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Linguistically dating and locating the origin of Manuscript MS408

(Companion paper to: Linguistic Missing Links: http://ling.auf.net/lingbuzz/003737).

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Abstract.

This paper provides demonstrable evidence that Manuscript MS408 is written in proto-Romance language and uses proto-Italic symbols for its alphabet, as proffered by the paper titled *Linguistic Missing Links* (2017). It also pinpoints the date and location of origin for the manuscript, due to the information gleaned by using the prescribed method to translate and transliterate a particular sheet from the manuscript: *Tabula regio novem*.

Key words: Manuscript MS408, date of origin, location of origin, proto-Romance, proto-Italics, *Linguistic Missing Links*.

Introduction.

Having announced the discovery of the writing system used for manuscript MS408, in the paper titled *Linguistic Missing Links*, it has become apparent that the concept of a solution comprising an unknown language and alphabet has been difficult for some to accept, despite the paradigm being entirely logical and the argument being supported by a raft of supporting evidence. Above all, it is apparent that those unfamiliar with the science of palaeography have a naïve expectation that the solution should offer a means of simply rendering the manuscript text into modern language without the application of effort and the deployment of intelligence.

This has resulted in the erroneous conclusion that the 'degrees of freedom' available in translating and transliterating the text are evidence that the solution is incorrect. In truth, palaeography is always open to interpretation even when

the researcher already knows the language and the alphabet used for a given manuscript. The manuscript uses a language that survives partly in ancient form and partly in subsequently evolved form. Thus, the degrees of freedom are to be expected, but they are subject to variability: i.e. some words are still definitive in their meaning, whilst the meaning of those that have evolved ambiguity can be identified by a process of cross-referencing and the application of contextual logic.

When one considers other factors, such as understanding the phrasing, the punctuation, the grammar, the semantics, the handwriting and the alphabetic symbols, then it should be plainly obvious that translation and transliteration requires an investment in time, effort and insight to find the most appropriate translation and transliteration, secure in the knowledge that the writing system – both its language and its symbols – have been identified.

As many proto-Romance words have subsequently undergone further evolution within the respective modern Romance languages, it is necessary to focus one's attention on those words that have undergone the least evolution from Classical Latin – to Vulgar Latin – to proto-Romance – to modern Romance. Ordinarily this would be an impracticable aim, but the visual clues available in Manuscript MS408 make it possible to cross-reference. Thus, there are sufficient words with definitive meanings that correlate with the corresponding images to be able to place them as marker words. As a result, the meaning of the more ambiguous words can then be surmised by context.

In this regard, manuscript MS408 is 'manna from heaven' to the linguistic community, as it offers the components necessary to compile a lexicon of proto-Romance words, thanks to the accompanying visual information. Inevitably the process of honing the definitive meanings of all the words within the manuscript will take a number of years, as it will involve cross-referencing the same words throughout the manuscript, but the proto-Italic alphabet is shown to be correct, so we know that the spelling of the words is also correct, even if unknown. The pages without illustrations will, of course, be more of a challenge, as they will

rely on marker words, cross-referencing with the other pages, and sequential context in order to settle on appropriate translations and transliterations.

Where the author of the manuscript has labelled specific illustrations with brevity, it tends to be easier to interpret the words than in longer sentences, because the author is being more economical and therefore choosing more concise terminology. The longer sentences are filled with conversational connectives, pronoun variants, singular-plural terms, gender specifics and so on, that make it necessary to identify the unambiguous marker words and then make sense of the equivocal words by a process of sequential logic.

Quite apart from anything else, the fact that many thousands of people have failed in their attempts to fathom the writing system, clearly points to the solution having some level of complexity beyond their reach. After all, if the solution were simple then it would have been discovered long before now. Therefore, complexity, in combination with efficacy, is exactly what one should predict and expect of the solution. That is precisely what *Linguistic Missing Links* offers, so this paper has been written to help the penny drop.

Tabula regio novem.

This paper focuses on one particular part of the manuscript MS408 by way of further demonstration that proto-Romance and proto-Italics definitely comprise its writing system. Furthermore, it reveals some fascinating information about the time and place from which the manuscript originates, which should encourage others to invest their time and effort into revealing what the manuscript has to offer by way of historical content, rather than into resistance.

Between the spreads marked ‘86’ and ‘87’ in the manuscript, there is a large foldout page, which has the equivalent area of six pages. The sheet is roughly square in shape and is sub-divided into a three-by-three format of nine zones. For this reason it has the name *Tabula regio novem* (nine region panel). Each of the zones contains a circular illustration, including numerous annotations and other components that join the nine zones together into a cohesive whole. On

close inspection, it becomes apparent that some parts of the illustrations depict recognizable images of buildings, walls, two suns and volcanoes, whilst the rest seems to comprise repeated patterns and forms that are not easily identifiable. The challenge, therefore, was to decipher both the graphic and textual elements of *Tabula regio novem*, in order to discover what is being depicted visually and what information the author was intending to relay to the reader.

Tabula regio novem has proven to be the perfect tool in demonstrating that the manuscript uses the proto-Romance language and proto-Italic alphabet as proffered. It includes a wealth of visual clues and so many definitive marker words that the positive correlations are beyond reasonable doubt in scientific terms. Most of the annotations are translated and transliterated with entire accuracy and the longer sentences are sufficiently well interpreted as to provide narrative for the events unfolding across the nine panels. Moreover, one would need to surmise that any further scepticism was fuelled by motive rather than tenable analytical argument.

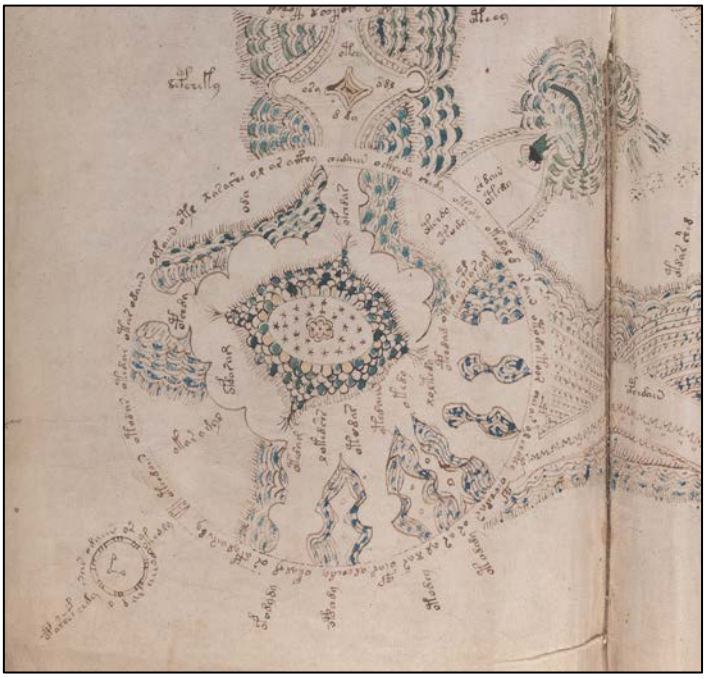
1	2	3
4	5	6
7	8	9

The layout for *Tabula regio novem* used for this paper.

The paper begins by examining Zone 7, for no other reason than it appears to depict a volcanic eruption, which might yield some information regarding date and location. In addition, the handwriting is clear and in good order, making it easy to identify the written symbols and therefore relatively convenient to

transcribe them into modern symbols for the purpose of translation into proto-Romance and transliteration into modern language.

Historical documentation of volcanic eruptions in Europe, that correspond with the approximate date of the manuscript, reveals five volcanoes as potential candidates: namely Vesuvius, Etna, Stromboli, Campi Flegrei and Vulcano.



Zone 7: *Tabula regio novem*. Vulcano eruption.

The writing circumscribing Zone 7 reads: *om é naus* (people and ship) *o'monas* (in unity) *o'menas* (take charge) *omas* (mothers/babies) *o'naus* (of ship) *orlaus* [*orlas*] (to protect) *omr vasaæe* [*vasaie*] (life-force pots: pregnant bellies) *or as* (yet in) *a ele/elle a* (he/she at) *a inaus* [*inauspitica*] (inauspicious/unfavourable), *o ele e na* (he/she is in) *æina* (a/one) *omina* (omen) *olinar* (to look) *n os aus* (it is) *omo na moos* (man not mouse) *é ep* [epousee] *as* (and embrace) *or e ele a opénas* (an opening) *os as ar vas* (*thus you go*) *opas* (but carefully) *a réina* (to the queen) *ol ar sa os aquar aisu na* (to facilitate not getting wet with seawater).

