G. Zammit-Maempel

HANDBILLS EXTOLLING THE VIRTUES OF FOSSIL SHARKS’ TEETH

In Medieval and Renaissance times, when the organic nature of fossil sharks’ teeth was unknown, their origin was deeply steeped in mystery. Some thought they were of celestial origin, having fallen from heaven on dark moonless nights (1), whilst others were convinced that they were generated by rocks, particularly those of the small Mediterranean island of Malta, where the Apostle St. Paul was shipwrecked in A.D. 60 (2).

In Europe fossil sharks’ teeth were generally known as Glossopetra (tongue stones), Linguæ melitensis (Maltese tongues) or Linguæ S. Pauli (tongues of St. Paul). The Germans, however, referred to them as Natternzungen (Serpents’ tongues) or Malteschen Amuletten (Maltese amulets), whilst the Maltese called them Ilsien San Pawl (St. Paul’s tongue), believing that they were somehow associated with St. Paul’s shipwreck on the Island (3). Some of the local people, lacking any knowledge of the bifid nature of snakes’ tongues, believed that they represented the tongues of snakes “cursed” by St. Paul after a member of their tribe bit him in the hand, others thought they were replicas of the Saint’s tongue spontaneously reproduced by local rocks to remind one and sundry of the great miracles effected by the Saint during his stay on the Island when he converted the heathen inhabitants to Christianity through the use of his tongue (by preaching) (4). Another section of the community, with a more vivid imagination believed that they were “images” of the Saint’s tongue that in some mysterious way penetrated the hard local rocks and got embedded within as a result of the forceful preaching of the Saint. The acceptance of such beliefs by many European scholars of the 17th and 18th centuries, resulted in Malta’s fossil sharks’ teeth being attributed not only supernatural powers against poison, but also many other wonderful virtues. They were consequently in great demand throughout Europe and from the seventeenth century onwards, a number of leaflets extolling the protective and curative powers of “St. Paul’s tongues”, “Serpents’ eyes” and “St. Paul’s earth/rock”, went into circulation both in Malta and abroad. They were printed mainly in Italian or French. The Italian versions were the most common and bore the title Virtù della Pietra di San Paolo, Lingue et Occhi di Serpe pretiosi che si trovano nell’ Isola di Malta, or a slight variant of it. Latin and German translations of these handbills are also known from scholarly books of the period, but no handbill in the Latin or German language has as yet ever come to light, nor have any been recorded in the Maltese language.
By Pietra o Terra di San Paolo is intended the chips of cave-rock or powdered limestone ("earth") derived from St. Paul's Crypt in Rabat, Malta. In this man-made subterranean cave, Saint Paul is traditionally said to have spent his three months enforced stay on the Island. It was popularly believed that, by a very special miracle of the Saint, the rock of this cave continuously regenerated, so that no matter the amount of material chipped from its walls, the cave's dimensions remained always unaltered (5). As a result of this firm belief, rock-chips from St. Paul's Grotto, generally known as Terra melitensis and St. Paul's earth, were referred to also as "The Grace of St. Paul". Whole shiploads of it are said to have been carted away by visitors (6).

The Lingue alluded to in the above-mentioned handbills are fossil sharks' teeth whilst the occhi di serpe are the Bufonites of the ancients, which are now known to be palatal teeth of fossil fish of the Sargus family. Being products of Maltese rocks that were blessed by St. Paul, they were believed to possess magical properties against poisoning and are known to have been embedded in anti-poison cups made from powdered limestone from St. Paul's Cave (7).

During the 17th and 18th centuries, the publication of informative leaflets was a very common practice, and many of these were evidently written by knowledgeable persons. A case in point is the leaflet (8) reproduced by Tudecius in his De Oculis Serpentum et Linguis Melitensibus (9). Most of the handbills were anonymous and sometimes also undated. They probably served as propaganda leaflets distributed by hand, free of charge, to visitors calling at St. Paul's Cave. No document has, however, come to light to show who distributed these handbills and why, but it is known that a number of them have survived the ravages of time. Though their wording may be slightly different, their theme was always the same. They differed from each other mainly in size and in the decorative motif that surrounds the printed text. The aim of this paper is to record the known varieties of such handbills, analyse their contents and register the location of the copies that have come to the knowledge of the present writer.

