

# GROUND SCAPES



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DOMINIQUE PERRAULT



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Illustration of canto XXXIV of Dante's *Inferno*,  
Manuscript of the Vatican Apostolic Library of, 1474-1482

# First of all

For architects, the ground has always been a limit, the threshold between earth and sky, between the aerial and the subterranean, with architecture being defined according to its visible forms and façades. This dividing line, and the cultural refusal to acknowledge the existence of the zone below ground, has meant the subterranean world has often been left in the hands of engineers alone. As the industrial revolution advanced, engineers continued to forge their chaotic tangle of networks in this obscure underside of our cities.

The little renovated château of the Saint-Germain-en-Laye Conference Center, placed on a mirror reflecting in its glass platform, under which a vast underground program of activities is housed, marked a decisive step in our determination to bring the ground and the underground back into the heart of architectural design. The powerful ambiguity of the Bibliothèque François Mitterrand was that, under the four towers framing the garden, it caused the entire mass of the supposed volume, as defined for the project, to disappear. By now it was becoming increasingly obvious this notion of the Groundscape, emerging through successive constructions since the 1980s, and spread over the course of many competitions, is a generic concept, an authentic extension of the practice of architecture. It was even more obvious as a veritable program, which, if developed further, could change the very structure and the nature of the territory occupied by our cities.

In order to define the contours of the cultural field opened by these Groundscapes, the two of us began collaborating through a series of dialogs, initiated over twenty years ago, notably through interviews designed to open up avenues of research and to signal as they arose issues revealing the full scope and richness of the reality of this underutilized territory. The ground and the territory below it, with its geography and its landscapes, offers the promise of extraordinary potential, and a possible response to the seemingly unsolvable questions raised by urban density.

The underground world has a rich history going back thousands of years. From the cave to the underground zone of early Christian Rome, from visions of hell to social visions of life in mines, it is an intensely symbolic world, having nurtured creators, writers, artists, and cineastes, who have in turn nurtured our collective representation, largely composed of shared images. More recently, with the crisis of modernisms, the notions of marking and foundation have significantly eroded. Thus, with a new understanding of the ground as a free and open field of exploration, artists making Land Art and the architects of radical architecture came to rediscover the subterranean world and to advocate its use as a resource, thereby giving rise to a wide array of visions regarding subterranean experimentation, which today resonate as revelations.

Beyond the visionary research conducted by Edouard Utudjian and the Groupe d'études et de coordination de l'urbanisme souterrain (GECUS), the Groundscape is clearly a specific field that cannot be restricted solely to the competencies of engineers. It is an area now open to new architectonic and intelligent spatial systems, and to architecture. In this respect, the Ewha Womans University marked a decisive step, being both a synthesis of research implemented on a territorial scale, and a foreshadowing of even bigger and all-encompassing urban strategies to come.

We wish this architect's book to be more than a manifesto, serving as a resource and the basis for further research, which must be shared, and not only as a critique of humanity's questioning and fears facing



the subterranean world, but also - and even more so - as a sort of mapping of the possibilities that will come into view if we rethink the relationship between the aerial and the subterranean.

The Groundscape is much more than an unexploited territory or simple resource for property development. It is first of all a generic zone, with its own logics and economies, which, once being developed, can redefine the grammar and the syntaxes of a new form of urban existence. This other revealed world belongs to everyone as it is the base, crust, and epidermis of our world, in so many continuous substances that bind, extend and root our cities, and will enable us to finally break with the unbridled and alarming consumption of the remaining open spaces that surround us. Groundscapes herald the arrival of a new and vast democratic space.

Dominique Perrault & Frédéric Migayrou

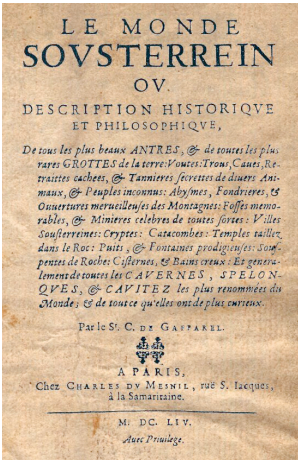
1. Jacques Gaffarel, *Le Monde sousterrein*, 1654

