



The Creative School



Open Educational Resources

Biodiversity and Visual Arts

Topic: Environment, Natural Sciences

Age Group: 7-14 years old



Erasmus+

Authors

Matilde Biondi, Sara Borella, Maddalena Nicoletti, Pier Giacomo Sola

Images

© Trustees of the Chester Beatty Library, Dublin, iStockpicture

Copyright

Materials can be used according to the:
Creative Commons Non Commercial Share Alike license




Disclaimer












The Creative School project has been funded with the support of the European Union and the French National Agency for the Erasmus+ Programme (Grant Agreement 2019-1-FR01-KA201-062212). This publication reflects the views only of the author, and the European Union and the French National Agency for the Erasmus+ Programme cannot be held responsible for any use, which may be made of the information contained therein.



Table of contents

Biodiversity and Visual Arts	6
Description of the workshop	7
Some words on Louis Masai's and Kate MacDowell artworks	8
Louis Masai.....	8
Kate MacDowell	9
	
The adventures of Max, Samir and Buzzyette 7-11.....	10
The workshop in detail	10
	
The adventures of Max, Samir and Buzzyette 11-14	12
The workshop in detail	12
Module 1: Louis Masai's artworks	12
Module 2: Kate MacDowell's artworks	19
Conclusion of the workshop and final considerations (slides # 68-72):.....	23
Suggestions for further activities	24
Bibliography in English.....	26
On Colony Collapse Disorder and Decline of Pollinators	26
On Louis Masai's Works	26
On Kate MacDowell's Works	27
Bibliografia in Italiano.....	27
Ruolo degli Street Artists.....	27
Api e Biodiversità	27
Sulle opere di Louis Masai	27
Sulle opere di Kate MacDowell	28

The Creative School open educational resources include the following learning modules, here listed according to subject matters and age of the target students:

	 7-11	 11-14	 14-18
 Art History		Let Them Live Again	Let Them Live Again
 Citizenship and Philosophy	Ethical Dilemmas	Ethical Dilemmas	Ethical Dilemmas
 Environment, Natural Sciences	Biodiversity and Visual Arts	Biodiversity and Visual Arts	
 Facilitation	Online learning through object based learning	Online learning through object based learning	Online learning through object based learning
 Geography	Urban walks	Urban walks	
 History			How did young people live?
	Photos as memories of the past	Photos as memories of the past	Photos as memories of the past
 STEAM			Critical thinking on climate change
	#Empowering YouthVoices	#Empowering YouthVoices	#Empowering YouthVoices
		Hungry Algorithms	Hungry Algorithms
 Teachers Training	Europeana as a learning tool	Europeana as a learning tool	Europeana as a learning tool
	Practical approaches to teaching with objects	Practical approaches to teaching with objects	Practical approaches to teaching with objects

The Creative School project develops learning modules for children and schoolteachers, promoting self-directed learning, critical and visual thinking skills by using cultural heritage content made available by the partner organisations. The present output has developed a set of training materials focusing on the development of thinking skills through engagement with cultural heritage.

More and more children and young people need to develop higher level thinking skills in order to find solutions to social, emotional and economic problems, both personally and in the context of the wider world. They are encouraged to be creative, innovative, enterprising and adaptable, with the motivation, confidence and skills to use creative and critical thinking purposefully.

The main beneficiaries of the project include primary and secondary school teachers, who, through engaging with the project will become equipped with the skills necessary to facilitate pedagogical strategies for creativity and critical thinking. Children and young people involved as participants in the Creative School project will develop the skills required to respond to the challenges offered by the Creative School curriculum.

We hope this material will bring a new dimension to your work and inspire you to use it for fostering creative and critical thinking among young people. The selected topics have been chosen together with teachers and educators coming from Austria, Croatia, Finland, France, Ireland, Italy and the United Kingdom through focus groups and surveys.

Each material is accompanied by key learning points as well as several interesting facts or pieces of information, which are intended to be used to provoke further discussion. The most appropriate age group is also indicated.

Wherever possible we have included a short interactive activity that can be carried out with students or a series of suggested questions to ask, in order to introduce the topics of each learning module. Should you wish to explore certain topics or themes further, each material includes a link to other related ones. When available, a general list of additional educational resources related to the topics is also provided.

The material and accompanying text are designed as standalone educational aids. In this respect, the resource is intended to provide an overall framework from which you can pick and choose the issues most relevant to your activities. The module can be used within any country any context as it deals with issues, which are cross-border and universal.



iStockpicture

For more information about *The Creative School* project, please visit:

<https://www.creative-school.eu/>

Biodiversity and Visual Arts

Topic:



Environment, Natural Sciences

Age range:



7-11



11-14

The workshop is proposed in 2 different versions, a shorter and simpler one for children aged 7-11 and a longer and more complex one for students aged 11-14.

Both versions are divided into independent parts and sub-topics, so teachers can choose to run all of them or only the one they prefer, according to their class age and to the topics they have already covered.

Time:



90-240 minutes according to the age and interests of students

Materials and tools:

PowerPoint slides; video projector.

Teachers can choose to print some of the slides

Learning objectives:

Encourage children to:

- learn about biodiversity, the role of bees and other pollinators and the impact of human activities on Life on Earth
- learn how Visual Arts can help arising our consciousness about endangered species
- learn how artists see themselves and their role
- think in a creative and critical way about the role of Visual Arts

Description of the workshop

The two workshops proposed approach the topic of the **loss of biodiversity** as interpreted by **visual arts**: “Art changes people, it can tell stories in ways that inspire people, moving them to think and act differently. Art and design can create a vision of the world we want to inhabit.” (cit. from “The Human Nature Manifesto”; <http://humannatureshow.com/manifesto>).

Working with Visual Arts is very effective: **images are international, do not need any specific idiom, can be understood by everybody, any age, any culture.**

Among the many artists approaching the theme of biodiversity, Creative School Project has chosen to present **Louis Masai’s** and **Kate MacDowell’s** artworks, as they are rich in quantity and intriguing in the results. Both artists explore the issue of loss of biodiversity via one of the most important vectors for reproduction: **bees**. Bees are disappearing all over the world: causes are still uncertain, but researchers find that climate change and chemical pollution are certainly two key factors.

Moreover, both artists explore other topics such as **pollution, climate change, equal rights for all living beings.**

The workshop runs in the form of a **comic strip**: two young students (Max and Samir) get to know a young bee (Buzzyette), who’s escaping her home town due to pollution. The young bee is angry to humans because they destroy the environment and threaten her specie. The two students show her **how artists stand up for Nature**, engaging the reader with several questions and inviting them to think about the message sent by the artworks.