**SIZE OF HANDBILLS**

Handbills took the form of a single sheet paper, printed on one side only and, in the specimens coming to the author's attention, no watermark was detected. The most common size encountered is 215 x 135mm, but one French version in the National Library, Valletta, Malta, entitled Les Virtus de la Pierre de Saint Paul & Yeux de Serpent qu'on trouve dans l'Isle de Malte, printed anonymously and published without locality and date, measures 243mm x 170mm (10). As it does not bear any marginal decoration, it might not be an actual handbill and there is a very remote possibility of its being a page from a book reproducing the handbill's text. If this is the case, however, the book containing the original text could not be traced.
MARGINAL DECORATION

All the handbills seem to have had their text surrounded by a decorative motif which proved to be particularly interesting in one version published undated “Con. Lic. de’ Sup.” in “Malta & in Ferrara”. One such copy, lately reproduced by Perusini (11), is herein illustrated with permission of this author (Fig. 1g). It incorporates an eight-pointed cross of the Order (Maltese Cross) in the middle of the upper horizontal bar of the rectangular ornamentation. The significance of the Cross of the Order on handbills extolling the virtues of St. Paul’s earth or stone, fossil sharks’ teeth and serpents’ eyes is not known, but it may possibly be an indication of the influence of the Order over St. Paul’s Grotto in Rabat. It has been established that one of the most common hallmarks stamped on St. Paul’s earth after this has been worked into “images, medals and other objects”, was precisely, the eight-pointed cross as chief emblem of the Order (12). This is significant, particularly when examined in the light of the Brief of September 24, 1608, and that of December 22, 1610, by virtue of which the Grandmaster “accepted” the administration of the Grotto from the Church. The Brief of 1610 does in fact state that “The Sacred Grotto will remain in perpetuity under the care of the present and future Grand Masters” (13). The decorative pattern of Perusini’s undated handbill published “In Malta & In Ferrara” is almost identical with that published, also undated, in Palermo by Felice Marino (see Figs. 1g, 1d).

PLACE OF PUBLICATION

Most of the handbills were published locally (1643, 1646, 1654), but some were printed in Sicily (Palermo s.d., Messina 1714, Messina s.d., Messina... e altrove, s.d.), one in Italy (Roma, 1768) and one in Malta and Italy (Malta & Ferrara, s.d.). The publication of these manifestos abroad is astonishing as, after the introduction of the Press Law in Malta in 1644, it became illegal to publish anywhere but in Malta, literature relating to Ricette della Pietra di S. Paolo. By virtue of this new law or “Pragmatica” enacted on 25 May, 1644, for the protection of the art of printing, “no person whatsoever, irrespective of his social status or condition, should dare under any pretext or excuse, import from abroad and sell the undermentioned books or booklets... Ricette della Pietra di S. Paolo” (14). The legislation fails to explain what is actually implied by the word “Ricette”. As handbills recorded how St. Paul’s earth, St. Paul’s tongues and Serpents’ eyes were prepared and administered (as if they had been the ingredients of a recipe), the term Ricette presumably referred to them. Although the Press Law in Malta gave complete monopoly to a local printer over certain material, it does not seem to have been adhered to for long (15). In the case of these Ricette, non-compliance with the law can be extended to include 1768. This is the date when Arcangelo Casaletti published...
in Rome two other Italian versions of *Virtù della Pietra di S. Paolo*. These are the latest handbills known to have been published on the subject.

What immediately strikes the reader of these handbills is that they almost invariably all end up with a phrase meaning “with permission of the superiors”. It should be recalled that this was an essential detail in all manuscripts and printed matter published and circulated in Malta in those days. *Cum permesso superiorum* or its equivalent implied that the written material had passed the strict censorship imposed by the Order of St. John, by the Church or by the Inquisition, and was consequently fit for printing or perusal. Manuscripts are said to have had stricter censorship than printed matter, for with manuscripts, permission was required from each of the three hierarchies in Malta (Order, Church, Inquisition), whilst for printed matter it sufficed to have the vague phrase *Superiorum permesso* at the end of each publication or on the title-page of books (16).