2a-2b-2c. Athanasius Kircher, *Mundus Subterraneus*, 1665

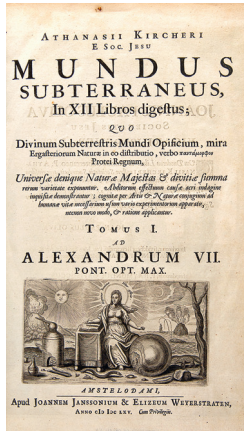
3. William R. Bradshaw, *The Goddess of Atvatabar or the History of the Interior World*, Chicago, late 19th century

4. Flyer for a lecture on the Koreshan Unity communal utopia, Chicago, late 19th century

5a-5b-5c. Thomas Wallace Knox, *The Underground World*, 1877



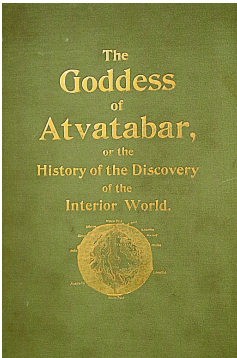
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2a



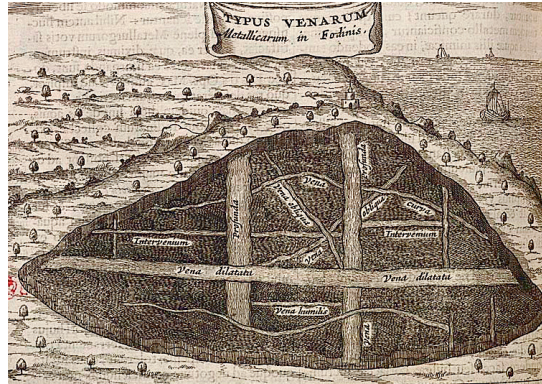
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3a



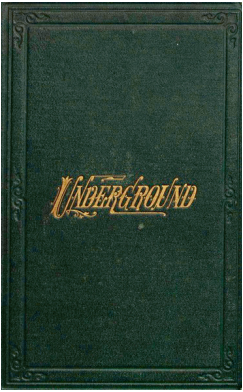
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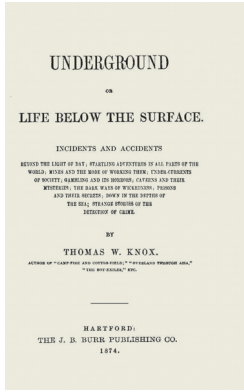
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6. Washington L. Tower, Interior World, 1885

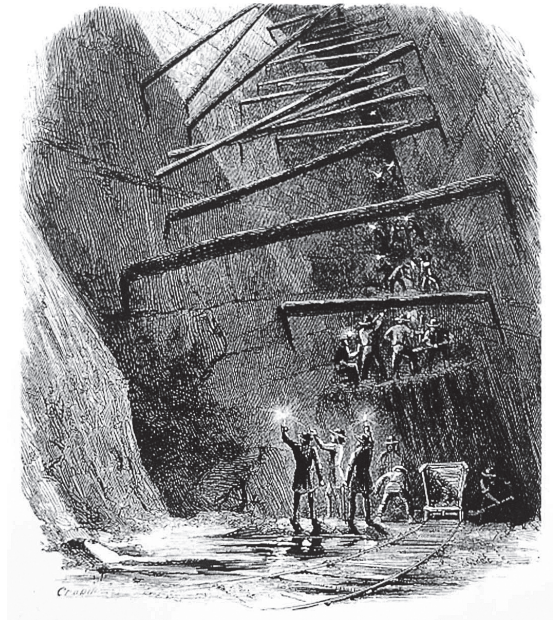
7. Ludvig Holberg, Nicolai Klimii iter subterraneum, 1741



