Landscapes of care the emergence of landscapes of care in unstable territories



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Beyond the Whiteness: Environmental Concerns in the Visual Narratives of Carrara Marble Quarries

Noemi Quagliati

Abstract:

Marble extraction in the Italian Apuan Alps has been known since Roman times, and its historical importance is symbolized by masterpieces of Western art history. However, the Carrara marble industry has recently received harsh criticism for operating in the protected area of the Apuan Alps Regional Park, recognized by UNESCO since 2015. Environmental and social concerns about mining have arisen from the extreme acceleration of all the productive phases of the extractive industry. From the mid-twentieth century, the exploitation of geological deposits of marble grew exponentially thanks to the development of powerful extraction technologies and a global export economy that creates only relatively few occupations in Carrara.

Within this context, photographic and cinematographic projects have increasingly focused on the environmental risks created by the marble mining industry. This article shows how visual representations of Carrara have changed in recent years via an analysis of three case studies: the internationally acclaimed documentary *Anthropocene: The Human Epoch* (2018), the climbing project and Italian short film *Carie* (Cavity 2019), and Lorenzo Shoubridge's naturalistic photographs in *Apuane: terre selvagge* (Apuan Wildlands 2018).

These case studies offer an innovative perspective on the landscapes of marble extraction. Previously, these landscapes were represented following other visual trends emphasizing the technological sublime found in the geometric shapes of the white quarries, the working conditions of marble laborers, and the myth of the purity of marble used in artistic sculptures. The three examples analyzed in this paper attempt to go 'beyond the whiteness' by focusing on the scale of environmental destruction (*Anthropocene: The Human Epoch*), the more-than-human perspective (*Apuane terre selvagge*), and the social struggle for preserving a mountain region through creative solutions (*Carie*). In other words, new aesthetic and ethical sensibilities are challenging established twentieth-century narratives of the Carrara marble quarries by focusing on a new element: the environment.

Keywords: Carrara, Marble Quarries, Anthropocene, Environment, Visual Culture

Noemi Quagliati is an art and photo historian specialized in landscape and aerial iconography, nature and territorial photography, photo-optical technology for military and environmental applications, multisensory aesthetics, and collective memory. After having studied at Brera Fine Arts Academy in Milan and Istanbul Bilgi University, she earned a PhD from Ludwig Maximilian University Munich in cooperation with the Rachel Carson Center for Environment and Society. Based on her doctoral research, she is completing her first book entitled "Militarized Visualities: Photographed Landscape in WWI Germany." Noemi has been a visiting researcher at UC Berkeley and the Research Institute for the History of Science and Technology of the Deutsches Museum, where she has collaborated on modernizing the museum's historical aviation section by investigating the topic of aerial photography. She is currently a lecturer in the history of photography at the LMU Amerika-Institut, where she also coordinates the Ph.D. program of the Class of Culture and History. Before joining the Amerika-Institut, Noemi lectured on German eco-aesthetics at the Junior Year in Munich Program (Wayne State University, Detroit – LMU Munich). She is an associate member of the Network Topographic Visual Media and the European Society for the History of Photography.

"The magic of the quarries opens up like an apparition."¹

The Massa-Carrara Tourist Office website promotes the marble quarries as a distinctive attraction of the most northern province of Tuscany. This Italian region comprises both kilometers of sandy beaches as well as the many mountain peaks of the Apuan Alps. However, according to the tourist office, the natural beauty of the sea and mountains is not the only landscape feature to appeal to visitors.² Massa-Carrara province offers an even more unique scenery: the white manufactured landscape of the marble quarries.³ This landscape is immediately recognizable when driving past the city of Carrara on the motorway A12, which in Italy is also known as Autostrada Azzurra (Blue Motorway).⁴

Located between the Ligurian Sea and the Apuan mountain range, the coastal road runs through the industrial area of the municipalities of Massa and Carrara. The elevated motorway allows a comprehensive view of an industrial landscape characterized by factories and overhead cranes that lift marble blocks and slabs. The uniformly cut rocks are tidily stacked all around the manufacturing buildings, waiting to be shipped and marketed. The industrial district lies between the Apuan quarries and the commercial harbor of Marina di Carrara, which is used for shipping the 'white gold.'

The excavated mountains accompany this landscape of production. In the summer, when the high season brings millions of tourists to the area, the green-yellowish flora of the mountain range appears interrupted by a white, shining surface similar to a layer of snow. However, the high temperatures suggest to visitors that what they are observing must be the famous Carrara quarries known worldwide for some of the most precious bright, white marble used since ancient times.⁵

¹My translation of the original: "La magia delle cave si apre come una visione." See: https://www.aptmassacarrara.it/ home/scopri/marmo/ (Accessed: 24 March 2022).

² Cf. original: "Un panorama unico: chilometri di spiagge incastonate tra l'azzurro del mare e il bianco delle cave marmoree e delle cime innevate all'orizzonte." See: https://www.aptmassacarrara.it/home/scopri/mare-e-natura/ (Accessed: 24 March 2022). Cf. also Cesaretti (2020, 94).

³ For the term "Manufactured Landscape" see Burtynsky et al. (2003). For the older concept of "Man-altered Landscape" see Adams (1975). For the notion of "Anti-Landscape" see Nye and Elkind (2014) and for "Poisoned Landscape" see Kaspar-Eisert (2019).

⁴ The Italian motorway A12, part of the European route E 80, partly connects Genoa to Rome following the Ligurian and Tyrrhenian coasts.

⁵ For a comprehensive analysis of the aesthetics of marble in history, see Gamboni, Wolf, and Richardson (2021).

The Roman exploitation of marble in the Apuan Alps (at that time called Luna marble) flourished under Emperor Augustus, who claimed to have found Rome a city of brick and left it a city of marble (Klainer 2009). Public monuments in Rome—including Trajan's Column and part of the Pantheon—testify to the use of this material (quarried by slaves) in Roman architecture.⁶ Nowadays, the ancient quarry of Fossa Cava is an open-air museum in the Colonnata basin that maintains traces of this historical period. A famous Roman archeological find is the Niche of Fantiscritti (III century A.D.) portraying Jupiter with Hercules and Bacchus, which was originally carved in the homonymous quarry.⁷ This niche also reports the later signatures of Canova, Michelangelo, and Gianbologna (in addition to famous personalities of the Grand Tour travelers) who personally selected marble blocks for their artworks.

