UPC

T: + 34 93 401 64 11 / +34 93 552 0842
Contact via email at: biennal.paisatge@upc.edu

Máster d'Arquitectura del Paisatge -DUOT - UPC
ETSAB- Escola Tècnica Superior
d'Arquitectura de Barcelona
Avenida Diagonal, 649 piso 5
08028 Barcelona-Spain

CLIMATE CHANGE AGAIN

11th International Biennial Landscape Barcelona

Barcelona September 2020

SCHOOL PRIZE

GEOGRAPHY IN MOTION

Santerno river is placed into Po di Primaro river

1460

Reclamation of *Valle Candiana*

1625

Ronco and Montone overflows

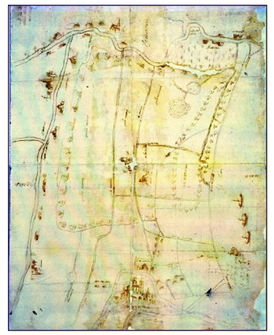
1568

Reclamation of *Valli Contermini*

1670

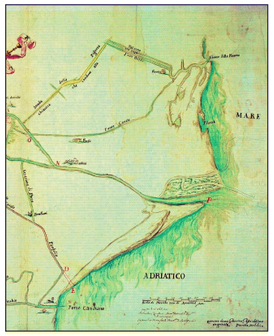
Lamone river derivation during *Clementina* reclamation

