DOI: 10.14232/suc.2021.2.197-215

SIMONA ROSSI

Superintendence of Cultural Heritage in Malta

Towards a Modern Culture of Antiquity in a Multidisciplinary Perspective: Architect Antonio Niccolini (1772–1850) and the Temple of Serapis in Pozzuoli, Italy

This research seeks to highlight a moment in the evolution of the culture of the Antiquity in the 19th century throughout the experience of the architect Antonio Niccolini with the Temple of Serapis in the town of Pozzuoli, Italy. This ancient site dating back to the Flavian Age turned out to be a complex but also stimulating case study for many distinguished European scholars given its historical and geological singularities. Among them was Antonio Niccolini, one of the most influential architects of the Bourbon Kingdom, working in Naples from 1807 to 1850. He will engage this line of research bringing an avant-garde concept regarding the approach to the knowledge of Antiquity and the preservation of ancient sites.

Keywords: Antonio Niccolini, Temple of Serapis, Phlegraean Fields, reception of the Antiquity, Architecture, Science, Bourbon Kingdom

Introduction

From the 18th century onwards, the Phlegraean Fields began to become one of the destinations of the *Grand Tour* in Italy, along with more well-known sites such as Herculaneum and Pompeii. Travellers were increasingly fascinated by this area not far from Naples, plenty of naturalistic beauties, namely Lake Lucrine and Lake Avernus, and also full of mysteries narrated by Latin historians. Sites such as the Temple of Mercury, the Sibyl's Cave, or the Tomb of Agrippina, not only represented the memory of Roman civilization, but still seemed to retain the spirit of history and myth.[1]

[1] To investigate the reception of the Phleagraen Fields from the 18th century, please refer to: ALISIO (1995), FINO (2001) and DI LIELLO (2005).

Among the numerous Phlegraean antiquities that fascinated scholars, perhaps none proved to be as enigmatic as the Temple of Serapis in Pozzuoli. This site, thanks to some naturalistic and architectural peculiarities, became the core of an exciting debate that involved intellectuals from various disciplines such as Architecture, Archaeology and Earth Sciences.[2] On one hand, architects and archaeologists were facing the issue of identifying the building: the so-called Temple of Serapis is actually a Roman *Macellum*, which was an architectural typology still unknown in the 18th century, considering that the one in Pompeii will be discovered only in 1818. On the other hand, scientists found anomalous phenomena affecting the building. First, periodic flooding affected the courtyard of the *Serapeum,* for no apparent cause. Secondly, there were traces of marine fossils on the marbles of the columns. These evidences were very difficult to explain in the light of the knowledge available up to that time in the geological field.

These investigations started since the first years of the unearthing of the area, would reach their peak in the 19th century to last until the late 20th century, making the Temple of Serapis a symbolic place for scholars of several disciplines. Indeed, it is precisely from some studies resulting from the observation of the *Serapeum* that fundamental goals will be achieved in many branches of knowledge.

The discovery and the early years

The area where the Temple of Serapis was located looked like a fertile plot called *Vigna delle tre colonne* (The vineyard of the three columns) from which emerged only three pillars not appearing to arouse any archaeological interest. Nevertheless, the columns still had to be somehow a landmark of the Pozzuoli itinerary, since they were already represented in the book *Ager Puteolanus* by Mario Cartaro and in a topographical map of the *Gulf of Pozzuoli* engraved in 1720 by the German artist Johann Christoph Weigel to be part of the collection named *Decriptio Orbis Antiqui.*

[2] The Temple of Serapis in Pozzuoli is the subject of a book that exhaustively outlines the aspects of the architectural, archaeological and scientific debate toward it, from the 18th century to the beginning of the 20th century: CIANCIO (2009).

Though, the existence of the columns is reported even in the 16th century, as they are mentioned in one of the first travel guides of the Phlegraean Fields, such as *Le antichità di Pozzuolo et luoghi convicini* by Ferrante Loffredo.[3]

In 1750, a violent episode of bradyseism,[4] a phenomenon unknown at the time, brought to light the remains of the Temple of Serapis. The columns turned out to be twelve metres high and suggested to be part of a complex structure.

1. The Temple of Serapis in Pozzuoli, Italy

Immediately, King Charles of Bourbon ordered to proceed with the excavation of the entire area. In fact, in the Kingdom of Naples both the archaeological sites and every artefact found during the diggings were property of the crown and it was the sovereign who managed every aspect of them.

[3] LOFFREDO (1573).

[4] Bradyseism is a particular movement of the Earth's surface typical of volcanic areas, very present in the Phlegraean Fields.

As a result of the first excavation campaign, a paved floor surrounded by *tabernae*, a circular aedicule and a portion of an *exedra* emerged. In addition, many artefacts were found, including a bust of the Egyptian god Serapis. For this reason, the archaeologists of the time identified the site as a Temple dedicated to Serapis. Moreover, the cult of the Alexandrian divinity had already been recorded in Pozzuoli starting from the 2nd century BC and was subsequently associated with the cult of the healing god Aesculapius or that of Zeus by the Greeks, to the point that the god was often referred to with the name of 'Jupiter Serapis',[5] also in 18th and 19th century literature. Although the actual function of the building was discovered in the following centuries, this toponym still lasted.