After the Roman period, starting from the 12th century, the white marble was used in religious architecture. The Cybo and Malaspina families, who ruled over Massa and Carrara, monitored marble quarries in the 17th and 18th centuries. These noble families granted locals the right to exploit the quarries and hand over the concession to their descendants. By claiming that the marble belonged to the town and not to a handful of families, Carrara workers organized the Lunigiana revolt in 1894 (Gemignani 2020). Since then, Carrara has become a stronghold of international anarchism; and anarchist partisan formations were active in the Carrara area in the anti-fascist Resistance in Italy during World War II.⁸ Against the labor movement, the fascist autarchic system consolidated rents to only a few Carrarians and made extensive use of marble in buildings and urban spaces to legitimize the regime by associating it with its imperial predecessor.⁹

By 1876 an industrial railroad (Ferrovia Marmifera Privata di Carrara) had replaced ox-drawn wagons for transporting marble from the quarries and remained active until the 1960s when it closed due to competition from road traffic.¹⁰ In 1995, a Constitutional Court ruling stipulated that almost all quarries are unavailable assets of the municipality and can be given in concession to private parties only for a temporary fee. However, quarry concessions are often awarded without competition, for very long periods of time, and based on fees below market value.

⁶ The study of Roman slaves' inscriptions in the Carrara quarries allows archaeologists to date mining activities. See Paribeni and Segenni (2014).

⁷ Saverio Salvioni's drawing no. 12 "Fantiscritti e Val di Chiaro" show the original position of the niche in the quarry http:// www.archiviodistatomassa.beniculturali.it/index.php?it/172/salvioni; After being removed from the quarry wall on which it was carved, the niche (Edicola dei Fantiscritti) has been placed in the Cybo Malaspina palace, today headquarter of the Carrara Academy of Fine Arts.

⁸ For anarchism in the Apuan region see Rovelli (2012) and Vatteroni (2019).

⁹ Representations of Carrara marble quarries in fascist time can be found in the propagandistic films of the Istituto Luce. See https://patrimonio.archivioluce.com/luce-web/search/result.html?query=alpi+apuane&archiveType_string= (Accessed: 15 April 2022). For the use of marble in architecture during Fascism, see Rifkind (2018).

¹⁰ For the condition of Carrara quarry workers at the beginning of the 1970s, see the documentary of Bonfanti and Pasolini (1972, 20:32 to 23:21). For a reportage of the Carrara mining industry in the 1980's, see Newman and Boulat (1982).

Throughout the last couple of decades, big businesses run by multinationals have used marble flakes to produce calcium carbonate for paper and as a filler in toothpaste, foodstuffs, and in the cosmetics and painting industries (Mistiaen and Briganti 2015).

The history of mining in Carrara helps to explain the architecture of the quarry as it appears today. Open-cast mining on the vertical mountain walls makes the core of the mountain visible. Geologists explain that the brilliant white of marble is caused by the shells and bones of prehistoric marine life: sediments that the mountain, with its elevation of nearly two thousand meters, has incorporated. The mining industry has therefore transfigured the natural landscape of this region. Distinguishing where the quarries finish and where the mountains begin is impossible in Carrara.¹¹ Human intervention is revealed through the geometry of the mountainside constituted of towers, terraces, steps, and zigzag curves, with wheeled loaders, excavators, and articulated dump trucks, distinguished by the brand CAT, appearing like tireless caterpillars as they enter and exit the quarry's tunnels.

In the seaside resorts of Marina di Massa and Carrara, tour operators advertise guided visits to active open-cast and underground quarries.¹² Many of these trips even comprise an *aperitivo in cava* (cocktail in the quarry) in front of a "sublime scenery."¹³ The type of narration one would expect from these guided tours would be based on the historical importance of marble extraction, the mining methods and working conditions of the quarrymen,¹⁴ and the celebration of Carrara marble as the rock of the artists. Therefore, it is not surprising to find the colorful face of Michelangelo's David painted by the Brazilian muralist Eduardo Kobra on the highest peak of the Gioia Quarry (Marsala 2017; Baldini 2021).

Despite the constant reference to mining traditions and past artistic uses of the white rock, extraction techniques have changed greatly since the painter Saverio Salvioni portrayed manufacturing methods used in quarries between 1810 and 1813 (fig. 1). From the mid-twentieth century, powerful technologies have led to the extreme acceleration of all of the productive

¹¹ To show this contiguity, the term "mountain-quarry" is often utilized in this article.

¹² Among different private guided tours, popular are the visits at the *Cava Museum* in Fantiscritti, http://cavamuseo.com/ en/, the *Ravaccione Gallery n.* 84 organized by Marmo Tour http://www.marmotour.com/il-tour-3/, and *Cava* 117 http:// www.cava177.com/en/cava177_marble_quarries_tour.html (Accessed 30 March 2022).

¹³ The words "spectacular" and "sublime" can often be found on Carrara tourism websites. Cf. also Edward Burtynsky's use of the term "industrial sublime" (Dean 2003: 43, cited in Scott 2022, 121). For "technological sublime" see Nye (1994).

¹⁴ For ethnographic research on work and labor in the marble quarries of Carrara, see Leitch (1996; 2010). A recent TV series about the present work of quarrymen (and women) in Massa-Carrara province is *Uomini di Pietro* (GiUMa Produzioni 2020), which environmental associations have criticized for supporting the destruction of part of the Apuan Alps.





phases of the extractive industry. The diamond wire, which substituted the helical wire in the 1970s, allows for much faster cutting of blocks from the mountain. On the one hand, this system allows a greater quantity of marble to be mined (with a higher environmental impact), but on the other hand, it also requires much fewer human resources. The marble industry has therefore been harshly criticized in recent years. Even though environmental and social concerns about industrialized mining are not reported in the quarries' guided tours, the exploitation of mineral deposits is at the center of local public debate.