DATE OF PUBLICATION AND LANGUAGE OF TEXT

As most handbills were published undated, it is not possible to establish a correct chronological list of the handbills. The earliest-known dated manifesto extolling the virtues and beneficial properties of Malta’s fossil sharks’ teeth and stone from St. Paul’s Grotto, seem to have been the Italian and French versions published in Malta in 1643 and reproduced by Bartholinus (17). An English translation of this edition was incorporated by Thompson in his paper describing a poison-cup made from the sealed earth derived from the Cave in Rabat, Malta (18). The cup served to protect its users from a poisoned drink. A second, but differently decorated, poison-cup was identified by the present writer amongst the fossil specimens in the “Giuseppe Monti 1733” Collection at the Museo Capellini, Istituto di Geologia e Paleontologia, Università di Bologna (19). These are the only two anti-poison cups known to have survived the ravages of time and Man. Reference to such objects is to be found in all the handbills.

The Biblioteca Nazionale of Rome has a manuscript reproduction of a printed handbill in the Italian language *Stampato in Malta Con Licenza de’ Superiori* and dated *L’anno di nost[ra] salute 1646*. The original manifesto could not be traced and the publisher is unknown (20).

The next dated handbill seems to have been a French version entitled *Vertus admirables de la Pierre de St. Paul & les langues & yeux des serpents précieux, qui se trouvent en l’isle de Malte*. Its text is reproduced by Burchardus Niderstedt in his *Malta, Vetus et Nova* (21), by Johan Reiskus (22) in 1684 and by Othenio Abel in 1939 (23), and does not appreciably differ from the other editions. It was printed in Malta in 1654 *par permission des superieurs* but the printer’s name is not revealed. Niderstedt, who travelled to Malta from Germany for the express purpose of obtaining information and material
for his book (24), considered this handbill to be sufficiently important as to warrant its reproduction in his book on the Island’s history and customs. The discordant inclusion of a French handbill in an otherwise exclusively Latin text, seems to suggest that Niderstedt was not aware of any Latin version of the handbill. He probably realised or at least suspected, that the Latin version by Worm five years earlier (25) was not a reproduction of a Latin handbill, but rather, the translation of an earlier Italian version. Indeed, Worm himself, when discussing “Terra melitensis... quocirca quidam Lapidem S. Pauli vocant” and which “ad Serpentum morsus potissimum commendatur”, records (fol. 6) that “In insula Melita publicata est lingua Italica quaedam, quae de viribus & Terrae hujus & Lapidum aliorum, qui ibidem reperiuntur, agit, in hunc modum”. No mention is made however, of any Latin leaflet. Worm’s text lacked, in fact, the marginal decoration and date of publication one usually encounters in handbills. The Latin version reproduced by Valentini (26) alongside a German translation (27) in a chapter entitled “Von den Natter Zungen und andern Steinen”, is actually a verbatim reproduction of Worm’s version with most of the second paragraph omitted.

In 1714, Vittorino Maffei published in Messina another handbill extolling the virtues of rock from St. Paul’s Cave and the wonderful attributes which fossil sharks’ teeth from the Island of Malta possessed. The leaflet, a copy of which is in the National Library, Valletta, Malta (28), measures 135mm x 218mm and like other handbills, it is decorated with a marginal frieze. It is peculiar, however, in lacking the usual statement that it was being published with permission of the superiors. Its text is identical with that of an undated Italian edition measuring 300mm x 140mm, and published in Messina by Giacomo Mattei (29). An original copy of this handbill was located at the Bibliothèque National et Universitaire, Strasbourg (30), where it forms part of a collection of papers on teratology and other curiosities of nature collected by Jean Hermann in 1788 under the heading Folia naturalis res spectantia. The handbill was reproduced also by Tudecius (1678) so that the date of its publication cannot be later than that date. An illustration of this leaflet was reproduced by Zammit-Maempel (1975), whilst Wickersheimer (31) and Stilon (32) reproduced its text verbatim. Cassar gave the English translation of the latter part of its text (33).