The workshops are **divided into modules and each of them is divided into sub-topics**: modules can be **run independently**, in addition teachers can **choose which sub-topics are more eligible** for their classes, according to their students’ age and to the fields they have already covered in previous lessons.

Some graphic elements have been used to make the story easier to be read by students:

- each character’s cartoon profile is painted in a different colour: Max – **magenta** as her hair; Samir – **green** as his T-Shirt; Buzzyette – **yellow** as her stripes. Thus readers understand who’s talking although the character might not appear in the slide;
- key words are marked in **bold orange**;
- questions for students are marked in **bold magenta**.

Some words on Louis Masai's and Kate MacDowell artworks

Louis Masai

Louis Masai is a British painter who approaches a variety of **conservationism** subjects, such as **biodiversity, endangered species, sixth mass extinction, pollution, climate change, equal rights for all living beings**, in a very colourful and captivating style. Here some short guidelines that will help your class understanding Masai's artworks:

- he uses simple **child-style images** and his paintings are very easy to understand but never boring, always cheerful even if covering environmental disasters;
- the artist **depicts animals as made out of several pieces of fabric stitched together**, to highlight that the species in discussion could become extinct, **leaving just toys or souvenirs**. It's a play on the absurdity of **consumerism** by recognising that people will often see these creatures as cute and cuddly whilst in reality they are struggling for survival ¹. Artist explain that if we don't preserve the species we've got, there will only be relics, souvenirs, toys, illustrations and paintings left;
- in many of his paintings, animals are being **stitched together by a bee carrying a needle and thread**. In this way, Masai allows his bees to become a metaphor to encourage people to join in with **stitching the planet together**, and to stop unstitching it ²;
- the juxtaposition of **patchwork** allows the artist to **connect consumerism and its effects on Nature**: "patchwork quilting is traditional, it's something humans have done forever, but we don't do it anymore. The reason we don't is because of **fast fashion**: we don't need to fix our socks or trousers, or stitch together all of our kids' clothes to make a blanket. We just **throw** it and buy a new one. I'm juxtaposing that with very unusual patterns you wouldn't see on a traditional patchwork quilt — e.g. **Mickey Mouse, Donald Duck, Peppa Pig** - because these things exist inside a society that no longer patchwork quilts. The idea is to refresh something that is past, and make it trendy and cool again" ³;
- the artist considers **patchwork** resourceful, colourful, functional and global: on his bigger patch worked pieces, you can see almost 200 paintings inside one. That gives the artist the opportunity **to tell much more and to reach a wider and more diverse audience** ⁴. For example, when painting a rhino, the artist might choose patterns from African cloth, thus grounding the animal in the story of its native environment;
- among the various patterns he uses, one of his favourite subjects are little yellow **bananas**: "bananas are on the verge of **extinction** for the second time in the last 100 years. It's a popular, recognizable image thanks to **Andy Warhol**, but the bananas our grandparents were eating are not the ones we do – they don't exist anymore. That's how close extinction is to us" ⁵;
- also, from a personal perspective, the patches allow the artist the opportunity to engage in all his personal artistic interests, such as comics, cartoons, fabric patterns, flora, colour and geometry ⁶;
- to convey the message that if we don't protect animals and plants there will be only souvenirs and toys left, the artist also **paints animals as if made out of plastic**;

1 <https://inspiringcity.com/2018/05/25/missing-the-latest-exhibition-from-louis-masai-brings-endangered-species-into-the-crypt-gallery/>

2 <https://impakter.com/art-beeing-interview-louis-masai/>

3 <https://vegworldmag.com/vertical-gallery-louis-masai-hatch-breakthrough-interactive-exhibit-meet-my-friends/>

4 <https://www.greenhousepr.co.uk/louis-masai/>

5 <https://monikerprojects.com/how-art-can-save-the-eels/>

6 https://issuu.com/kula_mag/docs/kulamag_issue_two/s/11001372



- the majority of the paintings have been realized on some building wall, so teachers can investigate the **educational and social role of street art**.

Kate MacDowell

Kate MacDowell is a US artist who chooses preferably to create her artworks out of porcelain. She covers various subjects such as the importance of **bees** and other pollinators for **biodiversity**; **chemical pollution**; **dependence of human beings on Nature**; **interconnections of all Lives**; **conservationism**, **climate change**, **toxic pollution** and **gm crops**. Some short guidelines:

- MacDowell focuses on the **romantic ideal of the unity of man and nature**. However, this idea is in stark **contradiction to our impact on the planet** ⁷;
- Kate MacDowell's **porcelain sculptures** respond to **environmental threats** and their **consequences**, revealing the rifts and **frictions** between man and nature ⁸;
- Kate MacDowell's work explores our physical and psychological relationships with the animal kingdom: whether as proxy, trophy, raw material, or mythic symbol, animals currently occupy a space in our subconscious which layers history, fable, and an awareness of species fragility ⁹;
- she sees each piece as a captured and preserved **specimen**, a painstaking record of endangered natural forms and a commentary on our own **culpability** ¹⁰;
- in some pieces, aspects of the **human figure stand-in for ourselves** and act out sometimes **harrowing**, sometimes **humorous** transformations which illustrate our current relationship with the natural world ¹¹;
- in others pieces, animals take on **anthropomorphic qualities** when they are given safety equipment to attempt to protect them from man-made environmental threats ¹²;
- each piece is a striking warning note, in some ways continuing the **vanitas** and **memento mori** tradition of **Dutch painters in the 17th-century**, who strove to remind viewers of our prideful folly and inescapable mortality. But she **twists the tradition** of Dutch still-lives by making the skeleton human within a non-human corpse. This way, she **shows our fate** and that of animals and plants as that **closely intertwined** ¹³;
- MacDowell uses a variety of methods to create her pieces, from hand sculpting porcelain (often building a solid form and then hollowing it out) to slip casting and assembling multiples ¹⁴;
- she forms every single work by hand. Each form is created piece by piece and thus gives her the possibility to get immersed in close study of the structure of a blossom or a bee ¹⁵;
- the paradoxical characteristics of porcelain, its fragility and at the same time its durability over thousands of years, highlight both the resilience and the transience of the natural forms of our dying ecosystem ¹⁶.

For both artists, see the suggested bibliography.