Note: The word *omr* is Persian for 'life', and *moos* is Persian for 'mouse'.

The author is relating that it was necessary to take the opportunity to pass when an opening came and to be firm (to be 'man not mouse') but careful whilst navigating the ship through the difficult waters around the volcano.

Furthermore, there is a circular chart (bottom left) depicting a mariner's compass. The surrounding words read: *op* (necessary) *a æequ* (to equal) *ena* (water)*, tas* (balance) *o'naus* (of ship) *os o n as aus* [*auspex*] (as it is propitious)*, o'meora* (to pass). Clearly then, the volcano in the depiction is on a small island, as the lava and pumice are evidently spilling into the sea and making the sea dangerous for ship navigation.

This means that only two volcanoes are now plausible: Stromboli and Vulcano. Stromboli, although frequently active historically, is however a relatively remote island, while Vulcano is an island closely adjacent to other islands as the sheet will be shown to describe. In addition to this, Vulcano is known to have erupted very violently in the year 1444, which corresponds with the carbon-dating of the manuscript velum: 1404-1438. It erupted in early February and was so violent that it hurled boulders a distance of 10km (6 miles) and spewed large quantities of lava, pumice and ash into the surrounding waters.

At that time there was a chain of three islands: Vulcano, Vulcanello and Lipari. Vulcanello, or Vulcanino as it was then known, was so close to Vulcano that the two eventually became fused together following a subsequent eruption in 1550. In turn, Lipari sits at a short distance north of about 800m (0.5 miles) from Vulcanello/Vulcanino. The islands are seen orientated roughly 90° clockwise.

Looking closer at the island of Vulcano in the manuscript, we can see that the illustration shows two volcano elevations – a plan elevation and a side elevation. The plan elevation shows various lava flows entering the water, with a number of annotations written on them, between them or on the periphery. The central annotations read: *o'pena* (of rock), *oqunas asa* (both directions), *ameno sa* (not so hot), *rolen æt* (veers here), *o'menas* (it twists), *amenaus* (reducing), *o'lena* (it slows), *vormena/formena* (middling, forming), *o'pena sa* (of rock it is). Clearly

the annotations describe the lava finding its way down the volcano on its eastern side and gradually slowing down as it cools, until it hardens into rock. It should be noted that the author of the manuscript must have had detailed knowledge in order to draw such an informative diagram.

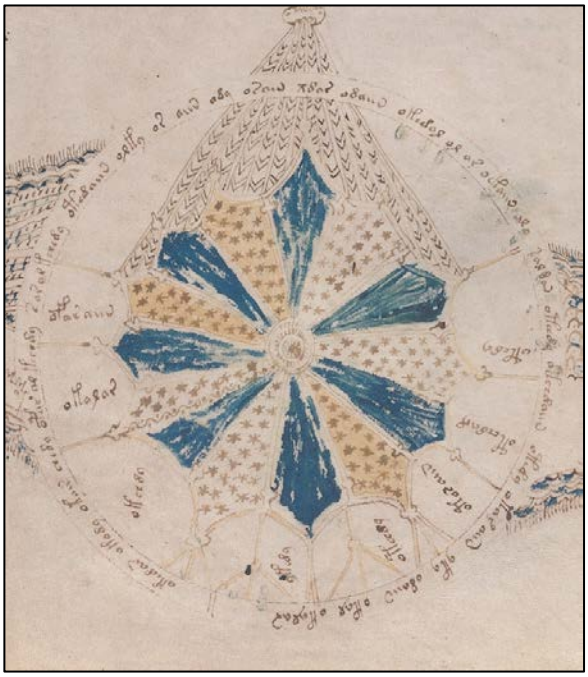
Incidentally, the word *vormena/formena* serves as confirmation that the phoneme cognates 'v/f' are occasionally used in the MS408 manuscript: the symbol is an inverted v with a bar above. It seems to derive from the Greek letter Pi in lowercase (π), as the archaic sounds of v, f, and ph were phonetic cognates.

The annotations to the side read: *alas a asar* (cave/recess [between the lava flows] is roasting hot), *o'quo nana* (where it [lava] sleeps]), *opna na* (membrane [floating pumice] here), *omon ea* (largest lava mass here), *omon ena* (smaller lava mass here). To the right of centre, the annotations read: *ona* (good or safe), *oquenas* (just a little [lava]), *omina opas asa* (it is a dangerous pass, path). These annotations give instruction as to the relative dangers around the perimeter of the volcanic island following the eruption. The eruption was ongoing too.

The annotations within the volcano in side elevation read: *o'ména* (the dark magic) *æ nais* (its birth)*, omona* (big man) *omina* (omen). The birth of the explosion is seen as a bad omen, caused by the devil and allowed by god.

To the right of Zone 7, connecting with Zone 8, there is a series of wave-like patterns that seems to denote a route of escape. The annotation reads: *op é nais* (necessary for new start). The annotation above reads: *omnas æin* (everything into [the water]), referring to the explosive volcanic debris: lava bombs, etc.

Clearly the eruption was so destructive for those who lived on Vulcano that the population had to be evacuated elsewhere for their own safety. In the foreground there seems to be a Medieval tented city for emergency accommodation right on the shoreline - represented by a row of tent apexes and windows in the foreground, with the strata of cooled and twisted lava as the backdrop.



Zone 8. *Tabula regio novem*. Vulcanello emergeny refuge.

Zone 8 therefore depicts Vulcanella, to where the islanders must have immediately escaped by wading and swimming through the shallows. There appears to be a marquee receiving a supply of something from Zone 5, above in the middle of the sheet. The words radiating from the centre read: *o'quas aus* (what for now), *o la raz* (of the race), *ol e na* (all is in), *alena* (long for), *omena* (to leave), *om os aus* (people it is), *om e nasa* (people trapped by), *omina* (the omen). This seems to be a temporary refuge for those who have survived the eruption, but are trapped – a communal tent where they wait to be taken elsewhere.

The circumscribing words for Zone 8 read: *o'lenas* (for energy) *o'lona* (a tent) *o'lais* (for laypeople) *eina* (tool) *o'pas* (of action) *ar* (air) *leina* (sorrow) *t'as* (you have) *ar leina omenaus* (passenger ship) *orla* (reduce) *os aus ona* (good) *otais* (remove) *vnat* [*vene'at*] (a route) *o'naus* (for ships) *o'linar* (of sails) *or as o e'laus* (for the praise) *aro* (encircles) [*es*]*tar* (is, are) *nas* (swim) *omena* (leave) *om e naus* (people and ship) *omina* (the omen) *olas* (waves) *aus* (it is) *ala o'naus* (with the ship) *o lar* (guardian spirit: Lar) *o la raz* (of our race). The words evidently allude to the tent being a disembarkation point for the stricken, either by ship or by swimming, under the protection of Lar, the Mediaeval guardian spirit.

Moving right, to the connector between Zones 8 and 9, we see wave-like patterns and the words *olas - raæ arta* (waves - distance close). This is clearly describing a passage of water between two closely adjacent islands: i.e. Vulcanello and Lipari. The distance is close enough for strong swimmers, but requiring of a vessel for others.

Zone 9. *Tabula regio novem*. Lipari port refugee depot.

Having ascertained that Zone 9 represents the island of Lipari, we need to look at the illustration to see whether we can identify the components in the drawing. It seems that the groups of rounded objects are intended to represent people *en masse*, as we can see them crossing the short stretch of water, and we can see them landing in two arcs on Lipari, before being channelled towards the rectangular forms at the centre of Zone 9. It seems that these rectangular forms represent communal covered areas, where the evacuees are being fed and attended.

Above the two rectangular structures the annotations read: *o'masa* (a table) *o'pæo na* (of bread here) *amea* (gratis, free) *tapas* (to fill the stomach) *e op e ea* (it is needed and it) *ameina* (lifts) *oraus* (laughter) *os æa* (from the mouth).

There can be little doubt that this is, indeed, depicting a disaster relief effort on Lipari for those stricken by the eruption of Vulcano: i.e. Tables of bread are freely given to the needy, to fill their stomachs and lift their spirits – to make them smile and accentuate the positive.

