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# ABSTRACT BOOK

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*COVER IMAGE:*

Aerial cityscape image of Turin during sunset.

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**S23.**

**Geology is coming home. A renewed interest in Italian  
geoscientific tradition**

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## **“In hoc silex vinces”: the success of the “sampietrino” in the paving of Roman roads**

De Caterini G.<sup>\*1-5</sup>, Argentieri A.<sup>2-5</sup>, Bilotta A.M.<sup>3</sup> & Della Ventura G.<sup>4</sup>

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The “Sampietrino” is a truncate pyramid shaped block of stone, with a square base and a side of 15 cm. It was used to build the paved roads in the city of Rome. The name comes from St. Peter’s square, it was the first square (1667) to be paved in the modern age by the Dutch Cornelius Meyer (1640 – 1702) who adopted a technique widely used in Northern Europe by then.

In the Roman slang the Sampietrino is also called “sercio” or “selcio” meaning the typical hard and heavy black stone, which is commonly used for road surfaces, cut into different shapes. The word comes from Latin “silex” meaning cobblestone. According to modern geologists, sercio is a kind of lava constituted by leucitites and tephrites which is really common in the comagmatic provincial areas of Lazio. You can easily find it in our Italian volcanoes but not in the rest of the world.

The history of the Sampietrino bumps into that of Giovanni Gerolamo Lapi (1749 - 1787). He was a geologist and a doctor and he worked at infectious diseases, this is why he is also famous, as a matter of fact he suggested a treatment for smallpox. The Pope Pio VI instructed him to study the problem of the decline in air quality in Rome; he understood that the problem was the water stagnation so he thought to find the solution in the drainage of water thanks to paved roads and hydraulic reclamations.

He also wrote a treaty about that: “*Del Selce romano, ragionamento mineralogico presentato alla Santità di nostro Signore Pio Papa Sesto*”. Even if he was the one who first identified the volcanic origins of Albano and Nemi lakes, in this treaty he stated that the sercio is not volcanic like other rocks in Rome. The parallel layers and the presence of limestones keep out the hypothesis that they belong to fiery concretions. He continues stating that they cannot be just like those rocks that “people from the Kingdom of Naples call lava”.

Lapi G.G. (1784) - *Del Selce Romano, ragionamento mineralogico presentato alla Santità di nostro Signore Pio Papa Sesto*. Stamperia Salomoni, Roma