⁷ <http://www.katemacdowell.com/statement.html>

⁸ <https://mindysolomon.com/artist/kate-macdowell/>

⁹ <https://mindysolomon.com/artist/kate-macdowell/>

¹⁰ <http://www.katemacdowell.com/statement.html>

¹¹ <http://www.katemacdowell.com/statement.html>

¹² <http://www.katemacdowell.com/statement.html>

¹³ <https://beautifulbizarre.net/2016/11/08/kate-macdowells-honest-and-haunting-sculptures/>

¹⁴ <https://mindysolomon.com/artist/kate-macdowell/>

¹⁵ <http://www.katemacdowell.com/statement.html>

¹⁶ <https://urban-nation.com/artist/kate-macdowell/>



The adventures of Max, Samir and Buzzyette

You can start the workshop by asking three students to volunteer for reading the roles of Max, Samir and Buzzyette in the PowerPoint presentation. Explain the students that today they will have some special guests that will talk to them about relevant topics.

In each slide, the characters suggest questions that arise the discussion on a particular topic.

The teacher/educator's role will be to facilitate questions and answers, as well as invite students to explain and describe their answers. The teacher/educator will also read the sections where the work of Louis Masai and Kate MacDowell is explained.

The workshop in detail

Introduction (slides #5-15):
The introductory part is common to all Modules and is to be run if teachers/educators need to introduce the subject of biodiversity . If this subject has already been covered, this part can be omitted.
<ul style="list-style-type: none"> • Definition of biodiversity • Definition of pollination • Role of bees • Why bees are disappearing
Module 1 (slides #16-17):
Module 1 offers the change to approach the role of Visual Arts in arising people's awareness on human beings responsibilities towards the environment.
<ul style="list-style-type: none"> • The role of Visual Arts
Module 2 (slides #19-42):
Module 2 presents the work of Louis Masai
Subtopic 1 (slides # 19-22):
<ul style="list-style-type: none"> • Introducing Louis Masai work and aims • Who's a street artist? • What does he do? • What's a mural?
Subtopic 2 (slides # 23-33):
<ul style="list-style-type: none"> • Several colourful animals (wall sized) explain the role of bees in biodiversity
Subtopic 3 (slides # 35-40):
<ul style="list-style-type: none"> • Some paintings explore the delicate balance of Sea Life biodiversity



Conclusions (slides # 41-42):

- References for Louis Masai's work

Module 3 (slides #43-57):

Module 3 presents the work of **Kate MacDowell**

Subtopic 1 (slides # 44-47):

- Introducing Kate MacDowell and her works
- What's porcelain?
- Why the artist prefers porcelain rather than other materials?

Subtopic 2 (slides # 48-55):

- Role of biodiversity
- Impact of pollution on the environment
- Dependence of human beings on Nature

Conclusions (slides # 56-57):

- How do you feel?
- Which emotions the sculptures arise?
- References for Kate MacDowell's work

General conclusions on the workshop (slides #58-64):

- Final considerations on the role of Art
- What can we do to change the situation?
- Join forces and work together: the power of cooperation



11-14

The adventures of Max, Samir and Buzzyette

You can start the workshop by asking three students to volunteer for reading the roles of Max, Samir and Buzzyette in the PowerPoint presentation.

In each slide, the characters suggest questions that arise the discussion on a particular topic.

The teacher/educator's role will be to facilitate questions and answers, as well as invite students to explain and describe their answers. The teacher/educator will also read the sections where the work of Louis Masai and Kate MacDowell is explained.

The workshop in detail

Introduction (slides # 1-13):	
This part is common to Modules 1 & 2 and is to be run if teachers need to introduce the subject of biodiversity . If this subject has already been covered, this part can be omitted .	
slides # 6 -10:	definition of biodiversity; role of bees; Colony Collapse Disorder (CCD)
slides # 11-12:	role of Arts in biodiversity

Module 1: Louis Masai's artworks

Module 1: Louis Masai's artworks (slides # 14-43)
Module 1 presents the work of British artist Louis Masai. Module 1 is divided into subtopics, which can be run independently
Subtopic 1 (slides # 15-28):
<ul style="list-style-type: none"> Introducing Louis Masai work and aims The "Save the Bees Project": a project aimed at rising people awareness on the role of bees for biodiversity and their importance for humans' survival Loss of habitat Wildlife crime Ecological balance of ecosystems

slides # 18-19:	These slides offer the chance to see the process of painting a big mural . They are also a first approach to one of Masai's preferred themes: bees and other endangered species. In fact, on a Shanghai wall, a bee is ready to stitch a Red Panda together. Red Pandas (<i>Ailurus fulgens</i>) are native to the eastern Himalayas and south western China. They are listed as "endangered" on the IUCN ¹⁷ Red List because the wild population is estimated at fewer than 10,000 mature individuals and continues to decline due to habitat loss and fragmentation, poaching and inbreeding depression ¹⁸ .
slide # 20:	Two bees say " when we go, we're taking you all with us ". Analyse with your students the meaning and implications of this sentence. Louis is photographed while completing a third bee. Next to him a box of sprays (East London, UK).
slide # 21:	A dying bee asks for help. Next to her, a message to remind people that without bees, humans can't survive (Brick Lane, London, UK).
slide # 22:	A cloud-fuelled sky scene (perhaps a toxic cloud?) and several bees. Two larger bees dominate this piece: the one on left is depicted as a marionette puppet bearing the sign 'No Bees, No Food!', indicating how it is humans controlling the future of the bees (Withecross Street, London, UK)
slide # 23:	A large bee has just completed a message for Parisian metro passengers: " <i>Je suis endangered. Help me</i> ". The bee is again depicted as a marionette puppet . It bears a brush which it has used to paint the sign. From the brush flourish some flowers (Gare du Nord, Paris, France).
slide # 24:	Bees, birds and insects painted on the wall of a house, carrying flowers (Hackney Wick, London). A bee bears the sign " No bees, no humans ". On the bottom part, another message says: " We share the same environment, look after it ". The message the artist conveys is quite clear.
slide # 25:	On reclaimed wood , a bee has been painted stitching together a Rhino . Three species of rhino— black, Javan, and Sumatran — are critically endangered . Today, a small population of Javan rhinos is found in only one national park on the northern tip of the Indonesian island of Java. A mainland subspecies of the Javan rhino was declared extinct in Vietnam in 2011 ¹⁹ . Black rhinos are the smaller of the two African rhino species. Populations of black rhino declined dramatically in the 20th century at the hands of European hunters and settlers to less than 2,500 in 1995. Since then, thanks to persistent conservation efforts across Africa, black