To the left of the relief depots it reads: *mar* (the sea) *oquas* (calms) *e equaus or* (and equals now) *ole a* (welcome to) *dolena* (bathing) *dolina* (valley) *mor* (death) *lio os* (is smoothed) *or e ilos* (now out of them): i.e. The sea waves calm and flatten as the bay welcomes them and they are removed from the jaws of death.

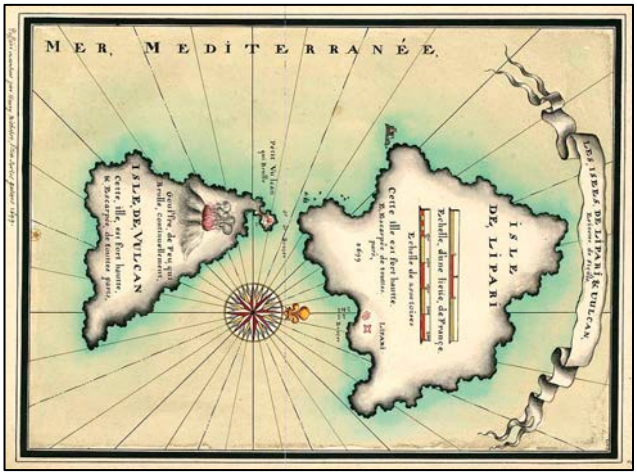
Beneath the relief depots it reads: *nas olor* (the smell) *o'pason* (of activity) *open æima* (with public aim), *ola as nas æ ele na* op (of them in need) *e na op* (and on need) *e ta* (this), *soa* (sounds) *r ena mæna* (of a wailing dog) *dolor é e la* (it is for the sorrow). This describes the aroma and the sound of the suffering, who are being tended to, following the eruption: i.e. The smell and activity of the public aid effort, along with the distressed wailing of those in sorrow and in pain.

The diagonal writing, to the left, reads: *olas* (waves) *or é e la naus* (now and it is in the ships), *o'liena* (of grief) *doléa* (hurt) *e que na o sa* (and what's in the healthy), *lei e a olar æ eia* (the sight and the smell of) *morqueta* (dirty people) *saus æo naus* (celebration on the ships). This describes the shipments of evacuees arriving at Lipari port: i.e. Waves of grief in those arriving by ship - some are hurt and others are healthy, but they are all smelly and dirty and they celebrate their arrival.

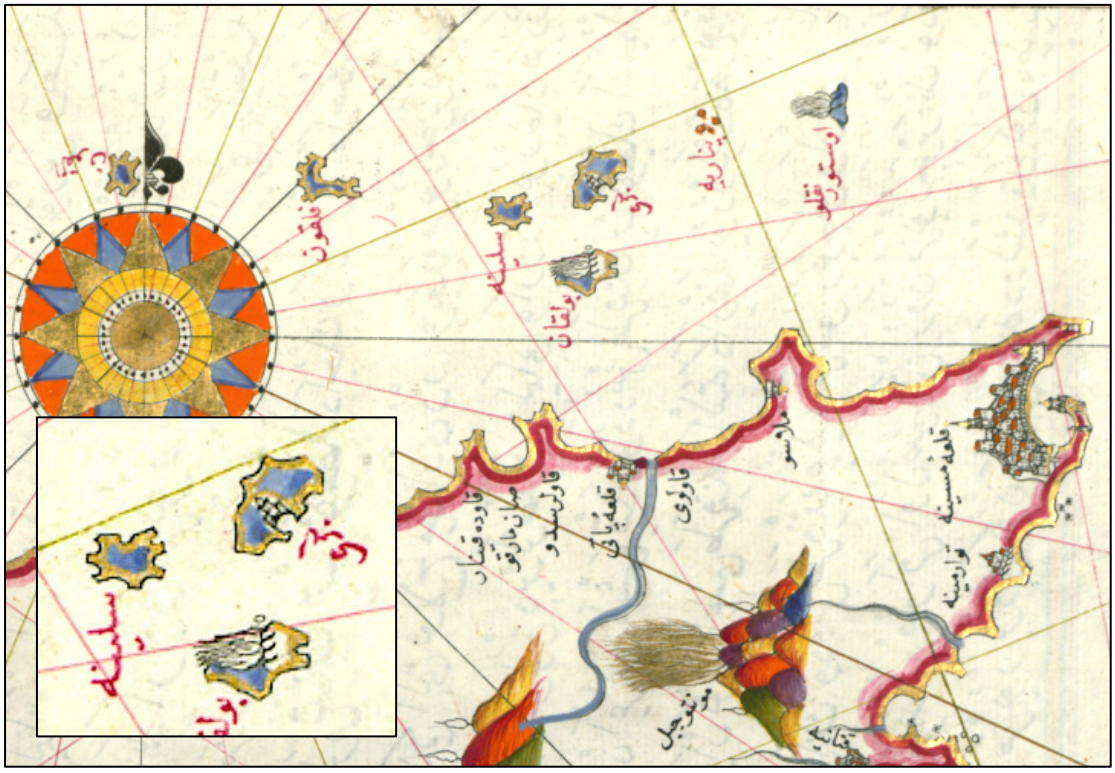
The writing around the circumference of Zone 9 is incomplete, but the two legible excerpts read: *alas as* (wings as) *olasa* (waves) *omone'en* (of god) *a nas é el aus* (he is in auster [southerly wind]) …….. *alees ous* (or) *o naus* (the ship) *o lar* (of Lar) *or aus olar ar olas* (the southerly wind and waves) *é énasa* (and are torment) *é eme* (and acquire) *a o moné et* (to be warned) *o mietia* (of culling) *é ele a* (it's him the) *omina* (omen) *o'mar* (the sea) *é inar* (is disagree) *o par* (of equal) *orlas* (waves) *o linaus* (to calm) *osos* (the bones). As the accompanying words in the sky read *op aso nasa* (produces heat trap), beneath the sun, and

opar nasa (swelling/windy dock) beneath clouds and wind, this is clearly alluding to the problem of dealing with stormy weather conditions whilst landing outside of dock, whereas the ships entering port are offered shelter and warmth. The 1444 eruption occurred on the 4/5th of February, so there must have been winter squalls hampering the rescue efforts in the following days.

In the background of Zone 9, there is another volcano. It is emitting fumes, but is relatively inactive compared with Vulcano. It must therefore represent Lipari volcano, as seen from Lipari port. The words rising from its crater read: *asas asa* (roasting hot here is).



1699 map of Vulcano, Vulcanello and Lipari, by Henry Michelot, orientated 90° clockwise as shown in the manuscript. Both Vulcano and Vulcanello volcanoes are shown to be still active, some 150 years after the 1550 eruption that fused them together and 250 years after the event documented in the manuscript. Vulcano has remained mildly active to this day.



1513 map of the Aeolian Islands and northeast Sicily, by Piri Reis. Vulcano (top-centre) is seen erupting, along with Stromboli (top-right) and Etna (bottom-centre). Looking closer (inset), one can see the flow of lava from Vulcano spilling into sea to the east, just as shown in the manuscript. Also, one can see that the islet of Vulcanello is still separate from Vulcano but fordable, which is why it offered sanctuary and refuge to the stricken islanders in 1444.

Zone 9 is connected with Zone 6 above by a promontory, again showing many people crossing. Either side are the words: *opon é nar – nas é na* (resistance it is holy fire – they, it is in): i.e. their faith helps them survive. The illustration shows the evacuees marching to the west coast of Lipari island, to a place called San Calogero, which is famous for its complexes of hot spas, hewn from the bedrock.

Zone 6. *Tabula regio novem*. Lipari, San Calogero spa.

Zone 6 represents San Calogero as a circular bathing pool, with recesses around the perimeter and a spring with two spouts at the centre. The words within the water read: *o'quaisa alara* (of what uplifts), *o'lena lasa os aus ea* (energy for the tired it is). Clearly the therapeutic benefits of the hot spa were considered important for recovery, convalescence and recuperation.

The remains of ancient thermal baths, at San Calogero. They were fashioned from the pumice bedrock and covered with domed or vaulted ceilings. A perpetual supply of hot water came from springs percolating from the slopes of Lipari volcano.

