Technique for Restoring Stability to the Tower of Pisa

The technique is based on the following operations:

- planning and laying a sub-foundation with geometrical and structural characteristics ensuring the stability of the foundation soil;

- operation for maintaining or decreasing the present inclination, and even an operation for conferring verticality, and also counter-inclination, if desired.

This technique has two significant advantages:

- possibility of eliminating immediately a future rotation of the Tower, due to potential subsidence in the soil;

- easy maintenance of the sub-foundation structural elements.

An experimental test, executed with a rudimentary model, has been conducted to check the behavior of the Tower in the following situations:

- inclination;

- verticality;

- counter-inclination.

It was also possible to observe the characteristics of functionality and of extreme structural stiffness in the sub-foundation.

There are two different aspects to restoring stability to the Tower: structural and operational. The former does not raise any problems. The operational aspect is much more important, however. If this technique is considered, subjected to further testing and finally executed by a staff of experts, technicians and workers, it could provide a proper solution to the phenomenon of the instability of the Tower.