¹⁷ International Union for the Conservation of Nature

¹⁸ Source: Wikipedia

¹⁹ <https://www.worldwildlife.org/species/rhino>

	<p>rhino numbers have increased to around 5,600 today. However, the black rhino is still considered critically endangered: wildlife crime — in this case, poaching and black-market trafficking of rhino horn — continues to plague the species and threaten its recovery ²⁰.</p> <p>The patterns in the fabric the rhino is made of are traditional patterns from Africa and Europe and also represent typical vegetation of those areas.</p>
slide # 26:	<p>A couple of New England Cottontail Rabbits (<i>Sylvilagus transitionalis</i>) painted on paper. This specie is classified as vulnerable, as there are approximately 16.500 individuals left. It lives in parts of New England and New York state (USA). A critical threat is the loss of habitat — places where rabbits can find food, rear young and escape predators. Development has taken much land once inhabited by cottontails and other wildlife ²¹.</p> <p>Observe the patterns in the patchwork and connect the patterns to the message the artist intends to offer.</p>
slide # 27:	<p>A bee is stitching together a patchwork ape on a house wall (Waterford, Ireland). With an estimated population of between 518,000 and 688,000 gorillas, chimpanzees and orang-utans living in the wild (all Great Ape species), are either Endangered or Critically Endangered on the IUCN Red List, indicating that they are at very high risk of extinction in the wild in the near future, probably within our own lifetime. The protection of these species, which play a fundamental role in the ecological balance of tropical forests and ecosystems, and thus in adaptation to climate change, is essential ²².</p> <p>Observe the patterns in the patches.</p>
slide # 28:	<p>A bee and two African Penguins (<i>Spheniscus demersus</i>). One of the penguins is depicted realistically and carries a needle and a thread in the beak, while the other one is shown with a colourful patchwork quilt type of design, as what he's representing is actually a toy. The message being that once the animal dies out, the only thing that remains is the cuddly toy. Observe the patterns in the patches.</p>
Subtopic 2 (slides # 30-31):	
<ul style="list-style-type: none"> • Effects of plastics wastes on sea life • Water pollution • Ecological balance of ecosystems • Overfishing 	

²⁰ <https://www.worldwildlife.org/species/black-rhino>

²¹ <https://louismasai.com/projects/the-art-of-beeing/new-york-rabbit/>

²² <https://en.unesco.org/themes/biodiversity/great-apes#:~:text=With%20an%20estimated%20population%20of,wild%20in%20the%20near%20future%2C>

slide # 30:	<p>The work depicts a coral sea with fish, turtles, and colourful plants. However, floating plastic bags can be seen amongst the colourful creatures (North Street, Bedminster, Bristol, 2018). The artwork sends a message about water pollution. The artist has created this painting for 2018 Upfest in Bristol, which was featuring the television cartoon series "The Simpsons". Creator of "The Simpsons" Matt Groening selected some of the street artists for that year's Upfest. As a tribute to "The Simpsons", the three-eyed fish in the cartoon style created by Matt Groening also makes an appearance: can you spot it?</p> <p>"Every year, 5 to 14 million tons of plastic flow into our oceans from coastal areas. Sunlight, wind, waves, and heat break down that material into smaller bits that look — to plankton, bivalves, fish, and even whales — a lot like food. Microplastics damage aquatic creatures, as well as turtles and birds: they block digestive tracts, diminish the urge to eat, and alter feeding behaviour, all of which reduce growth and reproductive output. Their stomachs stuffed with plastic, some species starve and die. Moreover, plastic isn't one thing: it comes in many forms and contains a wide range of additives — pigments, ultraviolet stabilizers, water repellents, flame retardants, stiffeners such as bisphenol A (BPA), and softeners called phthalates — that can leach into their surroundings"²³.</p> <p>The list of freshwater and marine organisms that are harmed by plastics stretches to hundreds of species. The question is: what individuals and nations can do to reduce plastic pollution from entering the oceans, lakes, and rivers?</p>
slide # 31:	<p>Atlantic Bluefin Tuna (<i>Thunnus thynnus</i>), is a species of tuna in the family of <i>Scombridae</i>. Atlantic bluefins are native to both the western and eastern Atlantic Ocean, as well as the Mediterranean Sea. They have become extinct in the Black Sea. It can live for up to 40 years and dive deeper than 3,000 feet. The Atlantic bluefin tuna has been the foundation of one of the world's most lucrative commercial fisheries. Medium-sized and large individuals are heavily targeted for the Japanese raw-fish market, where all bluefin species are highly prized for sushi and sashimi. This commercial importance has led to severe overfishing²⁴. (Chalkwell Hall Junior School, Southend-on-Sea, UK)</p>
Subtopic 3 (slides # 32-34):	
<ul style="list-style-type: none"> • Effects of climate change on ecosystems • Sea level rise • Global warming 	

²³ <https://www.nationalgeographic.com/magazine/article/plastic-planet-health-pollution-waste-microplastics>

²⁴ https://en.wikipedia.org/wiki/Atlantic_bluefin_tuna

slide # 32:	<p>American crocodile (<i>Crocodylus acutus</i>) habitat is expected to become significantly inundated from even the most conservative estimates (one meter) of sea level rise. Although new habitat may also become available as the sea levels rise, developed areas may create barriers to northward migration. Sea level rise will also drive changes in water chemistry and salinity that may negatively impact current crocodile habitat even before inundation occurs.²⁵</p> <p>Changes in temperature are also a potential direct threat: for crocodiles, gender is not determined genetically, but rather by embryo temperature during incubation. A difference of 0.5 - 1° C in incubation temperature results in markedly different sex ratios. Temperatures within a nest can vary from the top to the bottom of the nest, and can result in mixed-gender hatchlings. More female hatchlings due to the cooler or hotter incubation temperatures could lead to eventual extirpation of the species from an area.²⁶</p>
slide # 33:	<p>Bog Turtle (<i>Glyptemys muhlenbergii</i>) is classified as critically endangered. This specie lives in certain areas of the East coast of the US. Bog turtles are one of the rarest turtles in the United States. They are extremely sensitive to the effects of global warming. The turtle's survival is closely tied to its delicate habitat. Erratic weather patterns resulting from global warming will disrupt the fragile balance key to the turtle's survival. By altering hydrological cycles, global warming will either dry out or flood the turtle's habitat. In addition to bog turtles needing a very specific home, roads and development have fragmented much of their remaining habitat. As the changing climate alters the availability of the turtle's current habitat, they will have very limited ability to migrate to places that could be more suitable²⁷.</p>
slide # 34:	<p>This mural represents another pollinator, the hummingbird. There are around 340 hummingbird species in the world, all native to the Americas²⁸. Like all birds, hummingbirds have basic habitat requirements, including food, water, shelter, and space to forage and breed, in order to thrive. Some tropical hummingbirds are at risk, like other pollinators, due to habitat loss and changes in the distribution and abundance of nectar plants. Climate change and the spread of invasive species may exacerbate these issues for hummingbirds in the future²⁹.</p>