1570



Reclamation of *Valle del Montone*

1700



Dune cordon creation

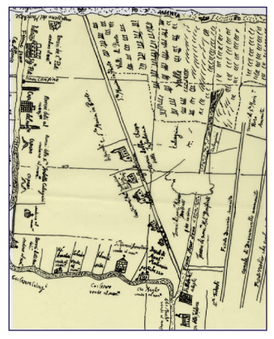
1600

Reclamation of Valli di Coma

1878

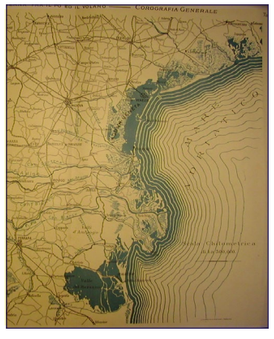
Fiumi Uniti creation

1620

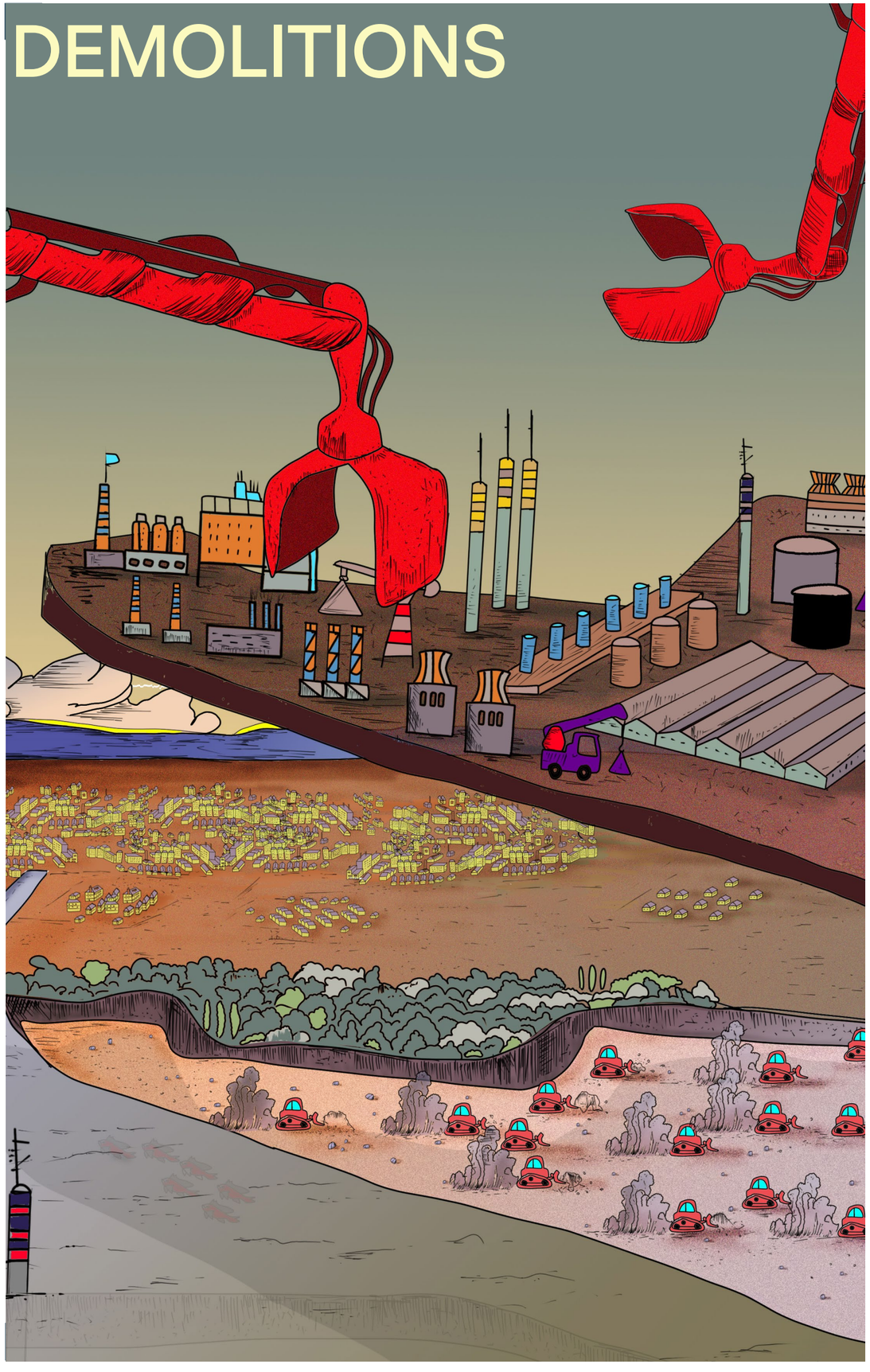


Fiumi Uniti creation

1950



DEMOLITIONS



GAINED

COASTAL LANDSCAPE

WETLAND

GREEN CORRIDORS

SAVED

SACRIFICED

URBAN FACTORIES

INFRASTRUCTURE

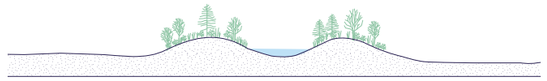
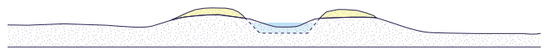
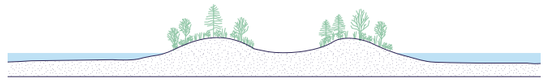
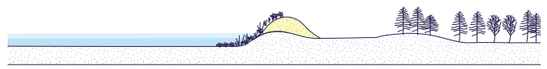
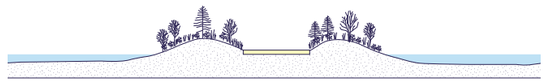
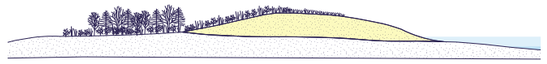
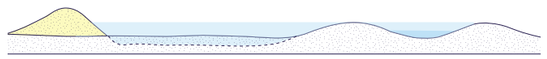
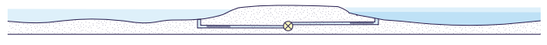
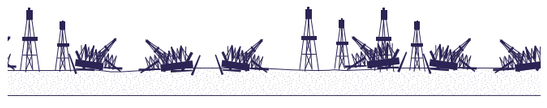
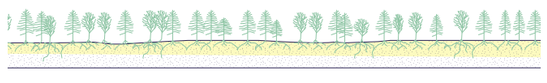
AGRICULTURAL FABRIC

	2020	2100 SLR 1m	2100 a Sea Odyssey
COASTAL LANDSCAPE	compact cities	55% at risk	100% saved
WETLAND	coast	100% at risk	80% saved
GREEN CORRIDORS	Ravenna	80% at risk	100% saved
SAVED	urban sprawl	55% at risk	13% saved
URBAN FACTORIES	factories	100% at risk	90% saved
INFRASTRUCTURE	off-shore platforms	100% at risk	0% saved
AGRICULTURAL FABRIC	agricultural fields	55% at risk	13% saved

SUSTAINABLE DEVELOPMENT GOALS

11

2100:
A SEA ODYSSEY

PROCESS SPACE	RISK	STRATEGY	TOOL	
A promenade	1 flood risk	A.1.1 linear spatial expansoin	A.1.1.1 terraces	
B embankment walls and dike	1 flood risk	B.1.1 reinforcing resistance	B.1.1.1 trees on embankment	
			B.1.1.2 reprofiling embankment	
	2 SLR risk	B.2.1 reinforcing resistance	B.2.1.1 trees on dikes	
			B.2.1.2 reprofiling the dike	
			B.2.1.3 dike as path networks	
			B.2.1.4 coastal dune	
			B.2.1.5 nourishment	
C selected areas	1 flood risk	C.1.1 extending the space	C.1.1.1 reprofiling the flood plain	
		C.1.2 extending the space	C.1.2.1 extensive natural areas	
	2 SLR risk	C.2.1 water managment	C.2.1.1 dam	
			C.2.1.2 pumping system	
		C.2.2 make the expendable area ready	C.2.2.1 demolition of refuse	
			C.2.2.2 phyto-remediation	
		C.2.3 tolerating areas	C.2.3.1 terraces