

## APPENDIX TO

# HISTORICAL SOURCES OF THE ROMAN AGE. FORMATION OF A NEW VOLCANIC ISLAND (OR TEPHRA PLATFORM) IN 183 BC

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STRABONIS, GEOGRAPHIA VI 2, 10-11, C.275-277

News on the creation of a new volcanic island in the Aeolian Sea dates back to the 2 century BC. Strabo mentions Posidonius, a historian and geographer living between c. 135 and 50 BC, who narrates that in his time (to be understood as several decades earlier as expressed below):

“towards the summer solstice, at dawn we saw the sea, in the stretch between Iera and Evonimo, rise to an extraordinary height, stay high for a certain time, under the pressure of a continuous eruption, and then retreat again ... Many days later, a patch of mud appeared on the sea and everywhere flames and smoke and sooty steam were released; then the mud solidified and the mass took on a colour similar to the grindstone. The governor of Sicily Tito Flaminio (229-174 BC) gave news of the incident to the senate, who sent a deputation to make a sacrifice on the islet and Lipari, to the underworld and marine gods”.

Greek-Italian translation by Biffi N. [Pagliara, 1995].

Posidonius also speaks of a large tidal wave that formed at the time of the emergence of the islet [Giustolisi, 2005].

TITI LIVI, ANNALES XXI 49, 1-3; XXXIX 56,6

Titus Livy (59 BC-17 AD) specifies the exact period in which the event took place: “not far from the Sicilian coast: in the year of Hannibal's death” i.e. 183 BC [Giustolisi, 2005].

C. PLINII SECUNDI, NATURALIS HISTORIA II 89.

Pliny the Second (about 61-113 A.D.) also recalls its creation:

“Before our time, near Italy, one arose in the middle of the Aeolian Islands...”

Latin-Italian translation by Barchesi A. et al. [Conte et al., 1982].

STRABONIS VI 2, 10-11, C. 275-277.

“About halfway between Lipara and Sicily is Termessa, which now bears the name of Iera di Hephaestus, all rocky, deserted and on fire, with three openings which, in a certain way, correspond to as many craters. The largest, amidst the flames, erupts large incandescent masses that have now filled a large part of that stretch of sea”.

Greek-Italian trans. by: Libertini G. [1921], Biffi N. [Pagliara,1995].

## **SOURCES OF THE 2<sup>ND</sup> - 1<sup>ST</sup> CENTURY BC. OTHER SUBMARINE ERUPTIONS IN 126 AND 91-88 BC BETWEEN LIPARI AND VULCANO**

IULII OBSEQUENTIS, PRODIGIORUM LIBER 29

“During the consulate of Marco Emilio and Lucio Aurelio (126 BC) - near the Lipari islands, the sea boiled and caused the death of a large number of sailors, the ships having been burned by the steam, moreover, it transported here and there a huge quantity of lifeless fish, of which the inhabitants of Lipari too greedily went in search to eat and died from contamination of the belly, as if the islands were devastated by an extraordinary pestilence...” [Pagliara,1995].

C. PLINII SECUNDI, NATURALIS HISTORIA II 238

Pliny the Elder adds that, during the Roman Social War fought from 91 to 88 BC, powerful eruptions occurred in Vulcano both on land and at sea:

“In the middle of the sea the Aeolian islands of Iera (Vulcano) and Lipari, near Italy, burned together with the same sea for a few days at the time of the social war until a delegation of the senate made propitiatory sacrifices”.

Latin-Italian trans. by Barchiesi et al. [Pagliara,1995].

VIRGILIO, AENEID, VIII

The poet Virgil (70-19 BC) indicates in his verses the position of the island of Vulcano between Lipari and Sicily, without noting Vulcanello:

“A small island lies between Sicania on the one hand / and Lipari on the other / which comes out of the waves high up and smokes”.

Latin-Italian trans. by Caro A. [Castellino and Peloso, 1967].