The excavations were completed only in 1818. By this date, the *Serapeum* appeared as a large rectangular courtyard surrounded by a portico (75 meters length by 58 meters width), overlooked by *tabernae* open alternately inwards and outwards. The entrance was emphasized by four monumental columns preceding an *exedra* in which were collocated three niches decorated with statues. The *exedra* was in turn preceded by a covered ambulatory. Two public latrines were located on the sides of the back apse. At the centre of the perimeter there was the *tholos*, or the circular aedicule, surrounded by a double colonnade, with a massive fountain in the middle.

The entire complex was embellished with marbles, mosaic floors and very fine finishes, of which evidence is found in reports and drawings of the many travellers of the time.

The *Serapeum* among the archaeologist and the architects

It was the French architect Jerôme-Charles Bellicard to spread the news of the discovery of the *Serapeum* in Europe by virtue of his publication: *Observation upon the Antiquities of the town of Herculanum,* in which he wrote:

[5] The cult of Serapis was established by the sovereign of Alexandria Ptolemy I (366–283 BC), and derives from the syncretism between the Egyptian god Osiris and the Greek god Zeus. Attributes of both gods are referred to him. ZEVI (2006: 69–86).

> In my last journey in 1749, I had observed in this city, three pillars, of about five feet in diameter, the shafts of which were half buried. Since that time the place having been dug, they have discovered their bases […] which are of marble, and the profil is very beautiful. The king of the Two Sicilies having ordered the work to be continued, they found a temple, supposed by the idol, and some other circumstances, to have been dedicated to Serapis.[6]

Bellicard's book had the merit of feeding the curiosity of the antiquity enthusiasts. Many of them would have taken part in the dispute regarding the uncertain architectonical typology of the building. In fact, before in 1907 the naturalist Charles Dubois dispelled any doubt about the nature of Temple of Serapis declaring that it was a Flavian age *Macellum*, several scholars engaged in speculation on the subject.[7] However, as the excavation proceeded it was clear to anyone that the discovered building was very different from the classic morphology of the temple as known from the most famous architectural treatises so far, such as those of Vitruvius or Sebastiano Serlio.

Nevertheless, the conjectures put forward by the antiquarians in this very early phase were not able to provide totally convincing elements on the typology, and their ideas only circulated around a small circle of trusted correspondents.

Moreover, the approach to the study of the antiquities of the 18th century scholars was mostly philological: apart from some exceptions, they hardly carried out direct inspections on archaeological sites, rather basing their interpretations on theoretical bases.

It will have to wait until 1770 for Italian scholars to identify a more effective approach to the antiquity, much closer to the archaeological one, based on the historical and cultural contextualization of the artefacts. In fact, the Italian antiquarian Ottaviano Guasco was the first to guess that to dispel the doubt about the architectural typology of the *Serapeum* it was first and foremost necessary to understand the ritual connected to Egyptian cults of Serapis from Latin literary sources and to compare them with the spatial structure of the building, in order to find

---

[6] BELLICARD (1753: 129).

[7] DUBOIS (1907: 286–314). To further investigate DUBOIS's research: DE RUYT (1977: 128–139).

some correspondence. Indeed, Guasco was also among the first to identify the actual syncretism between Serapis and the healing god Aesculapius (or Asclepius), whose cults often took place in *Thermae*. For this reason, he believed that the Temple of Serapis was in truth and ancient thermal bath in which ceremonies dedicated to Serapis took place. This would have explained *Serapeum*'s unprecedented conformation, much closer to a hospice for ailing people rather than a traditional temple.

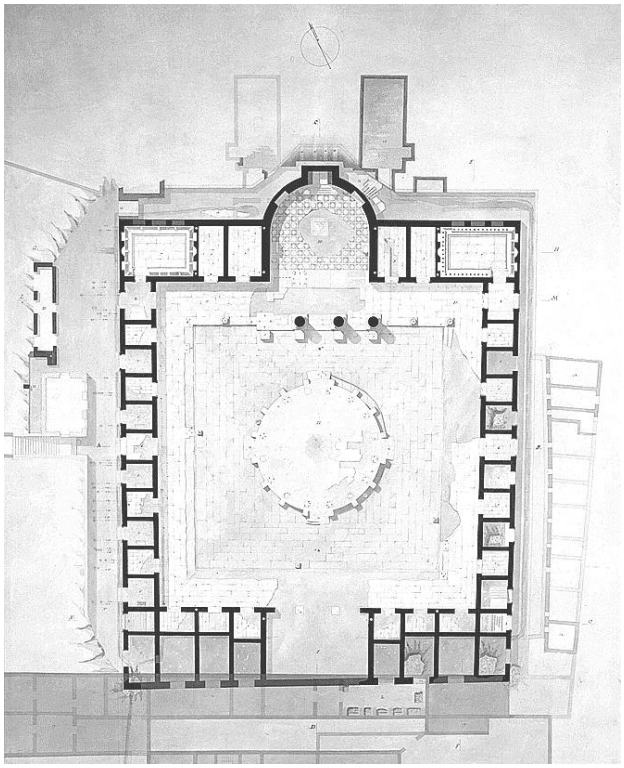
Among the scholars in line with the idea of the Temple of Serapis to be a thermal bath, it is worth to mention both the Puteolan archaeologist Andrea De Jorio (1769–1851) and the French architect Augustin-Nicolas Caristie (1783–1862), whose work gave considerable impetus to the archaeological and metric knowledge of the Phlegraean site.