Strolling around the city of Carrara or following the streets that lead to the mountain–quarry, acute observers can notice sprayed handwriting such as "No Cave," "Basta! Cave Chiuse" (No Quarries, Stop! Close the Quarries, fig. 2). These messages of protest are often written on the marble blocks and contrast with Eduardo Kobra's intervention. Rather than employing the block as a canvas for celebrating the genius of sculptors of the past, anonymous citizens express their opposition to the current industrial system that is exporting the Apuan mountains and destroying and polluting the communal environment. The protest movement for safeguarding the Apuan Alps and limiting the industrial activity of the quarries is known as *No Cav* (No Quarries), which comprises many groups active in the area, e.g., the environmental association *Apuane Libere*, the committee *Salviamo le Apuane*, and others.¹⁵

Critique against marble extraction also appeared in a 2021 manifesto issued by an anarchist group close to the *No Cav* cause. Titled "Le cave ai contadini!" (Quarries to Farmers), the manifesto claimed that Carrara is no longer the home of marble and has become an openair dump where multinational corporations make a big profit to the detriment of the local community. Unemployment, pollution, and traffic congestion caused by road haulage (which replaced marble rail transport) caused the depopulation of the mountain region. In the first few decades of the twentieth century, quarry workers protested against the awarding of state concessions of the marble basins to private and excessively powerful 'barons.' At that time, the motto that appeared in the periodical *II cavatore* was "Le cave ai cavatori!" (Quarries to the Quarrymen).¹⁶ According to current environmental sensibilities, which also influence contemporary anarchist groups, the only possibility for envisioning a sustainable future for the Carrara community is to return the quarries to nature. Reflecting on the Italian word for mining

15 Having arisen at the beginning of the 21st century, *No Cav* is a heterogeneous movement composed of various groups that organize activities at a local level that favor limiting marble extraction in the Apuan Alps. Even though the movement does not have a website, a list of the associations involved can be found at https://en.wikipedia.org/wiki/No_Cav. See also the website of Salviamo le Apuane http://www.salviamoleapuane.org and Apuane Libere https://apuanelibere.org. Besides these local associations, an interesting petition against the privatization of some parts of Carrara's marble basins was signed by Italian intellectuals in 2016 and can be found at https://firenzerepublica.it/cronaca/2016/09/06/news/ in_difes_delle_alpi_apuane_l_appello_di_scrittori_e_intellettuali-147288351/ (Accessed: 15 April 2022). 16 In January 1920, the socialist lawyer Vico Fiaschi published a series of articles on the periodical *Il cavatore* using the expression "Cavatori, le cave sono vostre" (Quarrymen, the quarries are yours). Cf. Bernieri (1964).



coltivazione, literally cultivation, even though the marble mountains may be erased forever as a consequence of mining activities, the anarchist manifesto seems to be searching for ways to restore the link between the natural world and the marble quarries by aiming at supporting the sustainable growth of the mountain region and its communities.¹⁷

17 See https://upload.wikimedia.org/wikipedia/commons/6/6e/An_anarchist_%22No_Cav%22_declaration_in_ Carrara%2C_2021.jpg (Accessed: 15 April 2022).

The first part of this article has introduced the historical context and the present debate regarding the Carrara marble quarries: a controversy involving the local community, regional and national institutions, international actors, and visitors. This introductory account should help to dive into the second part of the paper, which analyzes how environmental concerns have impacted the visual narratives¹⁸ of Carrara marble quarries. Three examples will guide us in exploring how visual representations of the Carrara region have changed in recent years: the internationally acclaimed documentary *Anthropocene: The Human Epoch* (2018), the climbing project and Italian short film *Carie* (2019), and Lorenzo Shoubridge's naturalistic photographs in *Apuane terre selvagge* (2018). These three examples demonstrate different visual genres that aim at diverse audiences when it comes to representing the marble mountains.¹⁹

The documentary *Anthropocene: The Human Epoch* (2018), directed by the Canadians Jennifer Baichwal, Edward Burtynsky, and Nicholas de Pencier, is an 87-minute cinematic catalog of environmental destruction organized around seven themes: extraction, terraforming, techno-fossils, anthroturbation, boundary limits, climate change, and extinction. Shot across twenty-two countries, the film visualizes the impact of human activities on the Earth's ecosystems by reflecting on the concept of the Anthropocene, a newly proposed geological epoch in which humans have acquired the role of a geological force able to cause changes at a planetary scale. The film directors have included the Carrara marble quarries as one of the many examples of "humanity's massive reengineering of the planet." Even though this Italian case is not the main subject of the documentary (Carrara appears only for less than five minutes), the Apuan marble assumes a symbolic value as a consequence of being featured in the film's trailer and on posters advertising the film, as well as in interactive experiences on the Anthropocene project website that accompanies the film.²⁰

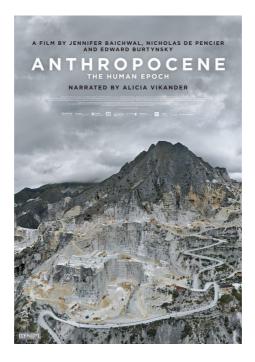
Edward Burtynsky, photographer and the most famous among the directors of *Anthropocene*: *The Human Epoch*, had already photographed Carrara quarries in 1993, incorporating these snapshots in his books *Manufactured Landscapes* (2003) and *Quarries* (2007). The film poster's image portrays Carbonera quarry in the extraction basin of Fantiscritti photographed by Burtynsky in 2016 using a drone (fig.3). In the poster, the natural shape of the top of Cima

18 In this article, different photographic and cinematographic projects (specifically a photobook, a documentary, and a short film) are analyzed in their formal and stylistic aspects. Within the field of environmental humanities, and especially ecomedia, this is considered a traditional approach to examining visual products. A recent trend in film scholarship aims at analyzing the environmental cost of film productions, namely what occurs 'behind the scenes.' This article overlooks this aspect and is therefore primarily concerned with aesthetics.

19 Among the numerous photo-cinematographic projects realized in the first two decades of the 21st century on the subject of Carrara quarries (e.g., Konrad 2010; cf. also Papapetros 2021), the three examples analyzed in this article were released in the last five years and they are particularly permeated with environmental concerns.

20 For a description of the movie and the cultural initiatives organized around it, see https://theanthropocene.org/film/ (Accessed: 15 April 2022).