At the Malta National Library there are two copies of another Italian version printed without date “In Messina per il Mattei, ed altrove”. They belonged to Canon Agius de Soldanis and are bound up with his Mss. as Ms. 142 vol. V ff. 271 and 273 respectively. An unsigned and undated handwritten note on f. 272 (which is the back of fol. 273) refers to another handbill printed in Malta. It reads: “Stampata in Malta dal S. re Niccolò Capace sopra una simile stampata in Messina: onde questa è copia fatta sopra quella di Messina. E'
traduzione d’un’altra Francese che si trova qui legata”. The present writer has been unable to trace any original handbill signed by don Niccolò Capace, the 18th century printer at the Grandmaster’s press in Valletta (the French version referred to in the note is reproduced below as Fig. 1h).

Another undated Italian version deserves special mention as it was published “in Malta & in Ferrara”. No adequate explanation could be advanced for the “twinning” of Malta and Ferrara in the publication of this handbill. It is a well-known fact, however, that the Ferrara Library contains a large number of documents about Malta and that many books on Malta were at one time published in Ferrara.

Up to the present day, six dated and seven undated versions of the Virtù della Pietra di S. Paolo handbills have been recorded by the present writer. Seven are in Italian, three in French, two in Latin and one in German. The French versions seem to be the ones that differ most in the wording of their text. This survey includes both manifestos and mere texts in books. Four handbills were published in Malta and these are the earliest ones known (17th century); three in Messina (one dated 1714 and the other two undated, but probably also 18th century as the printers are probably related), one in Palermo (undated), one in Rome (1768, the latest known) and one “in Malta & in Ferrara” (undated, but probably belonging to the earliest group). Three more handbills lack any information as to the place of their publication.

One of the very latest editions of Virtù della Pietra handbills has already been alluded to: it is that printed in Rome by Arcangelo Casaletti in 1768 (34). There seem to have been two issues of this version differing from each other only in the setting of the lettering, which indicates that the two issues were run off on two different occasions from a different block. An original copy of one variety of the above-mentioned handbill is preserved in the private library of Rev. G.P. Briffa Brincati of Rabat, Malta, who reproduced its text in a publication commemorating the 19th centenary of St. Paul’s shipwreck on the Island (35). A copy of the other variety is now in the private library of the present author (Fig. 1c).

An undated Italian version entitled Le Virtù della Pietra di S. Paolo, Delle lingue & Occhi Serpe pretiosi quali si trovano nell’Isola di Malta, was published in Palermo by Felice Marino. A copy of this handbill was discovered in the Biblioteca Nacional, Madrid, inserted at back of title page of the second impression of Francesco Balbi de Correggio’s book giving an eye witness account of the events in troubled Malta during the Great Siege (36). An attempt was made to date this manifesto by tracing the date of acquisition of the said book. This was published in Barcellona in 1568 and reached the Biblioteca Nacional some time after 1712, which is the date when Philip V erected that Institution. As the book carries no stamp of previous ownership and as its provenance is completely unknown, no fixed date can be put on the handbill through this line
of investigation. At request of the author and through the kind cooperation of the Secretario General of the Biblioteca Nacional, the leaflet was examined by an experienced member of the staff of the Sección de Incunables y Raros. His report that el impresó es característico del s. XVIII, aunque no se pueda precisar el año por su impression, con orla tipográfica característica de impresos de este siglo y también de impresos del s. XVII reveals that though the leaflet is characteristic of the 18th century, it is not possible to state precisely when it was actually printed, for the decorative marginal frieze is characteristic both of the 17th and 18th centuries (37). Attempts to discover when Felice Marino was active as a printer in Palermo have so far yielded no conclusive results.

**THEME**

Though the date and place of publication of the different handbills varied considerably, their main theme remained always the same: a declaration of the protective and curative powers of rock from St. Paul's Cave and of the wonderful attributes possessed by local fossil sharks' teeth and by other "products" of Maltese rocks.

The opening paragraph of the manifestos invariably introduced the reader to the whereabouts of the Cave, informing him that is was distant nine miles from the new capital, that its rock was of a white colour and that from its powdered white limestone were formed imaginí, medaglie, tazze & altre cose. In the account of his travels from Germany to Egypt via Malta, the German traveller Heberer included a queer outline map of Malta in which the whereabouts of "La Grotta" are clearly marked and reference appears also in the text (38).