From his side, Andrea De Jorio was indeed the first one to consider the building within his historical context, relating its existence to both Greek and Roman ancient settlement of Pozzuoli, called respectively *Dikaiarchia* and *Puteoli*. He tried to overcome the obsolete antiquarians' point of view which tended to consider every archaeological artefact like a monad, detached from its historical context. All these ideas were express in his book, *Ricerche sul tempio di Serapide in Pozzuoli*, published in 1820. De Jorio's collaboration with Augustin-Nicolas Caristie was fundamental for the drafting of his book, as the French architect took care of making the surveys and the drawings of the site. Caristie was a fellow of the École des Beaux-Arts and winner of the Grand Prix de Rome. While remaining in Italy many years, he was fascinated by the Temple of Serapis so much that he chose it as his favourite subject for his drawings, in which he also devoted himself to imagining his original appearance in detail.[8]

Their fruitful partnership was crucial for the further understanding of the nature of the building.

Their unprecedented research method was based upon both direct surveys on site and the intersection of historical, archaeological, and architectural sources. Their descriptions had the advantage of guaranteeing an immediate comparison with real data, thus becoming a tangible knowledge heritage for subsequent researchers.

[8] PINON (2002).



2. Augustin-Nicolas Caristie, plan of the Temple of Serapis, 1818

Among the scientists

These and many other studies contributed to introducing the Temple of Serapis into the group of Phlegraean sites worthy of attention. Together with the interest towards its enigmatic function, a further element of concern was outlining: the three giant columns showed clear signs of erosion at about a third of their height, as well as traces of fossil shells. This evidence was reported for the first time in 1757 by John Nixon, a British scholar member of the Royal Society of London in his pamphlet: *An account of the Temple of Serapis at Pozzuoli in The Kingdom of Naples*.

Nixon analysed the drills in the pillars and correctly attributed their cause to the mechanical action of marine organisms called lithodomes, living under the surface of the water. His intuition was widely shared by other members of the Royal Society. Moreover, given the aquatic nature of the lithodomes, Nixon deduced that evidently the sea level in the Phlegraean area must have been much higher in ancient times, so much so as to immerse the columns and favour the proliferation of mussels.

Although he did not venture to investigate the causes of the rising of the water level in the past, he was convinced that this was due to the volcanic nature of the Phlegraean Fields which was renowned to scholars, after the eruption of the mountain called *Monte Nuovo* in 1538.[9] Furthermore, the news transmitted by Nixon was soon spread by the famous German archaeologist Johann Joachim Winckelmann, as evidenced in a letter address by his regular correspondent Count Heinrich von Brühl in 1764, in which Winckelmann refers to the *Serapeum* as a place where proof of the variation of the tides could indisputably be found thanks to the drills present on the marble of the pillars.

The significance of this discovery is reflected even of the iconography of the *Serapeum*. Starting from the second half of the eighteen century, artists began to draw the drills of the erosion on the columns, as can be seen in the first widely distributed view of the Temple of Serapis signed by Giovanni Battista Natali in 1768.

