Work Group 1 Cost Association Underground Built Heritage
Based on the Naples Meeting

Reviewing the present contributions received by our workgroup members, specifically those who presented at the Naples workshop, leads towards a highly tentative framework for classifying, analyzing and contributing to an enhanced use of underground built spaces and environments.

First, a general definition is afforded by Roberta Varriale who has worked on the question for two decades. As a working definition for underground built heritage, we can adopt initially the following : "*historical artifacts realized underground which have become significant elements of local material and immaterial cultural heritage*". Moreover, our project concerns those "*cavities with a potential narrative power with reference to selected urban functions within future or ongoing valorization processes*". To these dual classificatory features, several qualifications seem in order. First, structures which today are underground and function as subterranean space, might not have been such when built, the immediate example is the case of Pompei. A second point of course concerns the "urban" requirement : numerous heritage sites might be either suburban or even rural and yet exercise sufficient social force to attract both visitors' and local populations' attention and veneration.

With these provisos made, various general features of underground construction—so-called "negative building"—can be listed. First, reasons for negative building arise form climatic conditions : extreme cold or heat favor underground storage facilities; sand storms, scare water resources or great annual temperature variations also lead toward underground "negative edifices".

Entire communities can be built in subsurface environments whether troglodyte (Peublo) villages in New Mexico or Arizona and those in Turkey and Dongzong, China. But also underground construction includes water and sewage ducts, channels, reservoirs, cisterns and cesspools. Religious sites also include a wide variety of underground structures : temples, shrines, cathedral crypts. In this regard, Dr Nasso Chrysochou has presented our workgroup (N°4) with an exceptionally well-document register of Cypriot hermitages. These hermitages involve either initial carved dwelling spaces or reused pagan tombs. Hermitages comprise either series of carved spaces forming clusters, isolated artificial caverns, catacombs and also subsurface structures with superimposed churches. Similarly, Ivor Janković has presented Saint Romuald's cave in Istria, Croatia which aside from intrinsic attraction as a site for pious devotion also raises a number of further preservation and excavatory issues.

These various uses lead to our second major concern : how to take advantage of sites for community benefit enhancement. How can underground spaces be used to raise locale understanding of the community's heritage while also creating a potential for enhanced public well-being that need not be simply "tourist attractiveness" and "visitor draws"? The Cypriot case sets the stage for heightened understanding of the multiple interconnections between these religious shrines and community linkages : "*The cave of St Fenontes outside St Epiktitos village, Kyrenia was a Christian place of worship of seven early Christian Saints. After the Ottoman occupation of the island in 1571, seven Moslem martyrs were thought to be buried there and it became a place of worship for both communities*". The Fontanelle Cemetery also has the potential to attract veneration from pious visits. A similar issue concerns the Phlegraean Fields, the super volcano whose caldera embraces the Gulf of Pozzuoli and Naples itself. Here a very large range of questions arise : first, the volcanic landscape has caused differential settlement and areas once above ground have sunk and in some cases have been inundated by the sea. The area attracts tourists for its

fumaroles and geothermal curiosities. But a much vaster array of historical vestiges underly the Phlegraean region and one major source of community linkage should be in the immense threat to the commonweal this volcanic caldera presents. The challenge thus becomes one of generating and shared understanding and instilling a common awareness. And this question threads onwards to several more general analyses.

Preservation of sites requires changing their status. On Cyprus, many sites have not been classified as historical monuments and are thus subject to the whole panoply of deteriorative phenomena : weathering, defacing and more generally as these sites are used for religious worship, they are not necessary managed for optimal protection. For example, the Panayia Chrysospilliotisse (Virgin of the Golden Rock) has become a victim of its own success and witnessed the development of major infrastructure to handle the onslaught of tourist throngs. Above ground construction nearly caused the underground site to collapse. Moreover, valuable frescoes have been damaged due to weather exposure, "*graffiti, religious practices, deliberate scratching motivated by belief in the miraculous healing powers of the paint, defacing due to religious conflicts and fading and discoloration due to changes in the microclimate (often due to visitors)*". Seismicity and encroaching development pose serious threats to the hermitages. Similarly, in the case of Saint Romuald's caver, a large number of natural and archeological wealth impede the conversion of the cave into a "tourist site". The cavern possesses prehistoric dwelling layers (the palimpsest) whose excavation raises further issues; also the cavern harbors wildlife whose habitat might be menaced if not subject to strict guidelines. All these caveats can be applied to other underground sites.

Community utilization of sites has to be balanced with conservation issues. Also, the question of how to best link community consciousness to those sites needs to be addressed. Renata Salvarani has discussed ways in which various sites have been re-conceptualized so they might be incorporated into the modus vivendi of later ages.

Finally, we need to develop tools for listing references to underground built sites to create a knowledge base. Pinar Karagoz, an expert in data mining, provided our group with a conceptual overview as to how data mining methods might contribute to our group's goal to build a directory of underground sites and develop a major documentary data base for our project.

Summary by Preston Perluss
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The question of public versus private space also comes to the foreground.