²⁵ <https://climateadaptationexplorer.org/species/reptiles/100>

²⁶ <https://phys.org/news/2006-11-global-crocodiles.html>

²⁷ <https://louismasai.com/projects/the-art-of-beeing/new-york-turtle/>

²⁸ <https://macroecology.ku.dk/news/2018/the-environment-determines-caribbean-hummingbirds-vulnerability/>

²⁹ <https://www.pollinator.org/learning-center/hummingbirds>

Subtopic (slides # 35-36):	
<ul style="list-style-type: none"> • Deforestation • Palm oil plantations • #ProtectPongo campaign 	
slide # 35:	<p>A Bornean Orangutan (<i>Pongo pygmaeus</i>) holding a chainsaw, which symbolizes the destruction of Orangutans' home. With just 100,000 Bornean orangutans left, the species is critically endangered due to deforestation. More than 24 million hectares of rainforest – an area the size of the UK – have been destroyed in Indonesia between 1990 and 2015, primarily to make way for palm oil plantations. Palm oil, which is used in 50 per cent of packaged products is threatening the destruction of orangutans' rainforest habitats. The #ProtectPongo campaign highlights the small changes people can make to help protect the species ³⁰.</p>
slide # 36:	<p>Three Orangutans are playing on this house wall (Arcugnano, Italy) ³¹. The youngest one is playing with an orangutan puppet, to signify that if we don't protect them, there will be only toys left.</p>
Subtopic 4 (slide # 37):	
<ul style="list-style-type: none"> • Monocultures • Biodiversity loss • Second bananas extinction 	
slide # 37:	<p>A bee is stitching together a patch worked banana. A sign says "<i>Almost extinct for the second time</i>" and refers to the fact that the Gros Michel banana is almost extinct and no longer viable for commercial exploitation because of its massive popularity and consequent monoculture in the first half of the 20th century. It has long been appreciated in biology that monocultures are extremely vulnerable to pathogens, and the Gros Michel banana got near extinction due to the fungus <i>Fusarium oxysporum</i>. This variety was replaced commercially around 1950 by the Dwarf Cavendish banana variety, which was also turned into a massive monoculture. These plants are all genetically identical, so they cannot evolve any resistance to new diseases. Now the Cavendish banana is seriously threatened by a variant of same pathogen that destroyed the Gros Michel. This is an example of the dangers of massive monocultures (see bibliography for references).</p>

³⁰ <https://www.prweek.com/article/1696295/protect-pongo-campaign-sheds-light-destruction-caused-palm-oil>

³¹ <https://www.vicenzatoday.it/cronaca/arcugnano-dopo-la-barbie-con-la-barba-arrivano-gli-orango-tango.html>

Subtopic 5 (slides # 38-41):	
<ul style="list-style-type: none"> • African resources exploitation • Elephants hunting • Civil wars • Climate change • Sea level rising • Migrations 	
slide # 38:	<p>An African elephant (<i>Loxodonta</i>) is swimming in a bright blue sea, carrying in its trunk a chain with the peace symbol (Corso Moncalieri, Turin, Italy). The African elephant is a genus comprising two living elephant species: the African bush elephant (<i>L. africana</i>) and the smaller African forest elephant (<i>L. cyclotis</i>). Both species are considered at heavy risk of extinction on the IUCN Red List. They are threatened by habitat loss and fragmentation. Also, poaching for the illegal ivory trade is a threat in several countries. The artist used the image of the elephant to invite reflection on the implications surrounding poaching and the ivory trade. Not many people are aware of the close links between arms smuggling, the exploitation of prostitution, the trafficking of children and the illegal ivory trade; but all of these activities contribute to financing wars.</p> <p>Moreover, the elephant is swimming: this pose is intended to encourage discussion on the consequences of rising sea levels: as this phenomenon intensifies, the number of people who are forced to emigrate will increase. In the future, there will be an ever greater need to be at peace with one another, and to welcome those who will be forced to leave their home countries ³² (Turin, Italy).</p>
slide # 39:	This slide invites students to analyse the issues proposed by the swimming elephant.
slides # 40-41:	These slides show some details in the painting, suggesting the topics the artist wishes to rise the discussion about.
Conclusions (slides # 42-43):	
<ul style="list-style-type: none"> • Suggestions for more investigations on the Internet 	

³² <https://www.lavazza.com/en/landing/toward-2030/goal-16.html>

Module 2: Kate MacDowell's artworks

Module 2: Kate MacDowell's artworks (slides # 44 – 67)	
Module 2 presents the work of US artist Kate MacDowell . Also module 2 is divided into subtopics , which can be run independently :	
Subtopic 1 (slides # 45-46):	
<ul style="list-style-type: none"> • Introducing Kate MacDowell's work and aims • Topics covered by the artist • Use of porcelain 	
Subtopic 2 (slides # 47-50):	
<ul style="list-style-type: none"> • Biodiversity and the role of bees • Future of bees depends on humans • Without bees human life is not possible 	
slide # 48:	<p>Cross Pollination, 2009. Cross-pollination, also called heterogamy, is a type of pollination in which sperm-laden pollen grains are transferred from the cones or flowers of one plant to egg-bearing cones or flowers of another ³³. Two human hands gently hold in the palms what appears to be the centre of a flower. Some bees suck nectar. This composition represents the idea that the fate of bees is in the hands of humans, that humans must take care of the bees, so that they can continue to be the vectors of pollination.</p>
slide # 49:	<p>Goblin Market, 2009. The title of the work, "<i>Goblin Market</i>", is probably taken from a narrative poem by the English writer Christina Rossetti, sister of the famous pre-Raphaelite painter Dante Gabriel Rossetti. In this novel, two sisters are tempted by the fruit sold by the Goblins, evil elves who appear every evening along the banks of a stream where the sisters draw water. The fruit sold by the Goblins is bewitched and kills those who eat it. The composition represents two human hands holding various types of fruit; various types of insects (flies, bees, worms) appear on the fruit and hands. Some insects are placed on the arteries of the wrists, as if to close them to prevent the precious blood from escaping, or as to drink it. The veins of the wrists look like branches of a tree that turn into fruit. This sculpture tells us that human life depends on what nature produces and fruit is one of the most important foods for humans. The work represents this link and perhaps also refers to the fact that if we pollute the land we cultivate and the water with which we irrigate our fields, we will only be able to eat fruit that looks beautiful but poisons us.</p>