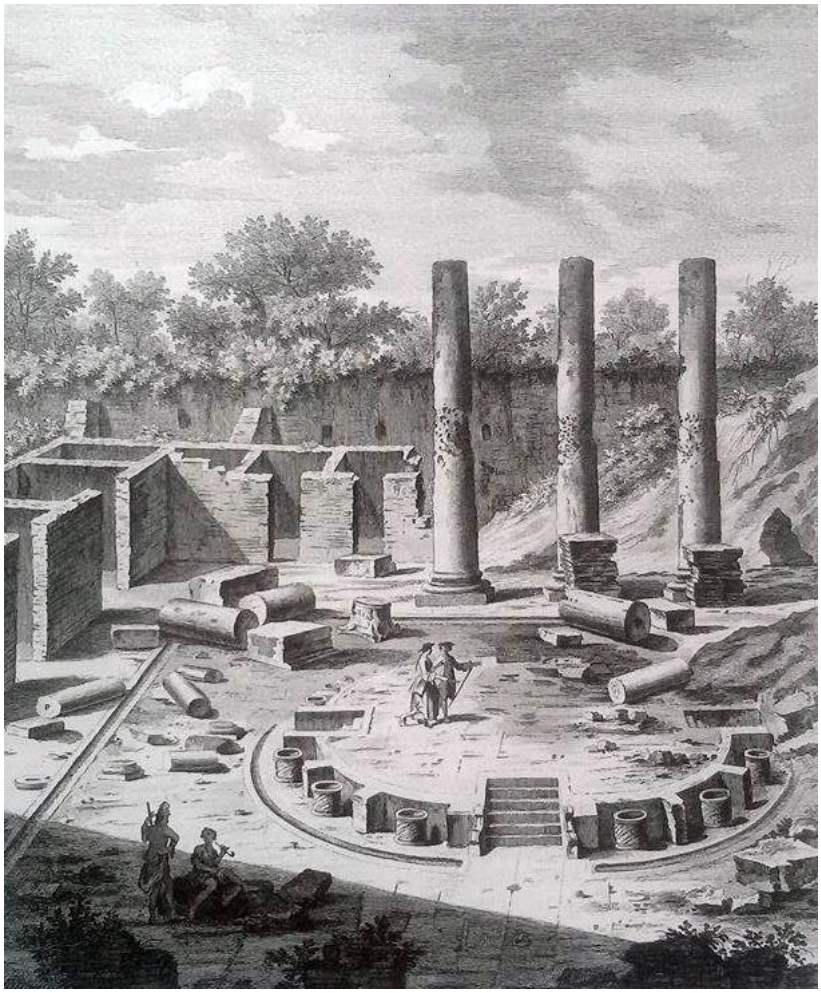
During the 19th century, it was well-established among scientists that the presence of the mussel's fossils testified that the temple had been submerged by water in the past.

In researching the causes of this phenomena, the geologists animated a heated diatribe that split the scientific community in two. On one side were the so-called *Neptunists*, those who believed that the presence of the lithodomes suggested the rise in the level of water due to the variation of the Mediterranean Sea tide in the past ages. On the other hand, there were those who hypothesized that the variation in the water level depended on the undulatory movements of the Earth's crust, which resulted in a rise in the water as a mere consequence. In this group were, among others, the famous scientists Charles Lyell (1797–1875) and Charles Babbage (1791–1871) considered the fathers of modern Geology.[10] In 1918, the Italian scientist Antonio Parascandola will prove them right by theorizing the phenomenon of Bradyseism. In addition to the erosion of the lithodomes, another unique fact of its kind attracted the attention of 19th century scholars providing further elements of investigation: the Temple of Serapis was subject to periodic flooding, of varying duration and flow.

---

[9] CIANCIO (2011: 15–60).

[10] CIANCIO (2009: 159–186) and GIUDICEPIETRO–D'AURIA (2013: 5–14).



3. Giovanni Battista Natali, etching, *Atrio d'un Tempio nella parte occidentale di Pozzuolo*, 1768

For geologists, this phenomenon constituted a fundamental evidence from which to move their reasoning. For the *Neptunists*, the unexpected arousing of the waters in the courtyard of the Temple was a clear manifestation of the validity of their theories, to be studied to find its ordering principle. On the contrary, their opponents considered the floods as a consequence of Earth tremors and were committed to rebuilding its cause-effect relationship.

During the first half of the century, the scientists of the respective alignments adduced experiments and tests to solve the mystery of both the erosion and the flooding of the *Serapeum*. This research will give an exceptional impulse to the epistemological maturation of Geology as a discipline, consolidating its character of historical science.

Furthermore, analysing the conspicuous literature produced in the 19th century on this topic, one can note how History gradually took hold in geological speculation and how, on the other hand, scientists took advantage of the archaeological method.[11]

A sensitive issue for the Bourbon Kingdom

The problem of the flooding of the Temple of Serapis worried not only geologists.

Before them, the first who had to deal with this phenomenon were the engineers and the architects working for the Bourbon Court of Naples. The emerged water, often stagnant for several weeks, jeopardised both the correct conservation of the building and the health of the inhabitants of the neighbouring areas. The event did not manifest itself immediately, in fact, is there no documentation relating a flooding until 1790. After that, King Ferdinand IV successor to Charles of Bourbon, appointed the Spanish engineer Francisco La Vega to solve the issue.

It took La Vega two years to drain the puddles from the temple's courtyard by installing a mechanical water pump within the *Serapeum* water collection system. Unfortunately, these measures did not lead to a long-term result.[12] However, by virtue of La Vega's interventions in 1803 other rooms of the Temple emerged, whose excavation works lasted until the end of 1810, also revealing the two square niches on the sides.

Furthermore, during those years precious bronze and marble finds continued to be discovered in the site. Some of them ended up being stolen or reused, others were brought to the Royal Museum of Naples. As a result, the site was depauperated in some of its features.

Then it became clear to the Kingdom's officers the necessity to safeguard the Temple of Serapis by implementing its maintenance and keeping. The issue was made even more urgent by the interest that all of Europe turned to the site, not only as a geological "observatory" but as an ancient find, also worthy of deserving a place on the *Grand Tour* route in the South of Italy.