Canal Grande, apparently untouched by marble extraction activities, contrasts with the artificially deformed landscape of the quarry just below the mountain's summit. The dark low clouds, a common feature in this area, add a sinister atmosphere to the image. Like many other photographers and filmmakers before him, Burtynsky is intrigued by the history of the Carrara iconic marble and the quality of the light that falls across the Apuan Alps (Papapetros 2021). His cold and sharp style reminds the approach of the German photographer of the New Objectivity Albert Renger–Patzsch, who published the photographic volume *Gestein* (Rock) in 1966, an album of rock formations that also includes photographs of Carrara marble quarries. Composing thematic visual catalogs of variations of similar subjects is a practice used by Renger–Patzsch and Burtynsky, even though the latter adds bright colors and comprehensive panoramics, an essential character also present in the documentary *Anthropocene*.



[Fig. 3]

Poster of the documentary Anthropocene: The Human Epoch (2018). The image is a portion of Edward Burtynsky's photo Carbonera Quarry #1, Carrara, 2016 (Source: The Anthropocene Project website; used with permission.)

The Carrara marble quarries represented on the film's poster appear circa twelve minutes after the beginning of the documentary following scenes regarding the mining town of Norilsk (Russia). The shooting in Carrara starts with a quarry wall marked by vertical cuts, creating terraces from which blocks are extracted. The camera films this geometric composition progressively until bulldozers appear at the center of the scene, clearly distinguishable from the background by their frenzied pace. Their movements offer a stark contrast to the inert atmosphere of the white-gray walls of the quarry. The drone recording stands still, with the machines poisoned on an imaginary horizon slightly above the center of the film's frame. Then, the camera gradually recedes, moving away from the quarry's core. The view opens on the entire mountain-quarry. From this new perspective, the bulldozers shrink in size, emphasizing the massive scale of the extraction site that seems almost never-ending. The sequence ends before the viewer can see the summit of the mountain, which, however, is easily recognizable as being the peak portrayed on the film's poster.

A piece of melancholic music played by a string orchestra accompanies the aerial scene, which is overlapped by the raspy voice of a quarryman, whom we know from the end credits to be Franco Barattini, the entrepreneur managing the Cave Michelangelo group. In the next close-up, Barattini recalls a memory from when he was a boy when extracting a single block of marble lasted twenty days. Nowadays, it takes only one day, showing how quickly technology advances. While his description continues, the noise of the machines operating in the quarry becomes louder until Mozart's piece *Don Giovanni – A cenar teco m'invitasti* starts. The opera indicates the beginning of an important moment in the film's narration, namely the difficult exercise of managing the inertia of a stone weighing tons when a marble block (*bancata*) is extracted. The entire operation is guided by the experienced 'chief' of the quarry, who coordinates the workers in moving the machines using a language consisting solely of gestures and signs to overcome the noisy tumult of the extraction industry (cf. Ancarani 2010). After cutting the marble with diamond wire, an excavator overturns the block on a bed of rubble previously prepared on the quarry floor. The falling of the block is shot from three different perspectives and coincides with the end of the music, which is also the end of the work in the quarry (fig. 4).

The last sequence of the documentary is filmed in the sculpture workshop *Studi d'Arte* of the *Cave Michelangelo* group, showing a relaxed, almost spiritual atmosphere that contrasts with the previous scenes in the quarry. Artisans reproduce classical statues with electric stone carving tools in a spacious room flooded with bright light. Perfect copies of Michelangelo's David show once again that, in the popular imagination, the Carrara marble quarries are still linked with iconic sculptures of the past (fig. 5).





[Fig. 4]

The falling of the marble block after the detachment from the mountain. A frame from Anthropocene: The Human Epoch (Source: Baichwal, Burtynsky, and de Pencier 2018, 0:15:57; used with permission.)

[Fig. 5]

Sculpture workshop Studi d'Arte of the Cave Michelangelo group recorded in the film Anthropocene: The Human Epoch (Source: Baichwal, Burtynsky, and de Pencier 2018, 0:16:51; used with permission.)

Visually stunning and often described in favorable reviews as 'alarming' and at the same time 'beautiful,' Baichwal's, de Pencier's, and Burtynsky's film has also been criticized for aestheticizing destruction through the use of captivating image compositions and the skillful use of contrasting colors.²¹ Like many eco-projects that aspire to represent the large-scale human transformation of the Earth, this Canadian documentary uses (and sometimes abuses) panoramic and aerial recordings in order to show the large scale impact of human technology on ecosystems.²² On the one hand, the ultra-high-definition of the distant view highlights the patterns made by 'anthropogenic' changes, but, on the other hand, it obscures local actors and historical and political causes by simplistically generalizing 'humans' as destroyers of the planet (cf. Sandoz and Weber 2022).

Moreover, the directors of *Anthropocene: The Human Epoch* favor quantity of visual examples over a deep contextual analysis of complex case studies. Even though the Canadian directors integrate more information into the interactive website and exhibitions related to *The Anthropocene Project*, the film excludes the voice of scientists, environmentalists, local groups of citizens, and regional park administrators who make Carrara a hot spot of conflicting interests. The film focuses on the landscape transformation caused by efficient (but disembodied) technologies and logistics that seems to overshadow 'the humans.' At this extraction rate, the Carrara marble will no longer exist in the form of a mountain, and, in fact, the whitest variety of marble called Bianco Statuario has nearly been wholly extracted.²³ Unable to change the course of these events, 'these humans' can only admire the unique character of the white stone as an artistic and architectural material of great historical and cultural importance (even though this is only mainly the case for those in Western societies).

21 A summary of positive reviews of *Anthropocene: The Human Epoch*, can be found on the film's webpage https:// theanthropocene.org/topics/anthropocene-the-human-epoch/. A selection of negative responses to the film can be found in Clarkson Fisher (2018), Pritchard (2020), Stevens and Wainwright (2020), and Le (2021).

22 The French documentary *Home* (Arthus–Bertrand 2009) also employed aerial recordings for showing the human threat to the ecological balance of the planet, while Emmet Gowin's *Changing the Earth* was a collection of black–and–white aerial photographs (2002). A more recent example is the German photographic project *Habitat* (Hegen 2018). In *Ecomedia*, H. Lewis Ulman analyzes Terry Evans's aerial photographs of North America's Great Plains (Rust, Monani, and Cubitt 2015, 33–46). However, differently from Gowin's and Burtynsky's 'terrible beauties,' Ulman describes Evans' approach as an ecological exploration able to frame the human relationship to the nonhuman world in a way particularly useful for the fields of ecocriticism and ecomedia.