## **SOURCES OF THE FIRST MILLENNIUM. BETWEEN MISLEADING RECONSTRUCTIONS AND LENGTHY SILENCES**

EUTROPIO, BREVIARIUM HISTORIAE ROMANAE, BOOK IV

Flavio Eutropio, a Roman politician and historian born in 387 in Bordeaux, France, narrates that: "In Sicily, the island of Vulcano suddenly came out of the sea to everyone's amazement and still stands today" [Zagami, 2006].

#### PAULI OROSI, HISTORIAE ADVERSUS PAGANOS, IV 20

Paolo Orosio, a priest born in 390 in Tarragona (Spain), writes: "At that time during the consulate of M. Claudio Marcello and Q. Fabio Labeone (= 183 BC), near the coast of Sicily it suddenly rose up from the sea, to everyone's astonishment, the island of Vulcano, which did not exist before and continues to this day".

Latin-Italian trans. by Bartalucci-Chiarini [Pagliara, 2005].

#### CASSIODORIUS, VARIARIUM, III EPIST. 47

Senator Cassiodorius (485-585 AD) wonders about the perennial nature of the flames of the island of Vulcano, which emerged as is handed down in the year of Hannibal's death (183 BC) and in his time it became a place of confinement for the curial Iovino, by Theodoric [Giustolisi, 2005].

#### RAVENNATIS ANONYMI, COSMOGRAPHIA ET GUIDONIS GEOGRAPHICA

The islands of the archipelago were presented with the same name in the 7<sup>th</sup> century, still without Vulcanello:

"Erculis, Lipparis, Stroile, Pagnarea, Vulcana, Didimi, Enicodes, Basilidin, Erigodes"  
(Erculis, Lipari, Stromboli, Panarea, Vulcano, Salina, Filicudi, Basiluzzo, Alicudi)  
[Bernabo Brea, 1988; Pagliara, 1995].

#### ENKOMION, SAN TEODORO STUDITA

San Teodoro Studita (758-826 AD) tells of the legendary arrival of the remains of San Bartolomeo in Lipari at the end of the 3<sup>rd</sup> century AD, and of the consequent removal of Mount Vulcano from the largest island of the Aeolian Islands:

"-because the mountain called Vulcano arose too close to the island (of Lipari), it caused constant damage to those living in the surroundings. Then at night, with an imperceptible motion of skidding, it detached itself for almost seven stages suspended over the water, so that even today the stretch covered by the fire when it retreats is evident to the viewer. - Today we see the outline of a fiery island that seems to be still in flight" [Bernabò Brea, 1988].

#### AL- MAS-ŪDĪ, GOLD MEADOWS AND GEM MINES

"Of this (island, Sicily) it will be spoken of further on, touching the Gabal 'al burkan (Mount of the Volcano), the one that sends fire, mixed with (other) materials and large bodies. Burkan is the aṭmah (crater) that erupts igneous bodies resembling headless men; whose bodies rise into the air at night, and fall back into the sea they remain afloat. This is the stone that is used to scrape the sheep-paper scrolls. It has the appearance of a honeycomb or a small wasp's nest".

Biblioteca Arabo-Sicula [Amari, 1880].

AL- MAS-ŪDĪ “TANBIH...” (The warning and the review)

“I also saw the island of Sicily and the adjacent mountain of ‘Al Burkan (Vulcano), from which the source of the fire emerges...” [Amari, 1880].

## **SOURCES OF THE SECOND MILLENNIUM: GEOGRAPHICAL AND TOPONYMIC EVIDENCE ON MEDIEVAL VULCANELLO**

AL-BAKRĪ, KITĀB AL-MASĀLIK WA AL-MAMĀLIK

“The Great Volcano is located on two islands to the north of Sicily” [Amari, 1880].

‘ABŪ ABD ‘ALLĀH MUHAMMAD IBN ‘ALĪ, DETTO IBN SABBAT

“In Sicily is the great volcano, the likes of which nothing more terrifying in appearance, nor more singular in substance is known in the world. This is the case of the two islands in the north of Sicily” [Amari, 1880].

AL-IDRĪSĪ (EDRISI), "BLISS FOR THOSE WHO DELIGHT IN TRAVELING THE WORLD", ALIAS “IL LIBRO DI RUGGIERO”.

