Giangiacomo Martines (Triest)
Description of the structure

During the 1981-1988 restoration, a complete survey was carried out of the whole monument, using the traditional methods of plumb line, spirit level, and metre. A transfer was made of the bas-relief from life and then reproduced at 1/5 life size. The 68 drawings of the illustrated frieze can be placed together to form a single drawing 529 cm high, which represents the net of the shaft. All the drawings were published in 2001: they do not have the magnificence or the expressive power of the engravings of Giovanni Battista Piranesi but they are very detailed and give precise measurements.
The monument is built *e marmore Lunensi*. Blocks and drums were extracted from the "*Fantiscritti*" quarry, situated at an altitude of 630 metres above sea level. The entire structure is made up of 29 monoliths: 8 huge parallelepipeds form basement, 17 drums make up the shaft; another forms the base of the column; the 19th is the capital, which is round underneath and square above; another two drums formed the pedestal which supported the statue of the emperor. The entire structure weighs 1,036 tons; the heaviest block forming the basement weighs 72.33 tons; the weight of the drums varies according to the height at which they were placed - from 29.85 to 22.30 tons; the torus weighs 50.37 tons and the capital 44.66 tons. The total height, from the travertine *solea* to the top of the capital, is 35.261 meters.
Despite the accuracy of the survey, there remain some unanswered questions: what size of Roman foot was used? Consequently what *centenaria* height would the column have from foot to head? Another open question regards the system used to raise the 29 colossal monoliths.
Columna coclidis refers both to the external shape of the illustrated frieze and to the internal shape of the stairs. The spiral stairs lighten the structure and give it strength, as it were an Archimedean screw made not of wooden sticks but in marble.