³³ <https://www.britannica.com/science/cross-pollination>

slide # 50:	Buzz, 2008. This sculpture represents the frowning face of a man, holding a hand over his face, in the position of someone who is thinking of something very serious. Many bees rest on his face and hand. The sculpture probably represents the scientific world's concern about Colony Collapse Disorder. In any case, it lends itself to many interpretations and reveals the close link between bees and human beings.
Subtopic 3 (slides # 51-55):	
<ul style="list-style-type: none"> • Dependence of human beings on Nature • Interconnections of all Lives • Land pollution • Air pollution • Migrations and climate change 	
slide # 52:	Taking Root, 2009. “To take root”, when referred to a plant, means “begin to grow and draw nourishment from the soil through its roots”. The expression can also refer to an idea, in the sense that it becomes fixed or established. Only one human part appears in this work: an ear. The ear canal, the nerves, the veins inside the ear are transformed into leaves, flowers and berries. It represents the concept that human life is closely connected with the natural world and that humans without nature cannot survive. The title perhaps also suggests that we should 'listen' more to the scientists who tell us that we need to change the way we live and that this idea should 'take root' within our daily thinking.
slide # 53:	Migrant, 2009. A “migrant” is a person who moves from one place to another, especially in order to find work or better living conditions ³⁴ . This composition represents two human feet. The toes are turning into roots and the ankles are represented as the trunks of a tree. On the toes is an ant. The veins resemble the branches of the tree or the sap flowing inside the tree. Here again the artist describes the indissoluble relationship between human life and natural life. The title of the composition perhaps refers to the fact that many populations are forced to abandon their roots because of climate change, which makes their home areas uninhabitable.
slide # 54:	Venus, 2006. “This piece follows the theme of human interaction with nature. This piece is different from the other pieces in MacDowell’s portfolio. Not only does the main item make it stand out, through the subtle fact that it is an organ and not an extremity limb, but the heart embodies affection, which could translate to MacDowell’s personal affliction towards how we treat the planet. MacDowell also added in a Halogen light, which brings the sculpture to life through the light being switched on. She also placed forms of foliage from which the arteries and veins would carry blood, thus effectively stopping the flow of blood or perhaps implying that the life force from the heart is generating new

³⁴ Definition from <https://www.collinsdictionary.com/dictionary/english/migrant>

	growth to the bio-systems in which we coexist. This is a provocative yet subtle jab at the governments, saying that if our hearts stop, we will die out, the same applies to the planet” ³⁵ .
slide # 55:	Canary, 2008. This work refers to “sentinel species”. These are organism, often animals, used to detect risks to humans by providing advance warning of a danger. The terms primarily apply in the context of environmental hazards rather than those from other sources. Some animals can act as sentinels because they may be more susceptible or have greater exposure to a particular hazard than humans in the same environment. An example is the "canary in the coal mine": canaries are used into coal mines as an early-warning signal for toxic gases, primarily carbon monoxide. The birds, being more sensitive, would become sick before the miners, who would then have a chance to escape or put on protective respirators ³⁶ . This work represents two human lungs. The work is hollow and can be illuminated by a light placed inside it. When it is illuminated, the effect is of great visual impact: inside the lungs you can see little birds - canaries. Two other canaries are placed outside the lungs. The work clearly refers to the fact that human activities pollute the air and that pollution will first kill wildlife and then will kill humans.
Subtopic 4 (slides # 56-59):	
<ul style="list-style-type: none"> • Man-made environmental threats • Pollution • Connection between humans and animals 	
slide # 57:	First and Last Breath, 2010. The work depicts a female rabbit suckling her young. The adult rabbit is wearing a gas mask. The title of the work refers to the first breath of the new born rabbits and the last breath they or their mother might take due to air pollution. In the sculpture, the animal defends itself using a gas mask, which instead it clearly cannot wear in Nature.
slide # 58:	Canary 2, 2008. The theme of this sculpture is closely related to the works entitled “Canary” and “First and Last Breath”. A small bird, probably a canary, is wearing a mask, an oxygen tank and a helmet. It is defending itself against threats caused by man.
slide # 59:	Safety, 2008. A rabbit wears a protective mask. Also in this work, MacDowell tells us that Nature is threatened by the presence of man, who instead of being responsible for the other inhabitants of the Earth, ignores their existence and compromises their survival.

³⁵ <https://ellieclaireartblog.wordpress.com/2017/05/21/inside-outside-artist-research-kate-macdowell-subject-part-2/>

³⁶ https://en.wikipedia.org/wiki/Sentinel_species

Subtopic 5 (slides # 60-63):	
<ul style="list-style-type: none"> • Sense of friction and discomfort between man and the natural environment • Man is a victim of his own destructive practices 	
slide # 61:	<p>Assisted Living, 2012. The artist says that what provoked her initial thoughts about this piece, “was thinking about how the California Condor (<i>Gymnogyps californianus</i>) was brought back from the brink of extinction (22 birds left in the wild) by a captive breeding program in which the first egg from a pair was removed from the nest and hand raised by biologists wearing condor hand puppets. She wanted to make a piece which emphasized the “hands on” nature of this approach, and how sometimes species preservation depends on such laborious egg by egg care-taking” ³⁷.</p>
slide # 62:	<p>Nursemaid 1-2-3, 2015. This composition depicts three primates, each holding and caring for a human infant. The title of the work refers to the fact that primates are our ancestors and that the human species is an evolution of them. Humans should take care of apes (preventing the destruction of their habitat, stopping hunting) and not the other way round.</p>
slide # 63:	<p>Feral, 2019. A cat has caught a bird, is holding it between its paws and is killing it with its mouth. However, if you look closer, you can see that the cat's front legs are actually human arms and hands. The work tells us that nature can seem ferocious to us, because larger animals eat smaller ones to maintain the balance of the system. In reality, man is the most ferocious creature of all, because he destroys nature for no reason, not for food, not to maintain balance, but for greed, lack of respect, consumerism, inability to manage natural resources.</p>
Subtopic 6 (slides # 64-65):	
<ul style="list-style-type: none"> • Analyse the reactions that the artist wants to rise in the viewer • Think about emotions • Think about the social role of visual arts 	
slides # 64-65	<p>These slides stimulate conversation between teachers/educators and students about the feelings and reactions provoked by the artworks.</p>
Conclusions (slides # 66-67):	
<ul style="list-style-type: none"> • Suggestions for more investigations on the Internet 	

³⁷ <https://mindysolomongallery.wordpress.com/2011/11/14/kate-macdowell-interview/>



Conclusion of the workshop and final considerations (slides # 68-72):

General conclusions on the workshop (slides #68-72):

This part is common to modules 1 & 2. The three characters are again all together and exchange their impressions on the works they have seen.