23 For more information on the main commercial varieties of the Apuan Alps marble, see Primavori (2015, 138).

An interesting aspect neglected by the film is the presence of many Carrara quarries within the protected perimeter of the Apuan Alps Regional Park. Established in 1985 by the region of Tuscany, the park was designated a UNESCO Global Geopark in 2015, and the European Commission included it in the NATURA 2000 Network for the conservation of habitats.²⁴ In 1997, a regional law (no. 65) reduced the initial surface of the park (54,000 hectares) to the present 20,598 hectares to safeguard the marble extraction industry. Despite this scaling down, the park still comprises around sixty guarries that, according to environmentalists, cause hydrogeological instability by obstructing and polluting springs and streams with marble processing waste. However, as the Apuan Alps Botanical Garden manager, Andrea Ribolini, suggests "the Apuan Alps are indeed mountains made of marble, but they are not just marble."²⁵ The surprising geological and biological diversity of this region, which combines Mediterranean and Alpine climates, comprises 1,784 plant species, more than 200 types of birds, and rare amphibious animals, such as the Ambrosi's cave salamander (Speleomantes ambrosii) (Mezzatesta 2021). Symbols of the Apuan Alps Regional Park are the red-billed chough (Pyrrhocorax pyrrhocorax) and the Killarney fern (Vandenboschia speciosa), which also appear on the park logo (Pizziolo and Summer 1984; Club Alpino Italiano and Parco Naturale delle Alpi Apuane 1998).

This natural heritage represents the core of Lorenzo Shoubridge's photography, which focuses on the fauna's struggle against the anthropization of the region. Attracted by 'pockets of wilderness,' the photographer completed a six-year project on the wildlife of the Apuan Alps, collecting his photographs in the book *Apuane terre selvagge* (Apuan Wildlands 2018). Shoubridge believes that the role of the twenty-first century's nature photographers consists in sensitizing the public to "support the cause of nature" (Groom 2020). Thus, by photographing the rich biodiversity and wildlife of the Apuan Alps, he draws attention to the harmful effects of the extraction industry. From this point of view, the photographer becomes an activist.²⁶ If Burtynsky tends to record landscape transformations without taking a definitive position (we do not know if Burtynsky is protesting against any of the systems he is representing), Shoubridge photographs animals in the landscape without immediately showing social and environmental problems (fig. 6). However, he clearly states his strong opposition to the marble extraction industry in public interviews.

25 Cf. original: "(...) le Apuane sono sì montagne fatte di marmo, ma non sono solo marmo."

²⁴ See https://en.unesco.org/global-geoparks/alpi-apuane

http://www.apuanegeopark.it/english_version/apuanegeopark_home_eng.html

https://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=IT5120015 (Accessed: 15 April 2022).

²⁶ For photography as environmental activism, see Scott (2022). For art as activism, see Groys (2014).



An example of Shoubridge's practice can be found in the snapshot *Wolf Mountain*, which earned him the title *Highly Commended* at the Wildlife Photographer of the Year of the Natural History Museum of London, and it was the winner of the Montphoto 2020 (fig. 7). The night photograph raises awareness of the Apuan Alps as a habitat for the wolf population, which is protected under EU law after decades of persecution.²⁷ The photo shows a close-up of two wolves trekking at night along the contour of Mount Corchia, a mountain subject to marble extraction. However, the part of the landscape that has been mined is shrouded in darkness in the photograph, with the two wolves its main subject. The camera's point of view, positioned at the level of the wolves, seems to follow the animals' passage and the photographer explains: "The initial work was very important, during which I identified this path used by one of the wolf packs present in

27 See http://www.parcapuane.toscana.it/bioparco/lupo.html (Accessed: 29 January 2023).

[Fig. 6-7]

Two of Lorenzo Shoubridge's photographs ("Migrant megamoths" above, "Wolf Mountain" next page) included in the volume Apuane terre selvagge and exhibited at the Natural History Museum of London (Source: Shoubridge 2018; used with permission.)



the park and spent a lot of time on the settings and maintenance of the camera itself" (Groom 2020). The use of camera trap systems for recording animals is increasingly popular among professional photographers and artists (Ducharme 2014; Zylinska 2017). The aspiration to reach a more-than-human perspective and reduce interference in animal life has led photographers to employ 'the automated image.' However, Shoubridge explains the complex preparation of these instruments and the long period of trial and error necessary to reach an interesting shot. The Italian photographer took six months to capture the award-winning photograph of the wolves. He carried and positioned a thirty-kilogram device on the mountain trail and frequently returned to modify the exposition because of the light changes caused by the lunar phases. The progressive automatization of everyday photographic devices does not prevent photographers from spending many days outdoors, first observing and then photographing. Shoubridge's tip for amateur photographers is indeed "(...) studying not only the art of photography, but also the nature we work with, in order to work in the best way and with a sustainable ethics." This close contact between photographers and the more than human other, an encounter also mediated by the principles of the life sciences, makes them the eyewitnesses to climate change and environmental degradation.

Confrontations between the natural and cultural landscapes of the Apuan Alps and its environmental loss can also occur through rock climbing, as shown in the 2019 project and documentary *Carie* (Cavity) created by Marzio Nardi, Achille Mauri, and Federico Ravassard. Through the metaphor of cavity (degradation and crumbling of a tooth or bone), the short film reflects on the landscape of decay created by marble extraction in the Apuan Alps by following a group of Italian climbers ascending the artificial walls of a disused quarry. As Nardi explains in the documentary, *Carie* "is a project born many years ago from my obsession of bringing to life spaces where emptiness and dereliction often reign. They are slices of landscape that humans have exploited and then abandoned but that, in my opinion, retain a strong attractive power. For such places, which are nothing more than wounds in the mountains, climbing can be the cure."²⁸

Climbing has not always been a vehicle through which to face environmental concerns. Throughout the last century, mountaineering has been linked with the idea of exploration, adventure, and the setting of new world records, while free climbing, different from aid climbing, related to the physical ability to move over the rock in what is known as aesthetic research of the 'flow' or in Italian '*il gesto dell'arrampicata*' (the gesture of climbing). In free climbing, the equipment (rope and anchors) is reduced as much as possible, serving only as protection. The final aim is not to reach the top of the mountain but to experience the verticality of the crag, finding a kind of corporeal harmony with the material qualities of the rocks. Even though many climbers consider their beloved practice more a performing art, such as dance, than a sport, free climbing became an Olympic discipline in 2020.²⁹ After emerging as an outdoor practice in Europe and North America in the 1970s, over the last decade it has become a well-recognized sport, with an increasing number of indoor climbing gyms in cities that are not even close to mountain ranges.