The words around the circumference of Zone 6 read: *a le o'liet* (of the soothing) *a réina* (of the queen) *olar* (to smell) *amor* (adore) *o'monas* (of unity) *ælelar* (to help/heal us) *// orlas* (to reduce) *é ea las dolor* (it is at the pain) *olas omas* (mood waves) *amosa* (show) *omona omas* (god's mood) *épor* (so it is) *ol æa olosa* [ollosa] *olas* (at the eye waves: tears) *as o lena* (as of energy) *alina* (to alleviate) *a léina* (to chance) *ei léina oquénos* (or what us chance) *doména las énas* (the domain of shadows/darkness) *é il orloeque* (it is for this we pray). Evidently the combination of thermal bathing, weeping and prayer were considered vital in purging the body of injury and the mind of morbidity.

Connecting Zone 6 with Zone 3, there is a stretch of water represented by waves. The words on either side read: *t'as é epe na – o quæe naus* (you have a term in – of what by ship): i.e. you have a long sea voyage. Within the connecting waves there is the image of a castle floating in clouds, with the words: *om é na o morna* (they are in the warm). Note: the word '*om*' is Occitan and can mean 'they', 'them', 'their', 'one', 'you' and 'nobody' depending on context. In this context it evidently refers to those who have died during the sea journey and gone to heaven – hence the celestial image and the sentiment.

Zone 3. *Tabula regio novem*. Castello Aragonese, Ischia.

Zone 3 will be of particular interest to Mediaeval historians, for it portrays the island castle fortress of Ischia, otherwise known as Castello Aragonese. As the schematic suggests, Ischia is north of Lipari. It is some 220km (140 miles) distant, which would have taken 3-4 days to sail with favourable winds in a dow.

Departing from the sea route between Zones 6 & 3, the way is shown around the island to a wooden jetty (top-right). On this route there are the words: *olas oe nana* (waves are sleeping): i.e. small waves. Where the route meets the jetty there are the words: *le é a dor é e nas as, a mena é naus oma* (we see longing in those leading ships from hell).

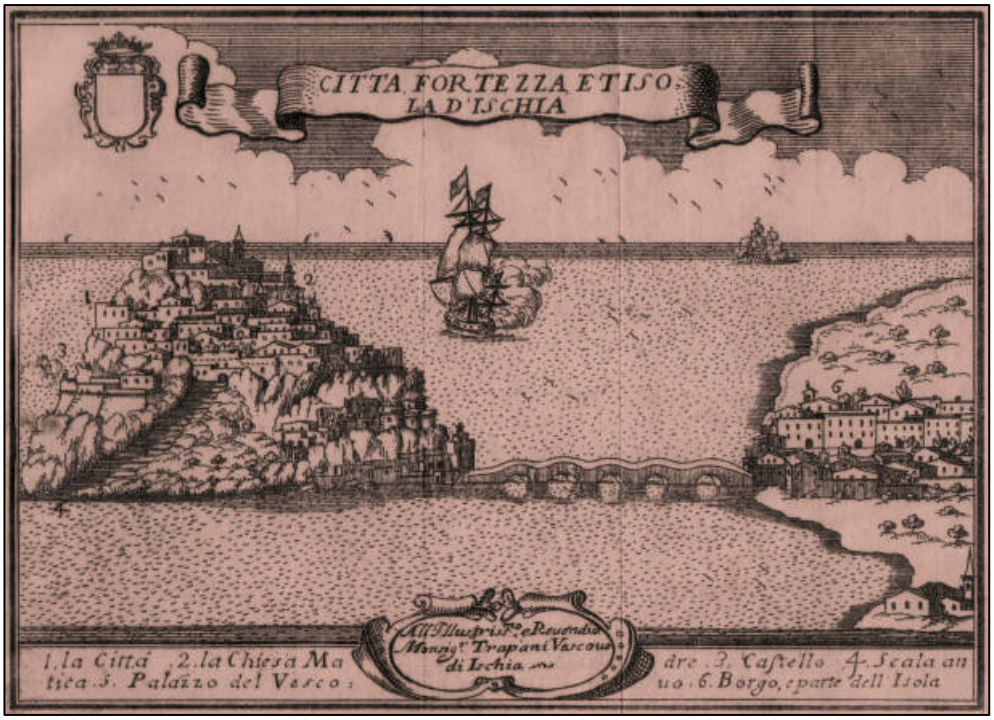
The wooden jetty platform is circular and divided into sectors, with three words: *olos* (rabble: commoners), *o'peia* (of fetters: slaves), *asar* (winged: nobility). In 1444 slavery was practiced widely in Italy and the Mediterranean as part of everyday life. In fact, the population of Ischia was itself frequently raided by Muslim slavers, which is why the islanders lived within the confines of the fortress, rather than on the main island. There is a ramp from the jetty to take the slaves into the rear of the fortress. On the opposite side of the jetty, a second route is shown, which leads around the top of the castle to Zone 2. Along the route there is the word *olona* (sailing).

Castello Aragonese is unique among the Neapolitan castles in being built on an island and having a manmade causeway attaching it to another island. The causeway was constructed in stone 1438-42, so it was newly built at that time. Coming from the castle and stepping onto the causeway there are the words: *o quais aqua-requea* (a quay/wharf, water requires it). Prior to its construction in stone, there had been a wooden bridge, which was difficult to maintain and far more vulnerable to attack. The wooden jetty gives some idea of how it might have looked only a few years earlier.

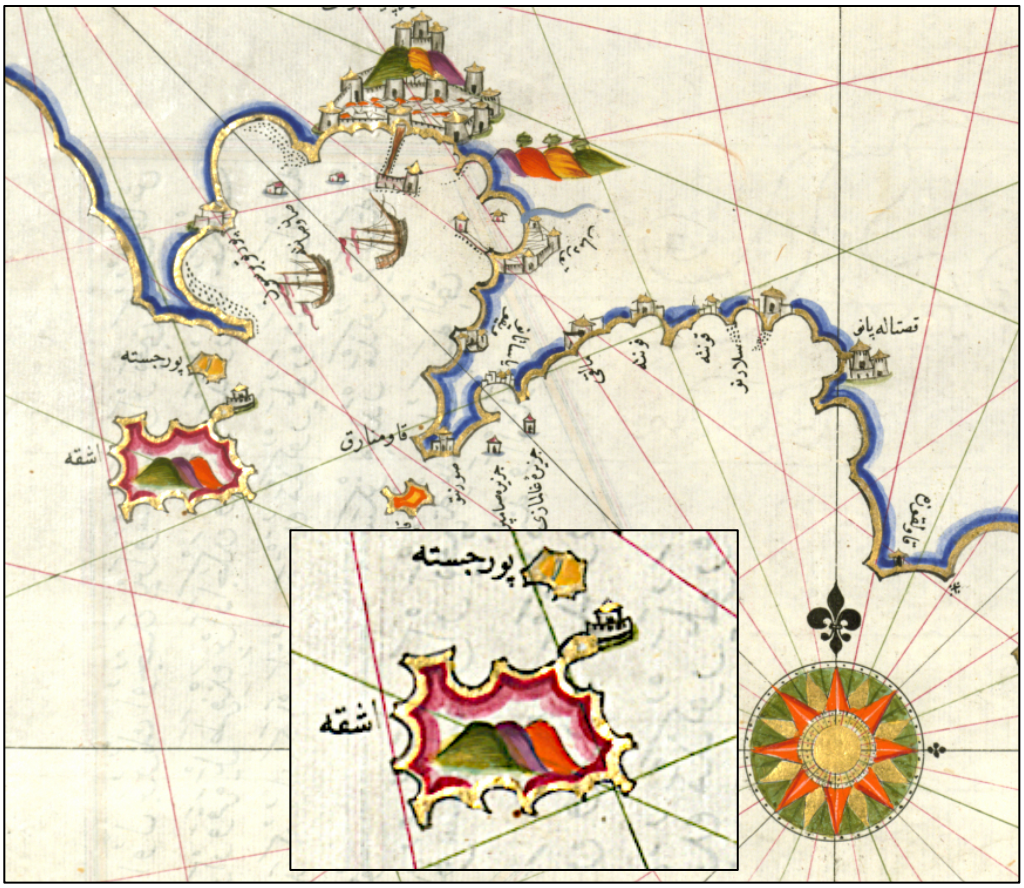
A 1590 Mediaeval map of Ischia, looking south, showing Castello Aragonese. The plaque reads: Ischia Island, once called Ænaria (land of wine). *Theatrum Orbis Terrarum* by Abraham Ortelius.