It is particularly interesting to note that the leaflets contain a paragraph recording the local abundance of "tongues" and "serpents' eyes" in rocks from which they are said to have been generated through a special privilege granted to them by St. Paul. This, the handbills record, was done to remind the faithful of the great miracles enacted by the Saint during his stay on the Island when he converted the inhabitants to Christianity. It is also narrated in the handbills that during his stay the Saint deprived all local snakes of their poison, rendering each of them "as harmless as a stone", and that he infused local rocks and their "products" (tongues, serpents' eyes) with wonderful protective and curative powers against poisoning (40). The reader is obligingly informed also that, should at times the protective powers of the amulets fail and poisoning occur, the curative powers of these objects could still be relied upon. Their beneficial use was not limited to poisoning, but extended also to many diseases and the attention of the reader is drawn to the large number of cures attributable to their action.

Next follows a paragraph on the methods how local "tongues", "eyes" and "earth" from St. Paul's Crypt are best used to procure the desired effects.
“Eyes” are to be worn as gemstone mounted on rings in such a way as to be in touch with the skin; “Tongues” are to be worn suspended either from the neck or from the arms, whilst “Earth” or powdered white rock from St. Paul’s Cave is used to advantage if added in small amounts to water, wine or other liquor and drunk as a beverage. The reader is also encouraged to drink liquids in which “tongues” or “eyes” had been infused, or else to drink wine or water from cups made from the powdered white rock of the Cave.

All handbills (with two exceptions) ended up in a serious note of warning that in order to obtain the desired effects from these amulets, “above all, one must be absolutely certain that the rock, tongues or eyes used are not fakes, but genuine Maltese specimens brought from the Island by a trusted person having the necessary credentials”. It is strange that this last paragraph warning the reader to be on the look out for fakes should be completely omitted in the French version dated 1654 published in Malta and reproduced by Niderstedt (40). It is also missing in another undated French version (170mm x 243mm) now in the National Library, Valletta (41). Had the note of warning not appeared in earlier version of the handbill and had there not been evidence in earlier books that attempts had already been made by unscrupulous persons to fake even Maltese “St. Paul’s tongues”, it would have seemed that the problem of faking Maltese amulets had its origin subsequent to 1654. The possibilities of having “faked” Maltese tongues, however, was very real and Gesner in 1565 went into great trouble to devise a method by which such objects could be detected (42).

The hanging of St. Paul’s tongues from the arms or from the neck, and the wearing of Serpents’ eyes as gemstone mounted on a ring in such a way as to be in touch with the wearer’s flesh, was undoubtedly a superstition that could not have had any effect (except perhaps psychological) on poisoning or on other maladies. Not so however, the ingestion of the powdered objects or the drinking from cups made from Terra sigillata melitensis. This could have had a protective as well as a curative effect both on poisoning and on other ailments. The beneficial influence was, however, in no way related to the fact that St. Paul showered his blessings on Maltese rocks, particularly those of the Cave where he is supposed to have spent his stay on the Island. It is the result of a natural chemical reaction whereby the arsenic (the most commonly used poison in those days), contained in the drink, reacts with the calcium carbonate of the rock from St. Paul’s Cave and undergoes “chelation”. It gets sort of covered up or mopped up and consequently rendered temporarily inactive, often allowing it to travel through the guts harmlessly. Undoubtedly, besides the chemical reaction, (which was then unknown), there was also the Faith factor — faith in the person bringing the Maltese amulets, faith in the person administering the medicaments and great faith and devotion on the part of the person receiving the treatment. All these factors must have been at the root of most
“cures” attributable to Malta’s fossil sharks’ teeth and the Upper Coralline Limestone chips from St. Paul’s Cave in Rabat, Malta. These cures were very similar to, though not quite identical with, those obtained in the Aesklepions of Greece when these had their heyday during the one thousand year period from 500 B.C. to 500 A.D.