- Final considerations on the role of Art
- Its impact on rising people's and governments' awareness

Suggestions for further activities

- **Did you know that not only bees are pollinators?**
 - Discover with your students which other insects and vertebrates play this role. Look on the web for pictures.
 - Look on the web if any other visual artist has painted or crafted other species of pollinators.
- **Discover Louis Masai works:**
 - Ask your students to observe Louis Masai's murals and look for small details:
 - observe the patterns of the fabrics Louis paints his animals with. What do you see?
 - often, murals have been photographed with the surrounding scene they are placed in. Observe the scene and describe what happens, what you see, notice etc.
 - Have fun with your students looking on the web for Masai's works and recognizing which animals and plants he has painted.
 - Look on the web for videos or pictures showing Louis Masai at work and discover the various techniques to paint a mural and which tools are needed.
 - Search on Instagram for more projects all over the world aiming at protecting bees and arising people consciousness, using the hashtag [#savethebees](#)
- **Discover Kate MacDowell works:**
 - Kate MacDowell has crafted many porcelains which have been bought by Museums and private collectors. On her website you'll find a selection of her artworks: have a look at them with your students. Some of them are really impacting!
 - MacDowell works analyse human and animal anatomy in detail: she represents animal/human skulls, hearts, livers, and other body parts. But if your students are able to label the various organs, you can explore the deep connection that MacDowell proposes and analyses in those works.
 - Kate MacDowell explores many other subjects other than the role of bees and biodiversity. You can use her artworks to approach other relevant environmental issues with your students.
 - You can also explore the process to create porcelain.
- **Other artists:** Louis Masai and Kate MacDowell are just two of hundreds of artists all over the world standing up for Nature and revealing the impact of human activities on the environment. Look by yourself for other artists, either your nationality or foreigners, and then propose your students to analyse their works and analyse the messages they want to send. You can also ask your students to search for other artists by themselves. Check for example:
 - <https://www.causelight.com/gallery>. This site is an **open source gallery** for a collective of artists for conservation to exhibit their work and highlight the causes of endangered species.
 - check the project on bees called "The good of the hive" by **Matthew Willey**: <https://www.thegoodofthehive.com/>
 - check the works of **ATM**, a street artist based in London, best known for painting murals of endangered birds on city walls. In 2015 ATM painted a giant honey bee in Bristol: it marked the beginning of the Urban Pollinators Summit organized by Friends of the Earth and BeeBristol as part of the Get Bristol Buzzing campaign. Check a very interesting interview in English: <https://www.synchronicityearth.org/a-conversation-with-street->



- [artist-atm/](https://www.greenme.it/vivere/arte-e-cultura/street-art-graffiti-atm-uccelli-estinzione/). For a comment in Italian on his artworks check: <https://www.greenme.it/vivere/arte-e-cultura/street-art-graffiti-atm-uccelli-estinzione/>
- Mural “**Shattering**” by artist **Leon Keer**. The mural depicts the story of climate change. See in English <https://www.streetpainting3d.com/3d-mural-shattering-helsingborg>, or in Italian: <https://www.elledecor.com/it/lifestyle/a33941148/street-art-leon-keer-svezia/>
 - Mural “**Dung Beatle**” in Bayonne (France) by French duo **Murmure Street**. The mural is part of their “Garb-age” series which is based on dreamlike and poetic twists of the garbage bag. This object, symbol of our era and our consumerist civilization, invades our daily life and the environment. See: <http://www.art-vibes.com/street-art/murmure-street-dung-beetle-bayonne/>
 - Works by **Federico “Iena Cruz” Massa**. Federico works in the US but is originally from Milan, Italy. Recently he has realized a mural in New York, along the East River’s banks, titled “**High tide**” about the endemic biodiversity of one of the city’s most polluted waterways and its links to climate justice. See a comment in English: <https://streetartunitedstates.com/a-mural-by-iena-cruz-addressing-how-human-activity-impacts-nature/>. See a comment in Italian: <http://www.art-vibes.com/street-art/iena-cruz-high-tide-mural-new-york/>

Bibliography in English

On Colony Collapse Disorder and Decline of Pollinators

- EUROPEAN PARLIAMENT NEWS - “What’s behind the decline in bees and other pollinators? (infographic)”:
<https://www.europarl.europa.eu/news/en/headlines/society/20191129STO67758/what-s-behind-the-decline-in-bees-and-other-pollinators-infographic>
- FAO (FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS) – “Declining bee populations pose threat to global food security and nutrition”:
<http://www.fao.org/news/story/en/item/1194910/icode/>
- EPA (UNITED STATES ENVIRONMENTAL PROTECTION AGENCY) – “Colony Collapse Disorder”:
<https://www.epa.gov/pollinator-protection/colony-collapse-disorder>
- USDA - ARS (US DEPARTMENT OF AGRICULTURE – AGRICULTURAL RESEARCH SERVICE): “Honey Bee Health” <https://www.ars.usda.gov/oc/br/ccd/index/> this page is highly recommended for other bibliography
- GREENPEACE – “Save the bees”: <https://www.greenpeace.org/usa/sustainable-agriculture/save-the-bees/>

On Louis Masai’s Works

- Louis Masai’s official website: <https://louismasai.com/>
- Interviews with Louis Masai: talking about his art and his message (we suggest to read all interviews listed below, as they explore different aspects of his art)
<https://impakter.com/using-art-to-combat-climate-change-an-interview-with-louis-masai/>
<https://www.greenhousepr.co.uk/louis-masai/>
<https://scienceline.org/2017/02/qa-louis-masai/>
<https://nogreywalls.org/interview-with-louis-masai/>
<https://www.conservationconversation.co.uk/post/whats-painting-got-to-do-with-conservation>
<https://www.greenhousepr.co.uk/louis-masai/> (interesting interview on the social role of art. Masai also comments on his mural “Turtley”, at Greenhouse HD, Bristol, UK).
- On the “Save the bees” project: <https://www.ecowatch.com/buzzing-artist-swarms-city-walls-to-save-the-bees-1882023610.html>
- On the second bananas extinction:
<https://edition.cnn.com/2015/07/22/africa/banana-panama-disease/index.html>
<https://theconversation.com/the-quest-to-save-the-banana-from-extinction-112256>
- 2.5 - On Orangutan conservation art project:
<https://www.itv.com/news/central/2020-09-28/artist-paints-orangutan-mural-in-birmingham-to-warn-against-palm-oil>
hash tag [#ProtectPongo](#)
- On the mural “Swimming toward extinction”:
<https://www.lavazza.com/en/landing/toward-2030/goal-0.html>
<https://www.lavazza.com/en/landing/toward-2030/goal-16.html>