---

[11] CIANCIO (2009: 9sqq).

[12] FRIELLO (2007: 55–91).

An economic resource for the Local Council of Pozzuoli

A crucial year in the history of the Temple of Serapis can be considered 1816. A very influential man in the politics of Pozzuoli, bishop Carlo Maria Rosini, decided to intervene personally after the umpteenth episode of flooding. With his intercession, the municipal council of the village appointed a commission of technicians for the maintenance of the Temple, who attempted to upgrade the *Serapeum*'s water collection system by constructing a new channel flowing into the sea.

However, what turned out to be the real novelty of Rosini's takeover was that he proposed to the Bourbon monarchy to take care of the maintenance and the custody of the building in exchange for the conversion of part of the temple to a thermal establishment.

This deal was favourable for the sovereign since the upkeep of the *Serapeum* was very onerous. It was also advantageous for the council of Pozzuoli which would have earned income by exploiting the fame of the thermal Phlegrean waters and restoring what some scholars believed to be the original intended use of the building.

Having obtained the concession, Rosini promoted a series of works aimed at expanding the space intended for the baths, creating additional changing rooms and spas. Some of the interventions were conducted illegally, without the necessary authorization of the General Superintendent of the Excavations of the Bourbon kingdom, Michele Arditi.

However, Rosini's resolutions added a new feature to the Temple of Serapis, which turned out to be not just a monument to admire but a reused archaeological site, both accessible to the public and a source of remuneration for the local council.

Five years after the agreement, the Temple of Serapis began a very popular thermal venue and recorded a significant attendance. On the other hand, the conversion of the building to a thermal bath worsened its conditions, and once again aroused the attention both on the conservation of the site and on the health of local residents, eventually threatened by the inhalation of the miasmas.[13]

[13] The local council of Pozzuoli continued to adapt the building to its new function changing the *tabernae* to bath rooms, until 1839. By then, these room where up to ten excluding the changing rooms. CIANCIO (2009).

Alert turned out to be higher after a severe episode of flooding and the subsequent stagnation of water in the courtyard. Moreover, the fame of this site throughout Europe made this a very sensitive issue, which threatened to undermine the credibility of the Bourbon's management of their inestimable heritage.

The significant contribution of Antonio Niccolini

A sensitive issue of this kind required the intervention of a skilful man, trusted by the Crown and well-regarded both by the local authority and the European intellectual community. This man was Antonio Niccolini, one of the most important architects of the Italian Neoclassicism.[14]

He was at the service of the Italian Bourbon Court from 1807 to 1850, intervening in issues related to the architecture and the archaeology of the Kingdom. Among his most famous projects there are the San Carlo Theatre (1809; 1818; 1844) and the Villa Floridiana (1817–1825) in Naples. Furthermore, he was the editor of the catalogue of the Royal Museum of Naples.[15]

Moreover, Niccolini was already aware of the whole vicissitude of the Temple of Serapis. In fact, as the architect itself writes in his memoirs, he began to study the Temple of Serapis autonomously from 1808 onwards, making surveys and drawings for his knowledge's sake.[16]

For all these reasons, in 1824 he was appointed as the new head of the maintenance of the Temple. By virtue of his open-mindedness and his expertise, he will mark a turning point in the way of dealing with the issues related to the conservation and the upkeep of the *Serapeum*.

In the first place, Niccolini started to investigate the building from a simple architectural point of view. Like many others, he was willing to identify its true typology. Therefore, he carried out his own surveys and researches ending up agreeing with Andrea De Jorio about the fact the Temple of Serapis was an ancient roman thermal bath.

He happened to immediately notice the worrying phenomenon of flooding which affected the conservation of the building. For this rea-

---

[14] To deepen the knowledge of Antonio Niccolini's work, please refer to: GIANNETTI–MUZII (1997).

[15] The huge publication was called *Real Museo Borbonico* and consisted in sixteen volumes published from 1824 to 1857. It was meant to spread the knowledge on the Kingdom's cultural heritage to all of Europe.

[16] NICCOLINI (1846: 1).

son, he decided to take a step forward, starting to monitor the variation in the volume of water stagnant on the *Serapeum*'s floor. From 1808 onwards, he carried out empirical and systematic surveys on the water level, noting down the measurements.

His aim was to find a rule in the flooding phenomena, in order to find its primary cause and eradicate it, so as to provide a definitive solution to this lasting issue.

According both to archival sources and the writings published by Antonio Niccolini himself on the subject, it seems that before taking up his institutional role, the only motive for this research was the genuine passion for the antique. Then, he engaged further to the cause sensing that it was an urgent matter of protecting and conserving a valuable cultural heritage site. In addition, he also considered its public function as a bath, and was willing to provide users and local inhabitants a safe and healthy environment.