In this detail of the same map, we can see the causeway (Ischia Ponte) quite clearly. We can also see two examples of the ships described by the word *naus* in the manuscript. These are the vessels that would have been used to rescue the victims of the eruption. Rather than the types of ship known as carracks, which were used for open ocean voyages, these are closer in design to the dow, which is still used in the east Mediterranean, the Red Sea and the Persian Gulf, as it is well suited to closed waters.

The dow is still used as a working vessel.



A 1703 engraving of Castello Aragonese, again looking south, showing the causeway redesigned and Ischia town having been built. This change occurred when the threats of Moorish piracy and slavery had passed. The current causeway is nothing more than a flat roadway, about 200 metres in length. *Regno di Napoli in Prospettiva* by Giovanni Battista Pacichelli

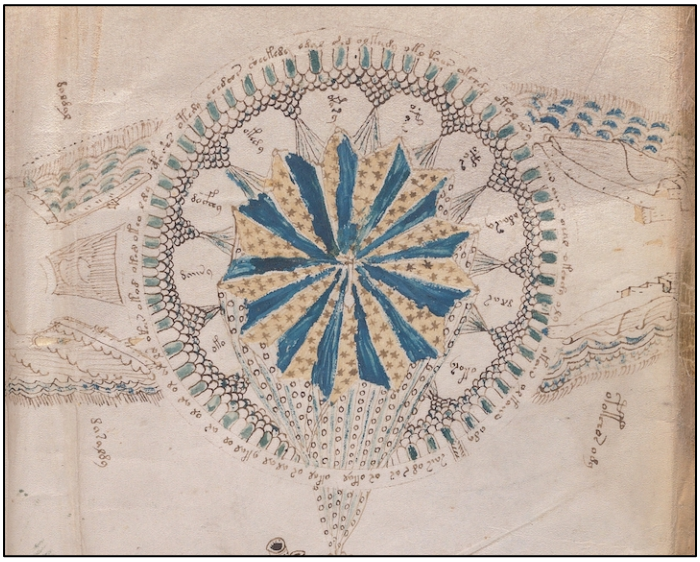


1513 map of Ischia and Bay of Naples, by Piri Reis. Castello Aragaonese is seen attached to the east coast of Ischia (inset). The peninsula of Sant'Angelo can also be seen mid-south of the island.

Within the castle walls, there are words spiralling from a church toward the centre, which read: *aous o em é a* (to the ones in) *osas* (bones) *asasa as* (at alter) *leio na* (I read in) *o é nos* (to and us) *ar o e lais* (a holy song) *a amonas* (to overcome) *o opar æa* (will work at) *os asonas ala nas* (the winged ones in the) *alonas* (halo) *a lasa* op (to let dig) *arva* (the land). It seems that finding places suitable for digging graves was tricky. Outside the castle wall, looking towards Zone 6, there are words that read: *opoas nar a* (opposite/facing holy light): i.e. the side facing the sun, to the south. This was probably the cemetery as those words follow on from 'they are in the warm' on the connecter between Zone 6 and 3: i.e. they [the dead] are in the warm, facing the holy light. The position of the church corresponds with the Chiesa Madonna della Libera (Madonna of the Free, Church): i.e. church for those who have been freed from their mortality.

Similarly, the cemetery became the site of the Tempio del Sole (Temple of the Sun).

The words circumscribing the Zone 3 island read: *olos epos ais* (all epic it is said) *as omeo meina* (it's my forceful) *o'lais amonas* (chant to overcome) *é is o lanais* (loneliness) *or alena* (to breathe) *é nos mé naus* (it is yours and my food) *ta tas arn monas* (to balance we appraise the weak) *élas o'nais os oar* (they of birth speak to pray) *o léna* (of energy) æina (quickly) *o mena* (to bring) *a léna* (the light) *é illa (that is) o aus o lies* (it is to associate) *or as os alena* (or at the comfort) *oleo* (oil) *ro* [recto] *naus* (correct/appropriate food) os o'raus orois (with outpouring of prayer). Chanting, prayer, food and oil are used for recovery.



Zone 2. *Tabula regio novem*. Winery on Ischia Ponte – causeway.

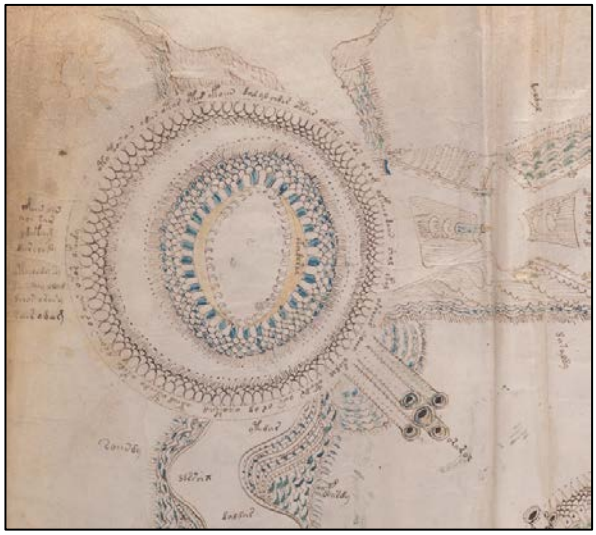
Zone 2 is situated equidistant from the ends of the causeway joining Castello Aragonese with Ischia. It is a winery. Ischia was famous for its wines in the Medieval period, as it had vineyards growing on the fertile volcanic slopes. Its original name was *Ænaria*, *Enaria* or *Oenaria* (land of wine): *oena* (pronounced owena) is the proto-Romance word for 'wine' or 'of wine' used in the manuscript. Each year a labour force would be shipped in to assist with picking the grapes, treading the grapes, and making the wine. The patterns of bluish and yellowish forms are meant to represent the black and white grapes having their juices

removed, which then flow towards the disc in the middle and then flow towards Zone 5 in the centre. At that time in history Ischia town had not yet been built due to the persistent threat of piracy in the Mediterranean. Therefore, the only settlement external to the castle was built on the causeway itself, so that the inhabitants had a better chance of reaching safety.

The words radiating from the centre of Zone 2 read thus: *ollo* (see), *naus a* (a nourishment), *no equea* (no equal), *o lena* (of energy), o quassa (of abundance), o quais (of quay), o quas (of which), anaisa (yearly), nvas: novas (new), o loza (of the vine). Clearly Ischian wine was held in high regard. In fact, there is a remark written beneath to the right: *o pol* [*edepol*] *é ot ona.* This translates as 'by god it is good'. Latin scholars will know that the term 'edepol' is a contraction of 'e deus Pollux' which translates as 'by the god Pollux'. Even though Christianity had been long established in Italy by the 15th century, there was still a good deal of hybridization with pagan or Roman beliefs.

The words around the circumference of Zone two read: *tais on s as* (such it is), *os olar* (to smell them), *olar os ar ar* (smell the air), *alar or* (to uplift), *as or ar or ar ras* (as the air is cleansed), *olas o lon ol eo rna* (the waves have long indebtedness), *opa æs omina* (wow, it is potent) *é ei lena onar æon* (and it has holy energy over time) *orlana ala laus ol é na olor as a* (it trims the wing of the praise in its smell), *aus aus a iar ol é na ora* (now now to go it is in praying), *olais ona* (the aromas are good). Clearly, Ischian wine had seductive qualities that enabled connection with spiritual council.

The causeway continues, to connect Zone 2 with Zone 1. On either side of the causeway are the words: *nar nar – na sarna* (holy light given - in the irritation/illness/torment). This evidently alludes to the inebriating effects of wine on the body and mind, making the torments of life easier to cope with.



Zone 1. *Tabula regio novem*. Ischia crater.