Al-Idrīsī, the Arab geographer who settled in Palermo in 1139 at the invitation of Ruggiero II, was formally commissioned by him in 1154 to create a collection of maps and geographical information entitled "Il Libro di Ruggero". Describing the large and small islands of the Mediterranean, including Vulcanello for the first time:

"'Gabal' al Burkān (Mount of Volcano), 'Gazīrat' al Burkān (island of the Volcano), 'Gazīrat' al Lībar (island of Lipari), etc. [Amari, 1880].

‘ABŪ ‘AL HUSAYN ‘IBN GUGAYR, RHALAT ‘AL KINĀNĪ (KINANI TRIP)

The Spanish pilgrim Ibn Jubayr on 18 December 1184, during the return journey, sailed from the Strait of Messina with his companions to the northern coasts of Sicily. “On the right hand, nine islets (the Aeolian Islands) can be seen in the sea, rising like ghosts (or mountains) not far from the land of Sicily, two of which (Vulcano and Vulcanello) are constantly emitting fire. In fact, we saw the smoke that came out of both: and at night a red fire came out of it that threw [many] tongues [of flame] into the air. This is the well-known [phenomenon of the] volcano. We knew that the fire comes out of two mountains of said (islands) through certain openings, from which a fiery puff bursts violently and ignites. Often a large stone is thrown into the middle of the fire, which the force of the said puff causes it to rise into the air and prevents it from stopping and falling to the bottom: this is one of the most wonderful facts that are told...” [Amari, 1880].

ARCH. CAPITOLARE DI PATTI, DE FONDATIONIBUS I, F.211

Below is a short extract from an original inventory of the Paetensis Ecclesiae dated 2 July 1247-

“Isola di Vulcano, mining of alum and sulphur, as well as offering possibilities for good rabbit hunting.

Island of Vulcanelli offers possibilities of rabbit hunting” [Catalioto, 1996; Iacolino, 2001].

#### LA EMBAJADA DE ENRIQUE III AL TALMORLÀN

The travel diary of the ambassadors of Henry III on their way to Samarkand provides interesting information on the state of activity of the Aeolian volcanoes at the beginning of 15<sup>th</sup> century.

“- July 16, 1403. The following Monday in the morning they passed between some unpopulated islands one of which is called Sallinas (Salina), one Strangoly (Stromboli), another Bolcanin (Vulcanello) and a further Bolcan (Vulcano), and from them came out much smoke and they made a great din. And they also passed by two other islands that are unpopulated, one called Panarca (Panarea) and the other Panarin (Basiluzzo?). -17 July 1403. ... And the storm continued on Tuesday and Wednesday during two hours of the night and the aforementioned mouths, in particular those of Stromboli and Vulcano with the strong wind launched mighty flames of fire and smoke with great noise, and during the storm the patron had the litanies sung, and everyone asked for God's mercy” [Lopez Estrada, 1996; Iacolino, 2007].

#### TABULA REGIO NOVEM

A manuscript dating back to around the middle of the 15<sup>th</sup> century, kept at the Aragonese Castle of Ischia, the subject of a recent linguistic study, contains a large folding page divided into a three-by-three format, therefore nine zones, hence its name *Tabula regio novem* (nine-region panel). Each includes a round illustration with numerous annotations and other components that unite the nine zones into a cohesive whole. The islands of Lipari, Vulcano, during its eruption between 4 and 5 February in 1444, and Vulcanello have been recognized in it, separated by a short stretch of sea crossed by those on the nearby island who were taken by surprise by the aforementioned eruption [Cheshire, 2018].

#### VULCANELLO IN THE MODERN AGE

##### FAZELLO, LE DUE DECHE DELL'HISTORIA DI SICILIA

Fazello (1498-1570), a Sicilian presbyter and historian, on describing the Aeolian Islands recalls that: “The third island is called Vulcanello, which is divided from Vulcania by a very narrow stretch of sea, and this island is also seen sometimes launching fire. This breast, or arm of the sea up to my time was navigable, and gave a trusted port, when it was needed by the ships, but now it has been filled with ashes and stones, which are hurled from the Island of Vulcania”.