The novelty of his contribution consisted in being the first to hypothesize that the periodical flooding did not depend on the malfunctioning of the Temple's water collection system, like the Bourbon engineers thought, but on the upwelling to floor of the waters in consequence of the natural rise of the tide. In fact, as the water collection system of the Temple flowed into the sea, Niccolini believed that the *Serapeum* and the sea were linked by the principle of communicating vessels: when the tide rose, seawater seeped into the canals and ascended to the courtyard of the *Serapeum*. Based on this observation, he projected his first intervention. It consisted in a cataract to be installed at the mouth of the main channel which connected the Temple's water system to the sea. The cataract could be open when the tide was low, giving way to the stagnant waters to flow towards the sea. In contrast, it could be closed during the high tide, to prevent the sea waters from rising and flooding the *Serapeum*'s courtyard.

This expedient highlighted not only Niccolini's skills in hydraulic engineering, but also his faculty of crossing together practical expertise and critical thinking. He strongly believed in the necessity of a strategic approach that would have considered not only technical solutions but also a multidisciplinary perspective that combined together Architecture, Archaeology and Science. Moreover, since he took charge of the maintenance of the Temple of Serapis, Niccolini was able to take his

theories to a further level. Up to that moment, he had measured the variations of the water of the *Serapeum* manually and occasionally. From that moment on, he managed to put a water meter at the mouth of the channel that connected the Temple's water system to the sea, in order to collect more systematic data on the fluctuating level of the tides. This meter remained in operation until 1838, recording almost sixteen years of variations, giving Niccolini the opportunity to collect an impressive amount of hydrometric data to prove his theory of rising tides.

At last, in the attempt to understand and preserve the existence of a remarkable ancient building, he ended up studying geological theories and even contributing to the debate among scientists.

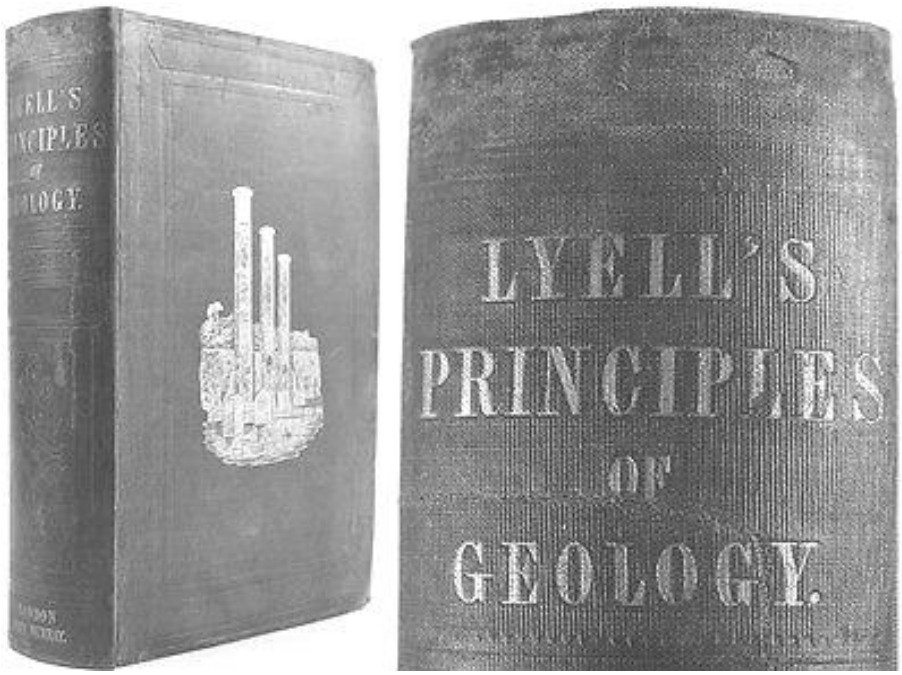
In 1829, Antonio Niccolini published the first book he had ever wrote on this subject, titled *Rapporto sulle acque che invadono il pavimento dell'antico edifizio detto il tempio di Giove Serapide*. In it, he compared the *Serapeum* measurement data with data of the changing in level of the Mediterranean Sea which he collected by the coasts of the Italian regions of Campania and Lazio. His final intent was to demonstrate that the alterations of the sea level were not a phenomenon limited to the Phlaegren Fields but a natural event occurring in several areas of the Tyrrhenian coasts as well. Furthermore, he crossed these measurement data with both historical and naturalistic sources drawn from the main treatises on Roman History with the purpose of retracing the trend of the tides of the Mediterranean Sea over the eras. By virtue of these researches, he finally hypothesized the existence of five geological phases that ranged from the Roman times up to the 19th century.