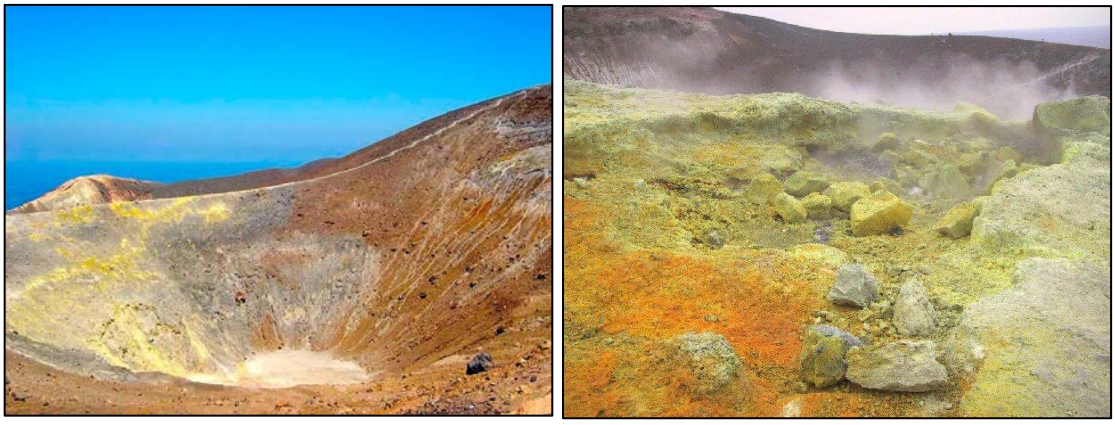
Zone 1 illustrates the crater of Ischia volcano, in plan elevation, with the cone surrounded by grapevines. At that time the volcano was still issuing fumes, both from the crater and from fumaroles to the side. The volcano can also be seen in side elevation in Zone 3, with the words *ane æsa asais* (the hole is hot) coming from the crater.

The plan elevation of the crater, in Zone 1, shows whisps of smoke emanating from the rim, and yellowish margins. These are deposits of sulphur, which was collected and sold by the people of Ischia – initially for use in medication and then for use in the manufacture of gunpowder. The words within the rim read: *olē nasas,* (smell betrays trap). Collecting sulphur was a very dangerous activity, as many people were poisoned and overcome by the noxious gases, or simply died from hypoxia. In fact, the Italian government eventually banned anyone from collecting sulphur in this manner, as it could also be mined relatively safely.

The four tubes projecting from the side of the volcano are meant to represent fumaroles, or gaseous vents. The words coming from their mouth read: [*n*]*'osa sor* (don't dare approach). The gases were evidently very toxic and best avoided.

Fumaroles still emit noxious fumes from Ischia volcano slopes.

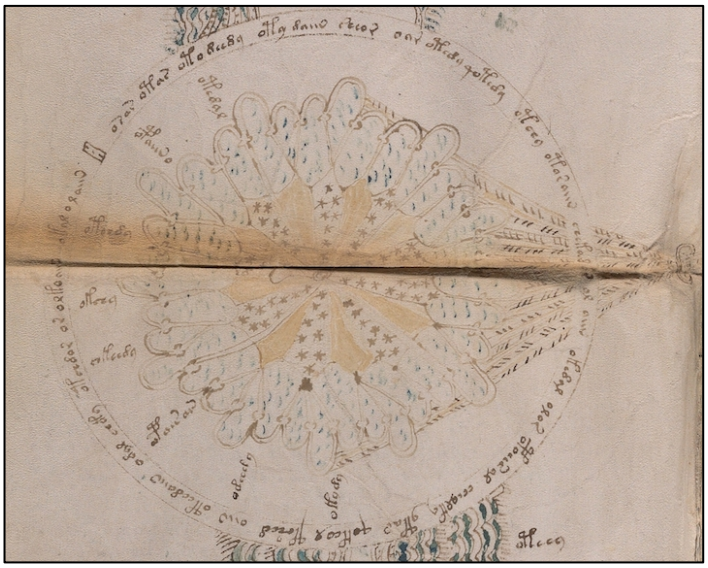
The words circumscribing Ischia volcano – Zone 1 - read: *omo mot ais a nas* (people's word asserts to in the) *omas* (or more) *omen* (an omen) *o laus* (or praise) *nar énas omnas* (fire it is in all) *éep ét olos* (it is in them) *or o sa orle io naus* (of healthy surrounding food), *æ or olar os* (and to look at) *æeit doei a olaror* (it is presented in pots) *omo ns* [*nostri*] *o eet as or o dolasa* (for us to eat, of chopped) *o'mein o'meina o lena* (of his and her energy) *r saus os aus* (it is the mouth [eaten]) *olos* (them) *oleina* (with oil). This describe the idea that food from the volcanic slopes contains holy, sustenance for good health, and is presented in pots for people to eat, chopped with olive oil.



Two images of Vulcano crater, which is now in the stage that Ischia crater was in 1444, with deposits of sulphur around the rim, accompanied by noxious gas emissions.

To the left-hand side of the Zone 1 there is a paragraph, that reads: *naus ais* (sustenance is), *a ei eas, anelasa* (to the breathless), *nas ée na* (and is at), *omo é ena ta* (people of yours), *t....no a orar* (to pray), *n é os osa sa* (said of displeasure), *tais* (to silence) *o nasa* (the trap). This seems to describe the use of food and prayer in combatting the problem with the noxious gases causing breathing problems. The god Vulcan was believed to reside beneath the volcanoes of the Tyrrhenian region. He therefore needed to be appeased in order to be content and giving. In addition, there was a believed connection with the heat and light of the sun. Thus Vulcan dictated fire below ground and fire in the sky.

Connecting Zone 1 with Zone 4, there is a representation of a strip of land with a pathway. The words each side read: *tous na* (all [people] here) – o *quass na* (of quakes/tremors here). The earth tremors are represented by a row of ripples extending along the shoreline, and by a series of tsunamis radiating out from beneath the fumaroles. Upon the pathway are the words: *amenas* (to carry, bring, provide amenity), *nn tt æ v [nomen nescio titulus ae vixit]* (I do not know the name of the title as he/she lived), *narnas (a devotion).* The pathway seems to have accommodated funeral cortèges, for those who didn't survive their injuries.



Zone 4. *Tabula regio novem*. Ischia, baths at Sant'Angelo.

Zone 4 appears to be another thermal bathing facility. Geographically, the location corresponds with a southern peninsula of Ischia, named Sant'Angelo. In addition, there are still thermal baths in the vicinity, including one on the eastern side named Terme Fumarole, precisely where the fumaroles are shown in the manuscript.

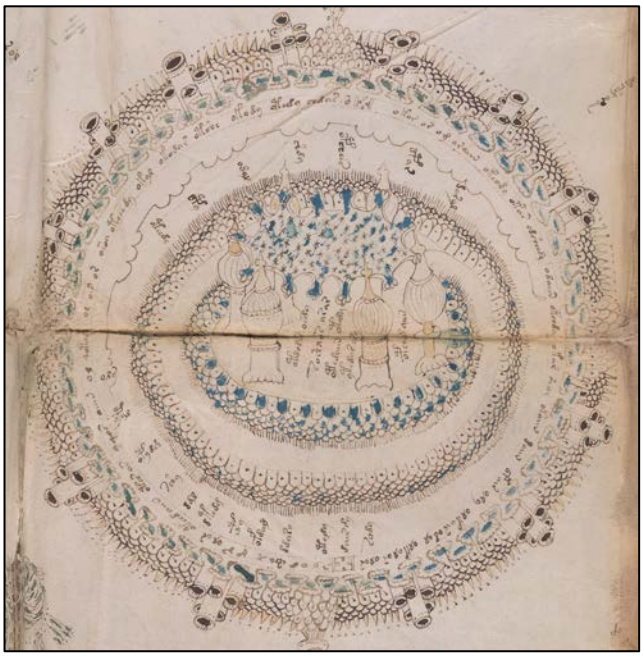
People still enjoy the hot coastal springs near Sant'Angelo peninsula.

The words radiating from the centre of Zone 4 read: *ominar* (forecast/predict), *o pauso* (to pause), *o ména* (the dark magic), *oléa* (olive oils), *é leina* (it is holy light), *op ais as* (need to say), *on i ona* (where is wave), *o la na* (for the swim). The word *ména* is an Aragonese word used to describe taking control with secret occult magical practices against adversaries. Thus, the holy light of olive oil is here used against the wrath of Vulcan, by applying it to water. It may be that they had noticed the effect of oil at attenuating or smoothing waves when it spreads to create a film on water, so there was a basic logic to the belief.