As a fast–growing sport, which includes a significant number of female participants, free climbing (with its competitive route grading system) has been driven more by individual performances than environmental concerns. In recent years, top climbers have transformed climbing into their job, becoming sponsors of mountaineering brands. For this reason, famous climbing personalities have been the subjects of documentaries, which have been presented in venues such as Banff Mountain Film Festival and Trento Film Festival. One of the most famous recent films concerning rock climbing, awarded the Best Documentary Feature at the 91st Academy Awards, is *Free Solo* (Chai Vasarhelyi and Chin 2018), which documented Alex Honnold's

29 The first international competition of free climbing *Sportroccia* was organized in the alpine valley Valle Stretta (near Bardonecchia), on the border between Italy and France in 1985. For rock climbing and environmental preservation in the United States, see the history of the Sierra Club.

²⁸ My translation of the original: "È un progetto che nasce tanti anni fa da una mia ossessione, ovvero quella di dare vita a questi spazi in cui regna il vuoto e spesso l'abbandono. Sono fette di paesaggio che l'uomo ha sfruttato e poi abbandonato che per me conservano un forte potere attrattivo. Per questi luoghi, che altro non sono che delle ferite nella montagna, l'arrampicata può essere la cura." (Piccolo 2020, 98). Originally born from a photo shoot for Ferrino & Rockslave (an Italian company producing outdoor accessories), *Carie* switched its focus from being an initial sport project to being a documentary on the environmental impact of mining in the Apuan Alps.

ascending of El Capitan in Yosemite National Park without a rope. From this perspective, the documentary *Carie* fits into the trend of these mountain films; however, it represents an innovation in the documentary trend of free climbing due to its strong focus on the Apuan Alps's environmental problems and local contradictions. Even though mountain climbing groups, like the Italian Alpine Club (CAI) and Mountain Wilderness, have often expressed disagreements about the expansion of quarry activities in Massa–Carrara province, the popularization of a climbing project reflecting on these themes in the form of a short film represents an outstanding example of environmental activism in the context of outdoor sports.

The peculiarity of *Carie* also emerges from some critiques made by the public. Contrary to the expectations of a part of the climbing community, this film does not only focus on sequences of movements necessary to complete the ascent of quarry walls. Although the project of climbing the disused quarry Cava Valsora³⁰ remains the core of the documentary, interviews with the many local figures intersperse the physical challenge of the climbers, showing the complexity of views about the mine. Departing from the natural sublime of pristine mountains and confronting their bodies with geometric manufactured crags of Carrara marble quarries, these climbers also come into contact with miners, sellers, shepherds, geologists, and ecologists. The documentary therefore offers a vivid picture of the environmental and social problems that involve the Carrara quarries and their relationship with the protected environment of the Apuan Alps Regional Park.

The multiperspectivism of the documentary does not hide its hope for future rehabilitation of the natural environment of the mountain-guarry. The documentary starts by declaring the problem: "The Apuan Alps host the largest marble basin in the world, famous for the high quality of Carrara's white marble. In recent decades, the area has been intensively quarried. Marble extraction has led to environmental devastation, damaging everything from rocky walls to groundwater. Rock climbing served us as a means to come closer to this situation." The first scene is a visual list of abandoned and rusty artifacts used to guarry marble; square closeups appear as soon as a regular beat resounds. The documentary continues with a panoramic drone recording of Cima Canal Grande, the same mountain included in Anthropocene: The Human Epoch. However, unlike the Canadian film the drone moves slowly toward the mountain: a recurring technique in the documentary Carie that aims to come close to things. More than giving an overview of the extraction areas, the directors use the drone to research the proximity to the material qualities of the mountain and show how climbers rely on artificially cut surfaces of the quarry by touching it. Far from considering the mountain exclusively as a marble source or as a playground for climbing, the documentary suggests that the Apuan Alps are an ecosystem based on the relationship between living organisms and non-living components. The panoramic

30 Cava Valsora was disused from 2016 to 2019 when the documentary was filmed. Then the company concessionaire for extracting marble in this quarry agreed with the Apuan Alps Regional Park to protect selected species, like the Alpine newt (Ichthyosaura alpestris), in return for starting underground extraction activities. However, this decision has been criticized by environmental organizations such as Legambiente, GrIG, Italia Nostra, and Cai (See D'Angelo 2019).





of the drone does not last enough time to become an ordinary sublime scene because it is interrupted by flashes of underwater recordings showing a newt darting off in the bright green of the meteoritic lake of Cava Valsora (fig. 8). At the third flash, the camera gradually resurfaces, showing the cut walls of the former quarries on which a climber is ascending using the cracks between the rectangular blocks (fig. 9). The short film continues with the voice of Marzio Nardi who explains the genesis of the climbing project and the need to understand the natural and social contexts that constitute the mountain territory of the Massa–Carrara province.

[Fig. 8-9] Frames showing the Apuan newt and the meteoritic lake of Cava Valsora where the climbing project Carie has been realized and filmed (Source: Nardi, Mauri, and Ravassard 2019, 10:23 and 21:13; used with permission.)



The following interviews with a representative of workers, an activist, a scientist, a producer of Colonnata lard, and a shepherd introduce topics that show how environmental concerns have started to question the capitalistic model of the extraction industry (fig. 10). The film ends with the voice of Nardi, who is standing on the top terrace of the quarry illuminated by the warm sunset light. After completing what seemed to be a utopic project, namely climbing the monotonous, sharp surfaces of a marble quarry, the group of climbers envisions the rehabilitation of the natural environment, overcoming the devastating past through cooperation and compromise with different stakeholders, including non-for-profit community-based organizations, local tourism associations, and the municipal government.