1. Plinius Secundus, Historia Naturalis, XXXVII, Cap. 59. See also: O Abel, Vorzeitliche Tiere... Buchten und Volksgläuben, Jena 1939, p.205


8. Virtù della Pietra di S. Paolo ecc. In Messina, per Giacomo Mattei (s.d.)


10. Misc. 303, ext. 48.


14. E Parnis, Notes on the first establishment, development and actual state of printing in Malta, Malta 1916, 1-3

15. Ibid., p.3. The local printing press was at a standstill for about a century starting around 1655, see G Mangion, “Le vicende della stampa a Malta”, Maltanapoli, Jan.-Apr. 1976.


17. T Bartholinus, Historiarum anatomicarum et medica... vol. VI, 1a.


20. Fondo Gesuitico, Ms. G 1448/11, Fig. 1a, below.


ILLUSTRATIONS *

Fig.1a-h Different varieties of Virtù della Pietra di S. Paolo handbills, published by courtesy of the Institutions listed hereunder:

Fig.1a Biblioteca Nazionale, Roma, (Fondo Gesuitico Ms.G.1448/11)
Fig.1b National Library, Valletta, Malta (Misc. 303 Extract 46)
Fig.1c Author's collection
Fig.1d Biblioteca Nacional, Madrid (Raro 26172)
Fig.1e National Library, Valletta, Malta (Library Ms.142, vol.V ff.271 and 273)
Fig.1f Bibliothèque National et Universitaire, Strasbourg (Cote R.5, Fol 4)
Fig.1g Collezione Perusini di Rocca Bernarda, Iplis, Italia
Fig.1h National Library, Valletta, Malta (Library Ms.142, vol.V fol.268, and Misc. 303 Ext 48)

Fig.2 Lingua di S. Paolo — a fossil tooth of the Tertiary Giant White shark Carcharodon megalodon Ag., Globigerina Limestone, Malta, mounted in silver for suspension as an amulet. Note superficial resemblance to a human tongue. Height 57mm, Base 48mm (Author's Coll.).

Fig.3 Occhio di Serpe — palatal tooth of fossil fish, Globigerina Limestone, Malta. Note resemblance to an iris and pupil (Author's Coll.).

Fig.4 A lamnid shark's tooth from Maltese Tertiary rocks mounted in silver with loop for suspension as amulet. No resemblance to human tongue, but all the same referred to locally as "Ilsean San Pawl". Height 21mm, Base 7mm. (Courtesy: Dr. G. Randon)

Fig.5 Envelope (80mm x 48mm) stamped with the image of the marble statue of St. Paul donated by Gran Master Pinto in 1743 for erection in the Crypt. Used for free distribution of the Pietra di S. Paolo or limestone chips from St. Paul's Crypt, Rabat, Malta.

Fig.6 Marginal ornamentation of handbills (lower horizontal bar).
* The author is greatly indebted to: The Director, Biblioteca Nazionale, Rome; Dr. V. Depasquale, Librarian, National Library, Malta; Mme Lang, Bibliothèque National et Universitaire, Strasbourg; Roberto Litar, Secretario General, Biblioteca Nacional, Madrid; Prof. Dott. G. Perusini; Dr. G. Randon and Rev. G.P. Briffa Brincati; for providing copies of items in their respective care and allowing reproduction; Chev. J. Galea for kindly donating a handbill and, finally, Mr J.P. Testaferrata Bonici for his photographic services. Their help is gratefully acknowledged.
**VIRTU DELLA PIETRA DI SAN PAOLO.**

Dello Unger e di Ochil di Serpe prezioso; di un travaso nell' Omo della Matia.


O cchi la terra, e la terra della terra, che l' ebbe uno specchio di cristallo.
EX CRYPTA
S. PAULI AP.
RABATEN, MELITAE.

In Malia et in Ferrara, Peri Duressi. Cum licent. d' arm.

In Palermo, per Felice Marino Con licenza de' Superiori.

In Messina per il Mattei, ed altri rove. Con licenza de' Superiori.

IN MESSINA, Per Giacomo Mattei. Con licenza de' Superiori.

In Messina, presso D. Vittorino Mattei, 1714.

Roma, per Arcangelo Casaletti 1768. Con licenza de' Sup.