The words circumscribing Zone 4 read thus: *otas* (to see) *omas om o nena* (mothers with of babies), *om a naus æio s* (for the sustenance to say), *o as omina* (of the omen) *domina* (to dominate/control), *oméa* (to blend) *omas aus* (mood it

is), *é el anos* (it is the year) *or aus ol inar* (it is to disagree) *oros* (prayer) *opoeisar* (to oppose), *e earla amas* (your love/like) *doleo* (to suffer) *r mæin ous* (main or) *om ei naus* (people to sustenance) *o nar* (of holy fire) *é ela om é nos os* (it is she, it is we) *orlo aisa* (edged with comfort) *o lar* (by the protective spirit) *o rais* (of worries). This would appear to be further testament to their belief that sustenance and prayer brought protection from bad omens. As there is mention of babies it seems reasonable to conclude that this bathing facility was reserved for families, whilst that of Zone 6 was for adults only, hence two routes to Ischia.

The geographical layout now demands that the connector between Zones 4 and 7 must therefore represent the journey between Vulcano and Ischia, as an alternative escape route. In order for the real islands of Vulcano and Lipari to accommodate the format of the manuscript, it was necessary for the author to alter their orientation clockwise. This is why part of evacuation appears to loop south of the lava eruption, as it actually loops east. The words left and right of the connector read: *nep é ila* [*illa*] (people of island), *om e ea* (nobody is here). On the connector it reads: *om é, ota, o'nr [nostri], n [numero] na* (nobody is seen of our number). This is where the lethal airborne debris fell during the eruption.



Zone 5. *Tabula regio novem*. Communal feast and communion.

Zone 5, at the centre, is evidently a representation of feasting. The six objects arranged in a circle are cooking vessels, now known as Ottoman or Turkish braziers. They were made from terracotta and used to braze food above a charcoal fire. In effect, they were tagines on stands, making them portable, efficient and a convenient height to tend the food.

There are attachments linking Zone 5 with Zones 2, 4, 6 and 8. This indicates that Zone 5 is the sum of vital or life-giving components: shelter, warmth, wine, food, bathing, prayer and human companionship and camaraderie. Thus, the attachments are merely diagrammatic conduits rather than physical connections, as Zone 5 is a 'snapshot' in the mind's eye: a mental picture for the reader.

The words written among the braziers read: *omna nas oena* (everything with wine), to *ævot asas* (to have a roast), *om e naus o mena* (people and food, with drink), *amenas asa* (pleasant it is), *opéo naus* (helpful sustenance). There can be no doubting what Zone 5 is describing. Notice also, that *Tabula regio novem* uses the word *naus* with three meanings: ship, food and nutrition (food and drink).

The words above the braziers read: *nasar* (happen), *opas* (event), *op é eit* (it is necessary), *æna* (very much), *onar* (to honour), *opa* (god), *o miet* (of mighty). The words below the braziers read: *ora* (now), *apar* (connect), *o'panæ* (totally), *tæa* (to it), *nnr* [*nostrorum*] (our), *n lenta* (toughness), *op a* (need of) , *oqun asa* (where it is), *n nasa* (to entrap/ensnare), *omina* (the omen), *nais na* (in birth), *tona* (of thunder). Essentially the message is that everyone should muster their faith in god to overcome the omen. The god Vulcan is fundamentally seen as the devil of the underworld: i.e. the enemy of god.

The words circumscribing Zone 5 read as follows: *t a o n æ a v l s* [*taonæ avls*] (flies breeding), *or as* (now we have), *o mien aus* (of mine it is), *omet as* (to leave them), *a dot aus* (a gift it is), *o d doman* (to control), *or ais os* (so do it), *osoa* (completely) *o'meii na* (of a portion in), *olar o'lonas* (canvas bag), *o'mæi* (of

departing), *o'lona* (of them), *omina énas to* (the omen's dark shadow). This is instruction to leave bags of food as a decoy to keep the tormenting flies away. Flies were seen as the work of the devil in the Medieval period. The words *taonæ avls* (flies breeding) are even written with spacing to emphasize the importance of the instruction – the equivalent of writing in bold or capital letters. We can also presume, therefore, that the cloud of asterisks above the braziers is a swarm of bothersome flies and not magical sparks, as some scholars might prefer to imagine. Note: The word *taonae* now means horseflies in French (*taons*) but once meant flies in general. The word *avls* is of Norse origin: *avl* - to breed, multiply.

The words continue: *o los* (of them) *os osa* (the attempt), *asais* (to roast) *oleona* (in oil), *olas onæiina* (the carrying wave), *o naus* (of food) *o'léna* (of energy) *a las* (to tired), *æos o'laus naus* (is of praise food), *op ais ora* (needed say prayers), *orlais* (to trim) *on ar orlar* (where to pray) *os oros* (the worry/stress). Thus, roasting the food in oil energizes the tired and it reduces the worry in combination with prayer.

It is quite clear that Zone 5 is the hub of the sheet. In combination with Zones 3, 4, 6, and 8 it forms the holy cross (+), representing the use of food, wine and prayer to save the souls of those afflicted by the eruption. The other four zones illustrate the event itself and the subsequent rescue and relief efforts.

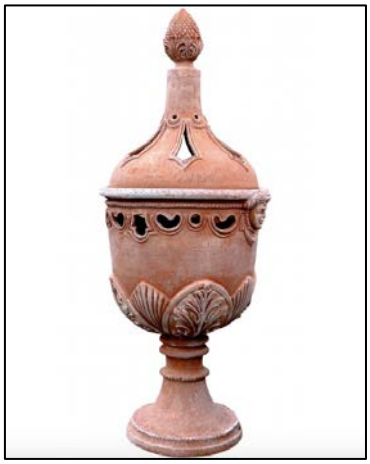
The more astute reader will have noticed that the perimeter of Zone 5 illustrates a crowd of people, as illustrated in Zone 3, sitting among small fumaroles, as illustrated in Zone 1. This is because the islanders famously used (and still do) the safer thermal outlets to do their cooking. Thus, the braziers were actually sat on the thermal substrate, rather than fuelled by charcoal, so that the food was cooked by convective heat. This is why the braziers appear to be sitting on sand and are clustered in a group – they sit on a beach fumarole pit.

Behind the people in Zone 5, there are the apexes of many Mediaeval tents, and in front of the people there are the thermal baths illustrated in Zone 6. There is also a ring of grapes around the brazier pit, to signify the wine drunk with the

brazed food. Thus we have tents, baths, people, food, wine and baleful swarms of flies – an encampment for the dispossessed and desperate.

An Ischian gentleman cooking food in a fumarole pit on Maronti Beach, on the southern coast of Ischia, near to Sant'Angelo.

The base of a clay brazier, unearthed at Kalyata Fortress in Bulgaria. This particular example has been dated to the 6th century AD.



An ornate version of the clay brazier, called a Tuscany Brazier, which was used during the Renaissance period in Italy, more usually for heating rather than cooking.

Two examples of the Turkish or Ottoman brazier, made from brass and copper. The domed lid is called the mangal. One can see that the braziers illustrated in the manuscript are very similar in design, but we know they were made from clay as this is alluded to in the paper *Linguistic Missing Links*.

Terracotta braziers used for cooking over a fire pit, in much the same way that the braziers are being used the manuscript.

Summary.

Having now precisely pinpointed the date and location of origin for manuscript MS408 it is first necessary to dismiss any ideas of a 16th century provenance, proposed in the paper *Linguistic Missing Links*. Therefore all of the plants must be Old World species. In addition, the gabled headdress must have been added at

a later date – probably when the transitional Italic names were added to the zodiac pages. The paper has since been modified in light of this information.

It seems highly unlikely that the alphabet symbols were deliberately designed for covert reasons, simply because the manuscript contains nothing more than practical information and instruction. Had the manuscript been written a hundred years later, then there might be some justification in supposing that the author wished to conceal pagan beliefs during the Spanish Inquisition. As it is, the more probable solution is that the alphabet was simply a very localized version of the proto-Italic alphabet. Indeed, it may have been exclusive to the court of Castello Aragonese.

Having mentioned the Spanish Inquisition, it is however quite reasonable to speculate that the manuscript found its way to the Italian mainland in the mid 16th century. The Papal authorities were thorough in their search for heretics and Don Pedro de Toledo conducted an inquisition of Naples 1547-1552, so the chances are that the manuscript was seized on suspicion of apostate beliefs at that time, precisely because the investigators were unable to read it. In fact, Naples and Ischia fell under Spanish control in 1503, so there would already have been an absence of anyone able to read the manuscript in the castle. Thus, the mystery had begun even before the manuscript left Ischia.