According to his theory, the first phase would have corresponded to the late Flavian Age. Back then, for Niccolini the water level was about two meters lower than the contemporary level. During the second and third phases, which lasted from the first centuries AD up to the Middle Ages, the waters gradually began to rise until they covered the temple, favouring the proliferation of lithodomes. Finally, at the beginning of the 18th century the downturn of the fourth phase began, marking the fifth phase still in progress.[17]

This elaborate theory ascribed Niccolini to the ranks of the so-called *Neptunistes*. By the virtue of his book, Niccolini took a step into the de-

[17] NICCOLINI (1829a: 29–31).

bate and happened to be renowned in the scientific environment. From 1829 to 1846, Niccolini published several treatises regarding his geological theories, which became more and more detailed over the years. Even though he was not a scientist, his books were well-known among the European scientific community which appreciated his meticulous approach to the subject. Furthermore, the water measurements Niccolini had collected over the years were considered a remarkable asset by some scholars, who used them as a basis for their research. Not surprisingly, Charles Lyell referred to it in the sixth edition of his masterpiece *Principles of Geology* in the section dedicated to his studies on the Temple of Serapis. Also, the physicist John Forbes brought them to the attention of the Royal Society of Edinburgh with due respect.[18]



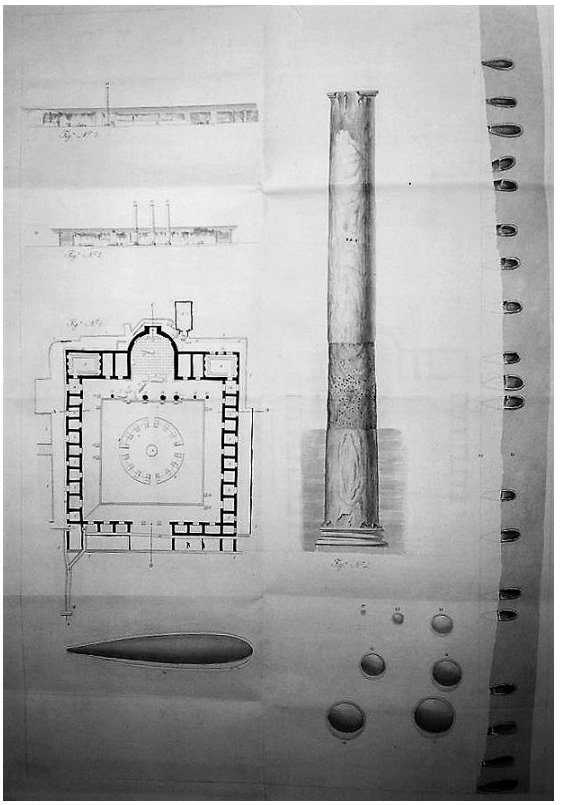
4 Charles Lyell, book cover of *Principles of Geology*, 1830

Although Niccolini's interest in Geology had developed to solve a problem of conservation regarding an ancient building, the architect believed so strongly in his convictions that in 1845 he decided to participate in the Annual Congress of Italian Scientists, which that year held in Naples.[19]

[18] CIANCIO (2009: 181).
[19] AZZINARI (1996).

For the Congress, Niccolini decided to collect all his forty-year data, drawings and notes in a book which happened to be a compendium of his research, called *Descrizione della gran terma puteolana volgarmente detta Tempio di Serapide.* In this treatise he sought out to definitively clarify all the 'erroneous interpretations' of the Temple of Serapis from an architectural and geological point of view, supported by all the hydrometric measurements he had collected, the surveys on the buildings and the historical researches carried out over the years.

What is remarkable about his accomplishment is that from the records of the time it is clearly understood that Niccolini's theories were widely popular in the scientific community, although they were considered obsolete. It was now increasingly clear that Charles Babbage and Charles Lyell were correct about the fact that the flooding of the Temple of Serapis depended on the movement of the terrestrial crust. However, the scientific circles respected him as a scholar to the point of letting him attend their congresses.



5 Antonio Niccolini, plan and column of the Temple of Serapis, 1846

Conclusions

Although it is true that Niccolini's curiosity in Natural Science is not surprising for a 19th century architect heir to the Enlightenment culture, the essence of his approach was unique, given the holistic perspective he had on the Antiquity. He moved from an architectural and archaeological interest toward the Antiquity to a modern solution to the sensitive issue of the conservation of an ancient building. He was the first among the Bourbon's court to sense the necessity of identifying the cause of the decay phenomenon to eradicate it at the origin, rather than act on its symptomatic manifestation.

Niccolini had the merit of prematurely grasping a methodology which is consolidated nowadays but was unforeseen in the 19th century. He managed to cross his expertise as an architect, his passion for the Antiques and his engineering skills predicting a contemporary approach.

Furthermore, it should not be overlooked that Niccolini considered the phenomenon of flooding also a public health concern, given that the miasmas constituted a danger for the users of the thermal baths, so as raising early "proto-hygienic" critical issues toward the serene coexistence of the building with its users.

Niccolini's approach to the Antiquity not only embodies the antiquarian culture typical of 19th century which admires, collects and wishes to understand the past. It also foresees the attitude of a modern 20th century intellectual, who handles the Antiquity with respect but also with a momentum of initiative which allows to enhance the culture and the society, by virtue of learning the lessons of the past, without forgetting to experience and interpret the present time.