The visual narratives analyzed in this paper have attempted to go 'beyond the whiteness' by focusing on the scale of the environmental destruction (*Anthropocene: The Human Epoch*), the more-than-human perspective (*Apuane terre selvagge*), and the social struggle for preserving a mountain region through creative solutions (*Carie*). Produced between 2018 and 2019, these visual narratives employ different styles and are framed by different points of view (regional, national, and international), which speak to different audiences. *Anthropocene: The Human Epoch* is a Canadian production that analyzes the Carrara marble quarries from an external

point of view (as a case among many human-destroyed natural environments) and aims at reaching an international public mainly characterized by a high level of education: museum visitors, art appreciators, students, and academics. The photos in *Apuane terre selvagge*, taken by a wildlife photographer from Versilia, bring instead a local perspective and a personal attachment to the place. Shoubridge advocates for a type of photography that 'activates' a public of nature enthusiasts, photography amateurs, and the local community to adopt a more sustainable relationship with his homeland. The project *Carie* produced by climbers from three different Italian regions offers an in-between perspective compared to the previous examples. By visiting, exploring, and climbing marble quarries, Mauri, Nardi, and Ravassard undertake to understand the complexity of the Apuan territory while avoiding adopting a tourist-like stance to their subject matter. Their effort to connect with the region's social (and natural) fabric primarily appeals to practitioners of outdoor sports and digital media users.

Despite differing in many respects, all these visual works maintain environmental concerns at their core. By speaking to various audiences, they point to a fundamental transformation in the way of visually portraying marble extraction. In the twentieth century, the Carrara landscape was represented according to three main visual trends: the technological sublime found in the geometric shapes of the white quarries, the working conditions of the marble laborers, and the myth of purity of marble for artistic sculptures. The twenty-first century has introduced a new sense of awareness and urgency: the case studies analyzed in this article invite us to interpret the marble quarry as *a non-human landscape* that needs *human care*. Even though not all of the three visual cases can be interpreted as pure acts of environmental activism and resistance, they surely expand ecological awareness and by doing so can be viewed as the counterpart of similar literary tendencies.³¹ In other words, these visual media testify to how aesthetic and ethical sensibilities are challenging established twentieth-century narratives of the Carrara marble quarries by focusing on a new element: the environment.

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³¹¹n the chapter The Politics of the Sublime(s), Conohar Scott rightly argues against considering Burtynsky's work under an "activist's perspective" (Scott 2022). However, the case studies analyzed in this article could also be studied using the tools of ecomedia studies (Rust, Monani, and Cubitt 2015). Enrico Cesaretti analyzes literary texts narrating Carrara marble through the lens of ecocriticism in Apua Ma(t)ter. Narratives of Marble (Cesaretti 2020).

Bibliography

Adams, Robert. New Topographics: Photographs of a Man-Altered Landscape. Rochester, New York: International Museum of Photography, 1975.

Ancarani, Yuri, dir. Il capo. N.O. Gallery, Gemeg, Deneb Media, 2010. https://www.imdb.com/title/tt1745908/.

Arthus-Bertrand, Yann, dir. Home. Saint-Denis: EuropaCorp. 2009. https://www.youtube.com/watch?v=-GUeDISwZ3E.

Baichwal, Jennifer, Edward Burtynsky, and Nicholas de Pencier, dirs. Anthropocene: The Human Epoch. Toronto: Mercury Films, 2018. DVD.

Baldini, Costanza. "Il David 'segreto' nel cuore delle Apuane: un'esplosione di colori nelle cave di Carrara." *InToscana*, June 1, 2021. https://www.intoscana.it/it/articolo/david-kobra-carrara/.

Bernieri, Antonio. "Il fascismo a Carrara fra il 1919 e il 1931." In *Movimento operaio e socialista* 10 (1964): 39–53, 105–120. https://www.istitutostoricosocialeapuano.it/saggi/il-fascismo-a-carrara-tra-il-1919-1931/.

Bonfanti, Giovanni, and Pier Paolo Panolini (n.c.), dirs. 12 dicembre. Lotta continua, 1972. https://www.cittapasolini.com/pasolini-12-dicembre-lotta-continua.

Burtynsky, Edward, and Michael Mitchell. Edward Burtynsky - Quarries. Göttingen: Steidl, 2007.

Burtynsky, Edward, Lori Pauli, Mark Haworth–Booth, and Michael Torosian. *Manufactured Landscapes: The Photographs of Edward Burtynsky*. Ottawa: National Gallery of Canada in assoc. with Yale Univ. Press, 2003.

Cesaretti, Enrico. "Apua Ma(t)ter. Narratives of Marble." In *Elemental Narratives: Reading Environmental Entanglements in Modern Italy*, 90–123. Pennsylvania: Pennsylvania State University Press, 2020.

Chai Vasarhelyi, Elizabeth, and Jimmy Chin, dirs. Free Solo. Washington, DC: National Geographic Documentary Films. 2018. https://www.documentaryarea.tv/video/FreeSolo/.

Clarkson Fisher, Daniel. "Anthropocene: The Human Epoch' Leaves Little to the Terrified Imagination." *PopMatters*, November 16, 2018. https://www.popmatters.com/anthropocene-the-human-epoch-2619916872.html.

Club Alpino Italiano, and Parco Naturale delle Alpi Apuane. Le Alpi Apuane: un parco in cammino. Ospedaletto, Pisa: Pacini, 1998.

D'Angelo, Manuel. "Sos da Massa, a rischio l'oasi dei tritoni." *Corriere Fiorentino*, February 20, 2019. https:// corrierefiorentino.corriere.it/firenze/notizie/cronaca/19_febbraio_20/sos-massa-rischio-l-oasi-tritoni-b35afd56-34f6-11e9-be51-a53d9d2a4b74.shtml.

Dean, Catherine. "Sublime traces." In Maclean's 116, no. 5 (2003): 40-44.

Ducharme, Véronique. "Encounters." *Photomediations Machine*, February 15, 2014. http://photomediationsmachine. net/2014/02/15/encounters/.

Gamboni, Dario, Gerhard Wolf, and Jessica N. Richardson, eds. The Aesthetics of Marble: From Late Antiquity to the Present. München: Hirmer, 2021.

Gemignani, Beniamino. 1894 Una Città in Rivolta. Carrara: Editrice Apuana, 2020.