The monarchy of the Tyrrhenian region was enormously complicated in the mid-15th century because there were various overlapping kingdoms and crowns, making it tricky to ascertain who might have been the queen alluded to in the manuscript. Here are a few possibilities: The first three are mother, daughter and granddaughter: Mary, Princess of Enghien (c. 1367-1446), also Queen of Naples and Sicily, married to Raimondo del Balzo Orsini (1361-1406). She was known to be beautiful, intrepid and adventurous. Catherine, Princess of Naples (c. 1395-), also countess of Copertino. Isabella, Princess of Clermont and Taranto (c. 1424-1465), also Queen of Naples, married to Ferdinand I of Naples (1423-1494).

It may be that the author used the term *réina* (queen) as a generic term for female royalty: i.e. princess, consort and queen. Therefore it might have been either Mary, Catherine or Isabella involved with the 1444 rescue. Mary would have been 76 yrs of age at the time, whilst Catherine would have been about 50 yrs and Isabella around 20 yrs.

The next candidate is Maria of Castile, Queen of Aragon (1401-1458), married to Alfonso V, King of Aragon (1396-1458), also King of Naples as Alfonso I from 1442. She became queen consort of Aragon and Sicily and would have been around 43 yrs in 1444, having been consort of Naples for two years. As if to confuse matters, there was also her cousin Maria of Aragon, Queen of Castile (1396-1445), who would have been about 48 yrs in 1444. The former Maria was also regent – acting head - of Aragon 1423-1458, so she seems to have possessed the proactive nature described in *Tabula regio novem*.

A contemporaneous portrait of Maria of Castile, Queen of Aragon.
The Genealogy of the Kings of Spain by Alonso de Cartagena (1385-1456). Written in Latin in 1456, reproduced in Spanish in 1463.

Although the portrait of Maria (above) looks similar to those in the manuscript, many Mediaeval portraits have rather cloned faces, so ultimately, definitive identification will require some deep research in order to discover who was living at Castello Aragonese or at least in the Tyrrhenian (Naples-Sicily) region at the time of the 1444 eruption.

There are various historical accounts of the 1444 eruption, as reported from a distance or from report and anecdote, but none provides the first-hand contemporaneous human story illustrated and described by the manuscript.

Examples are that of Thomas Fazelus in his 1558 book *De Rebus Siculis* (The Affairs of Sicily), that of Michael Scott in his 1525 book *The English Traveller Through Italy*, and that of Edward de Vere, following a visit to Vulcano in 1576. Indeed, the main reason why the 1444 eruption is on historical record at all is that it was felt and seen from Siciliy, which is about 20 miles distant to the south. Incidentally, the word 'volcano' derives from Vulcano, as volcanoes were historically called 'burning mountains' or 'fire mountains'.

In conclusion, *Tabula regio novem* tells a rather wonderful story of human generosity and compassion. Out of the ashes of the volcano, as it were, the phoenix of hope rises for those stricken by their deliverance from evil and their provisioning of shelter, food and wine by the people of Lipari and Ischia. One must presume that the victims of the eruption had been waiting for some period of time, in truly dreadful conditions, before help arrived, so their sense of relief must have been palpable. Add to that, their religious belief system, and they must have thought they were being punished, by the conjuring of a hell on earth. No wonder hell was typically perceived as a flaming underworld.

Yet, when the story takes us to Ischia we discover slavery in the Mediterranean. It was something seen as part of life during the Mediaeval period, and may have even been accepted as destiny. As the castle jetty illustrates, there were nobility, commoners and slaves in the 15th century. Thus, there was this odd paradox between showing empathy and sympathy for those in trouble, whilst keeping those of other races in servitude.

All of this poses a final question: why didn't the relief effort come from Sicily in the south, as it was far nearer than Ischia and Naples? The answer is; that the Aeolians had privileged trade links with Naples, established when the city was the capital of the Angevin kingdom in 1337 and the Aeolian islanders decided to remain part of that kingdom, despite their proximity to Siciliy. So, it was a matter diplomacy and loyalty that Naples and Ischia should come to the assistance of the Aeolians in 1444. In fact, the region was in flux at that time, as the last Angevin king, René, had been ousted from Naples in 1442 by Alfonso I, whose wife was

Maria of Castile. This meant that Naples and Sicily were actually officially unified at the time of the eruption, but not culturally. It wasn't to last either, as they separated again in 1458. Both, however, were dependences of the Crown of Aragon, such were the complexities of Medieval politics.

Thus, the Aeolian Islands still fell under the administrative moral obligation of Ischia and Naples in 1444 despite the political shift in 1442. Word would have needed to travel north first in order to initiate a relief flotilla, so aid would have taken at least a week to arrive given the nautical distance each way. As the eruption began on 4/5th February, we can presume the flotilla arrived at Lipari around 12th Feb. The 5th was a Wednesday, by the way.

Map showing the true geography of the schematic shown in *Tabula regio novem*. In reality, Lipari is north of Vulcano, and both are a long way from Ischia.

Diagram giving zone locations for *Tabula regio novem*, using an adapted map, showing Ischia above, with Vulcano and Lipari below, rotated 90° clockwise. 1. Ischia crater. 2. Ischia Ponte. 3. Castello Aragonese. 4. Sant Angelo. 6. San Calogero. 7. Vulcano. 8. Vulcanello. 9. Lipari port. Note: Zone 5 is absent from the map as it doesn't represent a physical location.

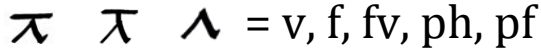
Linguistic Missing Links.

In order to retrieve a copy of the preceding paper, download pdf *Linguistic Missing Links* from this link: http://ling.auf.net/lingbuzz/003737

***Tabula regio novem*: Manuscript MS408.**

In order to retrieve a high resolution version of *Tabula regio novem*, download jpg file No. 158 from Download Options (bottom-right) at this link: https://archive.org/details/voynich

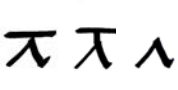
Additional proto-Italic symbol.

 = v, f, fv, ph, pf

The text of *Tabula regio novem* indicates that this symbol is the phoneme v/f. It seems to derive from the lowercase Greek Pi (π), as the archaic sounds of v, f, fv, ph, pf were phonetic cognates. The different forms seen in the symbol indicates that the phoneme had subtle variation in precise pronunciation.

It is worth adding that the *long e* symbol has been found to better translate as the accented e: thus é

= é

Symbol-Italic key for MS 408.			
Symbol	Italic	Symbol	Italic
	a (trapped)		a (free)
	ais		aus
	æ (ae, a, e, i)		d
	e (short)		e'e (intonation)
	é (long)		i
	l (ll)		ele (elle)
	m (mm)		eme (emme)
	n (nn)		o
	p (pp)		epe (eppe)
	qu		eque
	r (rr)		s/z (ss, zz)
	s/z (ss, zz)		sa/za
	t (tt)		ta
	u		v, f, fv, ph, pv

Conclusion.

The version of proto-Romance language used in Manuscript MS408 is closest linguistically to Portuguese, Catalan, Galician and Occitan. This is evidently due to the language having developed from Vulgar Latin at a time when Naples, Ischia and the Aeolian Islands were part of the Crown of Aragon. The other Romance languages; Spanish, French, Italian, Romanian all preserve some of the lexicon, as do the southeast European languages Croatian, Greek, Hungarian, Albanian, Slovenian. In addition, there are Germanic, Norse, Persian and Arabic influences on the proto-Romance of the manuscript.

This demonstrates just how translocating peoples, cultures and languages were across Europe, North Africa and the Near East during the Mediaeval. Of course, the Mediterranean was the focal point of trade, slavery, warfare and political flux at that time, which explains why so much movement occurred prior to the Renaissance, when the modern map began to form.

In scientific terms, the Mediterranean was a 'meme-pool', so that idea, knowledge and methods of communication were constantly interacting, with Naples as the epicentre of it all, being the largest city in Europe during the Mediaeval. Little wonder, then, that its version of proto-Romance was such a heady mix of Occidental languages and vestigial Latin. The city was filled to brimming with peoples of many different nations, all using the language as a common tongue in order to exchange information, knowhow, property and goods.

Thanks to the miraculous survival of Manuscript MS408, historians now have a new window into the mid-fifteenth century Neapolitan world, and linguists have, in a single document, the only known examples of proto-Italics and proto-Romance. In effect, Manuscript MS408 is the Mediaeval Rosetta Stone and should therefore provide a wealth of linguistic and historic data for scholars to investigate and fascinate over for many years to come.