On Kate MacDowell's Works

- Kate MacDowell's official website: <http://www.katemacdowell.com/>
- General comments on Kate MacDowell's art:
<https://mindysolomon.com/artist/kate-macdowell/>
<https://ellieclaireartblog.wordpress.com/2017/05/21/inside-outside-artist-research-kate-macdowell-subject-part-2/>
<https://beautifulbizarre.net/2016/11/08/kate-macdowells-honest-and-haunting-sculptures/>
- Interviews with the artist:
<https://mindysolomongallery.wordpress.com/2011/11/14/kate-macdowell-interview/>
<https://blogs.massart.edu/earthandalchemy/artists/kate-macdowell-american/>
<https://blogs.scientificamerican.com/symbiartic/science-art-interviews-kate-macdowell/>
<https://ellieclaireartblog.wordpress.com/2017/05/21/inside-outside-artist-research-kate-macdowell-subject-part-2/>

Bibliografia in Italiano

Ruolo degli Street Artists

- "Street art per l'ambiente: i graffiti più iconici al mondo. Dieci esempi di murales che vogliono far riflettere sui danni causati dall'uomo al nostro ecosistema":
<https://anteritalia.org/la-street-art-per-lambiente/>
- "Murales a Torino: quando la street art riporta la natura in città":
<https://www.mostramifactory.it/2020/06/18/murales-torino-la-street-art-riporta-la-natura-citta/>
- "Street artist di tutto il mondo uniscono arte e attivismo ambientale per salvare gli oceani":
<https://www.keblog.it/street-art-attivismo-ambientale-pangeaseed/>

Api e Biodiversità

- ISPRA, 2020 – *"Rapporto su declino delle api e degli impollinatori"*. Pdf scaricabile da:
https://www.isprambiente.gov.it/files2020/pubblicazioni/quaderni/declino-impollinatori_quaderno-ispra_20maggio2.pdf
- ISPRA, 2010 – *"Alla scoperta della biodiversità. Strumento didattico del progetto di educazione ambientale 'Orientarsi nella Biodiversità' "*. Pdf scaricabile da:
<https://www.isprambiente.gov.it/it/attivita/formeducambiente/educazione-ambientale/file-educazione-ambientale/orientarsi-nella-biodiversita#:~:text=Si%20ritiene%20che%20molte%20specie,resta%20in%20gran%20parte%20sconosciuto.>

Sulle opere di Louis Masai

- Sito ufficiale dell'artista Louis Masai (solo in inglese): <https://louismasai.com/>

- Sul progetto “Save the bees”:
<https://www.dolcevitaonline.it/louis-masai-e-il-progetto-savethebees/>
<https://www.terzoincomodo.it/pot-pourri/il-progetto-proteggi-le-api-di-louis-masai-michel>
- Sul possibile rischio di estinzione delle banane:
 - “Un fungo parassita dei banani minaccia la produzione mondiale del frutto”:
<https://www.focus.it/ambiente/natura/un-fungo-parassita-dei-banani-minaccia-la-produzione-mondiale-delle-banane>
 - “La banana rischia l'estinzione: solo l'editing genomico potrà salvarla?”:
<https://ilbolive.unipd.it/it/news/banana-rischia-lestinzione-solo-lediting-genomico>
- Sul progetto artistico di salvaguardia degli Oranghi
 - “Questo orangotango cerca casa, la sua è stata distrutta dalla deforestazione”:
<https://www.r101.it/news/fuori-onda-news/1270733/questo-orangotango-cerca-casa-la-sua-e-stata-distrutta-della-deforestazione.html>
 - “Murales per preservare”: <https://www.rsi.ch/news/vita-quotidiana/cultura-e-spettacoli/Murales-per-preservare-13586263.html>
 - hash tag #ProtectPongo
- Sul murale “Swimming towards a new existence” realizzato a Torino
 - “Torino e Lavazza presentano Toward 2030: quando la street art racconta la sostenibilità”:
<https://www.mentelocale.it/torino/articoli/75887-torino-lavazza-presentano-toward-2030-quando-street-art-racconta-sostenibilita.htm>
 - “Toward 2030: a Torino la street art racconta i 17 Obiettivi delle Nazioni Unite”:
<https://www.mentelocale.it/torino/articoli/79105-toward-2030-torino-street-art-racconta-17-obiettivi-delle-nazioni-unite.htm>
 - “TOward 2030 a Torino: street art e global goals, what are you doing?” (in italiano)
<https://www.impakter.it/toward-2030-a-torino-street-art-e-global-goals-what-are-you-doing/#:~:text=TOward%202030%20%E2%80%93%20What%20Are%20You,obiettivi%20dell'Agenda%20Onu%202030>
 - “Lavazza e i 17 Goal di Sviluppo Sostenibile”:
<https://www.lavazza.it/it/landing/toward-2030.html>
 - “16. Pace, giustizia e istituzioni solide. LOUIS MASAI, Corso Moncalieri 61”
<https://www.lavazza.it/it/landing/toward-2030/goal-16.html>

Sulle opere di Kate MacDowell

- Sito ufficiale dell'artista (solo in inglese): <http://www.katemacdowell.com/>
- Commenti sul suo lavoro:
 - “Porcelain Sculptures, le opere di Kate MacDowell”:
<https://www.collater.al/kate-macdowell-porcelain-sculptures/>
 - “Kate MacDowell”: <https://www.bizzarrobazar.com/2011/01/28/kate-macdowell/>
 - “La fragile forza della porcellana: Kate MacDowell”:
http://artonclimatechange.altervista.org/la-fragile-forza-della-porcellana-kate-macdowell/?doing_wp_cron=1619100653.3594141006469726562500
 - “Kate MacDowell”:
http://deathstheaway.altervista.org/kate-macdowell/?doing_wp_cron=1619101002.6430599689483642578125



- “Lo stato di natura”: <https://www.libidodocta.it/lo-stato-di-natura/>
- “Art Excellence: Kate MacDowell” (in italiano):
<https://designthesign.wordpress.com/2009/12/22/art-excellence-kate-macdowell/>
- “Le ceramiche di Kate MacDowell”:
<http://pandamolesto.com/1078-le-ceramiche-di-kate-macdowell/>