Bibliography

ALISIO 1995 — G. ALISIO: *Campi Flegrei*. Napoli 1995.

ALISIO 1997 — G. ALISIO: *Civiltà dell'Ottocento. Architettura e Urbanistica. Le arti a Napoli dai Borbone ai Savoia.* Napoli 1997

AZZINARI 1996 — M. AZZINARI: *Il Settimo Congresso degli Scienziati di Napoli nel 1845*. Napoli 1996.

BELLICARD 1753 — J.C. BELLICARD: *Observation upon the Antiquities of the town of Herculanum, discovered at the foot of Mount Vesuvius.* London 1753.

CIANCIO 2009 L. CIANCIO: *Le colonne del tempo. Il tempio di Serapide a Pozzuoli nella storia della geologia, dell'archeologia e dell'arte (1750–1900)*. Firenze 2009.

CIANCIO 2011 L. CIANCIO: *L'invenzione di un oggetto scientifico: antiquari e naturalisti alla scoperta del "Tempio di Serapide" (175–1769).* In: R. Mazzola: (ed.): Le scienze a Napoli tra Illuminismo e Restaurazione. Roma 2011, 15–60.

DE JORIO 1820 A. DE JORIO: *Ricerche sul Tempio di Serapide in Pozzuoli*. Napoli 1820.

DEMMA 2009 F. DEMMA: *Monumenti Pubblici a Puteoli*. Roma 2009.

DE RUYT 1977 C. DE RUYT: *L'importance de Pouzzoles pour l'étude du macellum romain*. Puteoli 1 (1977) 128–139.

DI LIELLO2005 S. DI LIELLO: *Il paesaggio nei Campi Flegrei. Tra realtà e metafora.* Napoli 2005.

DUBOIS1907 C. DUBOIS: *Pouzzoles antique. Histoire et topographie*. Paris 1907.

FINO 2001 L. FINO: *Vesuvio e Campi Flegrei. Due miti del Grand tour nella grafica di tre secoli (stampe, disegni e acquerelli dal 1540 al 1876)*. Napoli 2001.

FRIELLO 2007 A. FRIELLO: *Il Tempio di Serapide di Pozzuoli*. ASPN 127 (2007) 55–91.

GIANNETTI–MUZII 1997 A. GIANNETTI– R. MUZII: *Antonio Niccolini architetto e scenografo alla corte di Napoli (1807–1850)*. Napoli 1997.

GIUDICEPIETRO–D'AURIA 2013 F. GIUDICEPIETRO – L. D'AURIA: *Storia del dibattito scientifico sul Serapeo di Pozzuoli*. INGV 20 (2013) 5–14.

LOFFREDO1573 F. LOFFREDO: *Le antichità di Pozzuolo et luoghi convicini*. Napoli 1573.

NICCOLINI 1829a A. NICCOLINI: *Rapporto sulle acque che invadono il pavimento dell'antico edifizio detto il tempio di Giove Serapide*. Napoli 1829.

NICCOLINI 1829b A. NICCOLINI: *Alcune idee sulle cause delle fasi del livello del mare*. Napoli 1829.

NICCOLINI 1839 A. NICCOLINI: *Tavola metrica-cronologica delle varie altezze tracciate dalla superficie del mare fra la costa di Amalfi ed il promontorio di Gaeta nel corso di diciannove secoli*. Napoli 1839.

NICCOLINI 1846 A. NICCOLINI: *Descrizione della gran terma puteolana volgarmente detta Tempio di Serapide: preceduta da taluni cenni storici per servire alla dilucidazione de' problemi architettonici di quel celebre monumento, e considerazioni su i laghi Maremmani*. Napoli 1846.

NIXON 1757 J. NIXON: *An account of the Temple of Serapis at Pozzuoli In The Kingdom of Naples: in a letter to John Ward*. London 1757, 166–174.

PARISI 2006 R. PARISI: *Da Puteoli a Pozzuoli, e ritorno. Itinerario nell'iconografia urbana della città flegrea*. In: C. De Seta – Alfredo Buccaro (eds):

Iconografia delle città in Campania. Napoli e i centri della provincia. Napoli 2006, 193–197.

PEZONE 2003 M. G. PEZONE: *Francesco La Vega e la cultura architettonica neoclassica*. In: A. Gambardella (ed): Spagna. Architettura e Città nel XVIII secolo. Napoli 2003, 73–90.

PINON 2002 P. PINON: *Augustin–Nicolas Caristie (1781–1862), temple de Sérapis à Pouzzoles, 1817–1823*. In: A. Jacques – S. Verger – C. Virlouvet (eds): Italia Antiqua. Envois degli architetti francesi (1811–1950). Italia e area mediterranea. Paris 2002, 218–245.

ZEVI 2006 F. ZEVI: *Pozzuoli come "Delo minore" e i culti egizi nei Campi Flegrei*. In S. De Caro (ed.): *Egittomania. Iside e il Mistero*. Napoli 2006, 69–86.