“This Island (Vulcano) was not formed like the others at the beginning of the world, but it was created, and came about in an instant, from the wind excited by the fire, as Eusebius writes, out of the water, at the time that Spu. Postumius Albinus and Quintus Fabio Labeone were Consuls in Rome, five hundred and fifty years after its construction, as Pliny affirms in the second book in chapter 90. Isidoro

writes it again in 14. Paolo Orosio states it in the fourth book, 92 in the chapter 19. and Eutropius confirms it in book 4”.

Latin-Italian translation by Nannini, R. [Fazello, 1563].

#### HIERONIMO MAURANDO, ITINÉRAIRE D’ANTIBES IN CONSTANTINOPE

Hieronimo Maurando, a French priest, writer and traveller, in his *Itinéraire d’Antibes in Constantinople* documented the siege of Lipari in 1544 alongside the army of the Saracen pirate Ariadeno Barbarossa. On 2 July, he landed in Vulcanello in order to reach the Gran Cratere.

“I mentioned the island of Vulcano, which is half a mile east of Lipari, uninhabited and very large; what needs to be known is that this island was once divided into two islands, one called Vulcano and the other Vulcanello, but today they are but one, because the abundant ash that escaped from Vulcano blocked the channel that divided them - and now thanks to these abundant ashes a good port has arisen where, on July 2 [...] we landed with the Rialle galley and then we climbed to the top of the volcano and saw where the perpetual fumes came from its summit emitted by the volcano ”.

Latin-Italian trans. by Nannini, R. [Fazello, 1563].

## APPENDIX TO

# ORIGINS OF VULCANELLO BASED ON THE RE-EXAMINATION OF HISTORICAL SOURCES (VULCANO, AEOLIAN ISLANDS)

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KIRCHER ATHANASIOS, MUNDO SUBTERRANEUM. IN XII LIBROS DIGESTU

"It is said that about 60 years earlier (in 178 BC) a Liparian volcano had thrown up such a quantity of ashes and lapilli, that Vulcanello formed close to it in the middle of the sea, which for this reason is called after the son generated by his father" [Kircher, 1678].

FRIEDRICH MUNTER, NACHRICHTEN VON NEAPEL UND SIZILIEN AUF EINER REISE IN DEN JAHREN 1785 UND 1786 GESAMMELT

Another precious testimony is that of Friedrich Munter of February 1786: "I did not derive any other advantage from my return, than to review the delightful Strait of Sicily (Messina)... and particularly Vulcano and Vulcanello which I was allowed to consider distinctly. These two islands smoke, and Vulcano sometimes still threw fire at night. I myself was enchanted when three flame throwing mountains appeared at the same time: that is, these two, and Etna, whose boundless summit with an eternal snow cover ascended high in the clouds "[ANSLA, 1995; La Greca, 2009, b].

HENRI-RENÉ-ALBERT-GUY DE MAUPASSANT, LA VIE ERRANTE

"And here is the cone of Vulcan - before reaching it, another islet, Vulcanello, suddenly emerged around 200 BC, and attached to its older brother by a narrow strip of land, swept by the waves on stormy days".

Translation French-Italian by Rota, C. [Palermo, 2001].

LUIGI SALVATORE D'ASBURGO-LORENA, DIE LIPARISCHEN INSELN

Salvatore Luigi d'Asburgo-Lorena (archduke of Austria, prince of Tuscany) frequenter of the Aeolian islands, visited the island of Vulcano several times from 1867. Based on what the author himself

writes, it is plausible to attribute the following description of the isthmus of Vulcanello to 1891, the year of his last visit, immediately after the last eruption of the Great Crater dated 1888-90.

“Vurcanu - is connected to Vurcaneddu by a flat, sandy strip of land that forms, on either side, the ports of Punenti and Livanti. On the west side, the waves often break violently and pushed by the winds they sometimes reach the centre of the strip of land which, cultivated with rushes, has a marshy appearance” [Paino, 1987].