GiUMa Produzioni, *Uomini di pietra*. DMAX. Discovery Italia, 2020. https://dmax.it/programmi-dmax/uomini-di-pietra Gowin, Emmet. *Changing the Earth: Aerial Photographs*. New Haven, CT: Yale University Art Gallery in assoc. with the Corcoran Gallery of Art and Yale University Press, 2002.

Groys, Boris. "On Art Activism." *e-flux Journal* 56, June 2014. https://www.e-flux.com/journal/56/60343/on-art-activism/.

Groom, Alison. "Wildlife Photographer of the Year: The Fight to Save the Apuan Alps." Natural History Museum, 2020. https://www.nhm.ac.uk/discover/wildlife-photographer-of-the-year-save-the-apuan-alps.html.

Hegen, Tom. Habitat: Vom Mensch Geprägte Lebensräume. Bielefeld; Berlin: Kerber Verlag, 2018.

Kaspar-Eisert, Verena, ed. "Poisoned Pictures." Photoresearcher 2019, no. 32.

Kleiner, Diana E. "From Brick to Marble: Augustus Assembles Rome." In Roman Architecture, episode 9, YaleCourses, 2009. https://doi.org/10.5446/46047

Konrad, Aglaia. Concrete & Samples III Carrara. Majority Flemish Production, 2010. https://www.flandersimage.com/titles/concrete-samples-iii-carrara.

Le, Phuong. 2021. "Anthropocene: The Human Epoch Review – Colossal Eco Doc Prettifies Disaster." *The Guardian*, September 4, 2021. https://www.theguardian.com/film/2021/sep/01/anthropocene-the-human-epoch-reviewjennifer-baichwal-nicholas-de-pencier-edward-burtynsky.

Leitch, Alison. "The Life of Marble: The Experience and Meaning of Work in the Marble Quarries of Carrara." The Australian Journal of Anthropology 7, no. 1 (1996): 235–57. https://doi.org/10.1111/j.1835-9310.1996.tb00330.x.

----. "Materiality of Marble: Explorations in the Artistic Life of Stone." Thesis Eleven 103, no. 1 (2010.): 65–77. https://doi. org/10.1177/0725513610381375.

Marsala, Helga. "Il David di Kobra tra le cave di marmo. La Street Art su Sky conquista anche le Apuane." Artribune, May 30, 2017. https://www.artribune.com/arti-visive/street-urban-art/2017/05/il-david-di-kobra-tra-le-cave-di-marmo-la-street-art-su-sky-conquista-anche-le-apuane/.

Mauri, Achille, Marzio Nardi, and Federico Ravassard, dirs. Carie. Itaca on Demand, 2019. https://www.itacaondemand.it/film/carie/.

Mezzatesta, Francesco. "Apuane terre selvagge." Oasis. Meraviglie dal mondo, 2021.

Mistiaen, Veronique, and Chiara Briganti. "Michaelangelo's Marble Is Being Sold Cheap by Industrialists." Newsweek, March 27, 2015. https://www.newsweek.com/2015/04/03/bin-ladens-and-tuscan-city-destroyed-marble-317224.html.

Newman, Cathy, and Pierre Boulat. "Carrara Marble: Touchstone of Eternity." National Geographic, July 1982.

Nye, David E. American Technological Sublime. Cambridge, Mass.: MIT Press, 1994.

Nye, David E., and Sarah S. Elkind, eds. The Anti–Landscape. Studies in Environmental Humanities. Amsterdam: Rodopi, 2014.

Paribeni, Emanuela, and Simonetta Segenni. "Le cave di Carrara e la proprietà imperiale." In *Studi classici e orientali* LX (2014): 307–328.

Papapetros, Spyros. "The Quarry and the Tower: Filming Marble's Architectural Anticipations." In The Aesthetics of Marble: From Late Antiquity to the Present, edited by Dario Gamboni, Gerhard Wolf, and Jessica N. Richardson, 294–311. München: Hirmer, 2021.

Piccolo, Denis. "Carie." The Pill. Living Life in Nature, February 2020.

Pizziolo, Giogio, and Manlio Summer. Verso Il Parco delle Apuane: programma sperimentale per l'attivazione del Parco. Firenze: La casa Usher, 1984.

Primavori, Pietro. "Carrara Marble: A Nomination for 'Global Heritage Stone Resource' from Italy." *Geological Society* 407 (2015): 137–154. https://doi.org/10.1144/SP407.21.

Pritchard, Sara B. "Dangerous Beauty: Aesthetics, Politics, and Power in Anthropocene: The Human Epoch." *Environmental History* 25, no. 2 (2020): 377–382. https://doi.org/10.1093/envhis/emz086.

Rifkind, David. The Radical Politics of Marble in Fascist Italy. London, New York: Routledge, 2018.

Renger-Patzsch, Albert. Gestein: Photographien Typischer Beispiele von Gesteinen aus europäischen Ländern. Ingelheim am Rhein: C.H. Boehringer Sohn, 1966.

Rovelli, Marco. Il contro in testa. Roma: Laterza, 2012.

Rust, Stephen, Salma Monani, and Sean Cubitt, eds. Ecomedia: Key Issues. London, New York: Routledge, 2015.

Sandoz, Marie, and Anne-Katrin Weber, eds. L'image verticale. Politiques de la vue aérienne. Transbordeur 6, Paris: Éditions Macula, 2022. https://transbordeur.ch/fr/2022/.

Scott, Conohar. "The Politics of the Sublime(s)." In Photography and Environmental Activism: Visualising the Struggle Against Industrial Pollution, 121–37. London, New York: Routledge, 2022.

Shoubridge, Lorenzo. Apuane terre selvagge. Limited Edition (500 copies), 2018. https://www.naturephotography.it/apuane-terre-selvagge/.

Stevens, Shannon, and Richard Wainwright. "Review of 'The Anthropocene Project': Treachery in Images." Art/Research International: A Transdisciplinary Journal 5 (2020), no. 2: 567–84. https://doi.org/10.18432/ari29496.

Vatteroni, Gino. Dalle Apuane alle Green Mountains: Anarchismo ed anarchici tra Carrara e il Vermont (1888-1910). Spoleto: Edizioni Monte Bove, 2019.

Zylinska, Joanna. Nonhuman Photography. Cambridge, Massachusetts; London, England: The MIT Press, 2017.