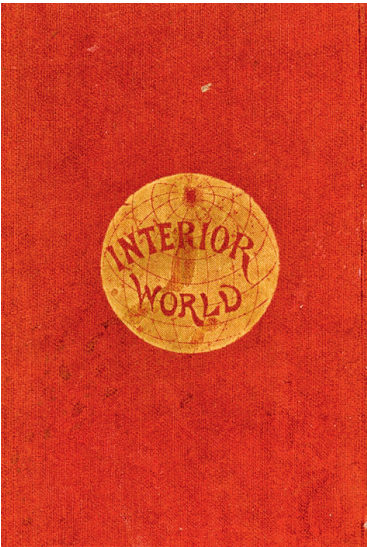
4a



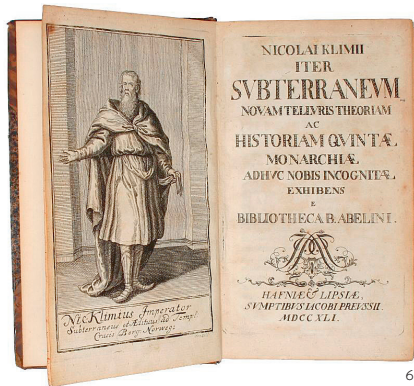
4b



4c

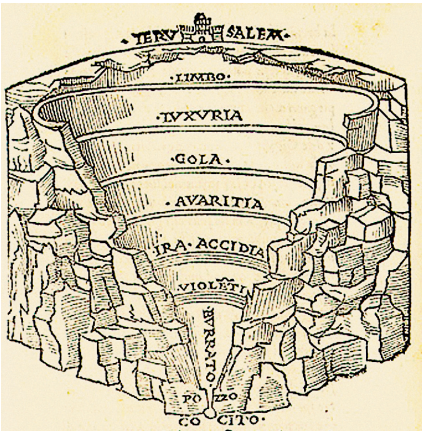


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6

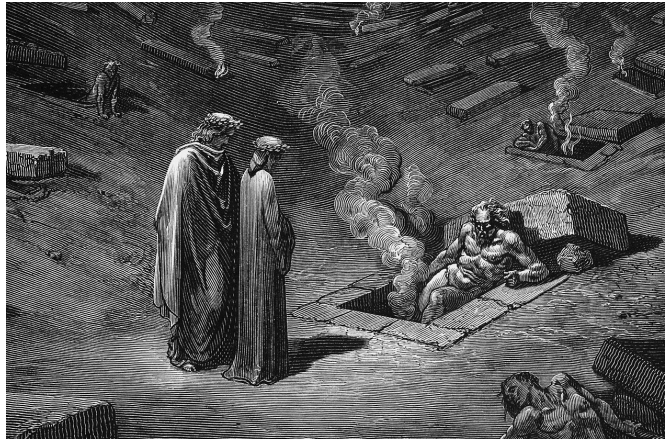
1. Illustration by Filippo Giunta, *Inferno*, book by Antonio Manetti. *Dialogo di Antonio Manetti, cittadino fiorentino, circa al sito, forma, & misure dello 'Inferno' di Dante Alighieri, 1506*



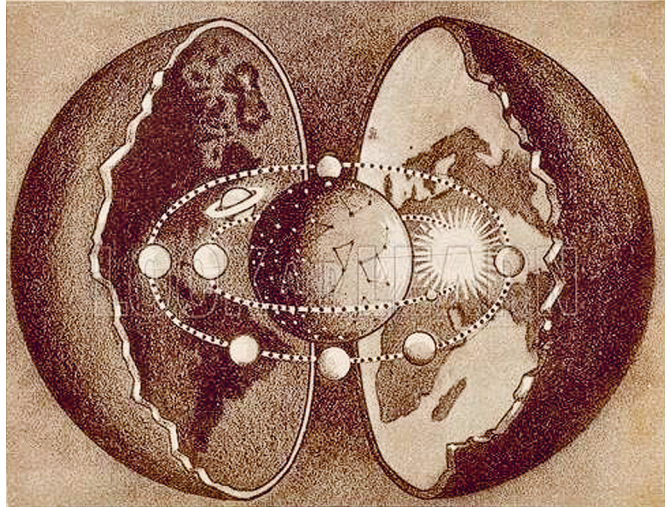
Per questo secondo disegno si mostra (come voi potete uedere) la metà de' pouano o uero ananiti di questo inferno & qualche cosa piu che si uede nel girare de' lati, che è fatto, perche detto uano apparisca in auo costi come egli ha essere i uerita. In questa figura sono (come uoi uedete) distincti tutti e' suoi cerchi & paucissimi biche quanto alle loro distantie & misure quasi ogni cosa ci sia falsa & fuori di proportione rispetto al

1

2. Gustave Doré, drawings for *L'Enfer - La Divine Comédie de Dante Alighieri, Ed.1892, BnF*



2



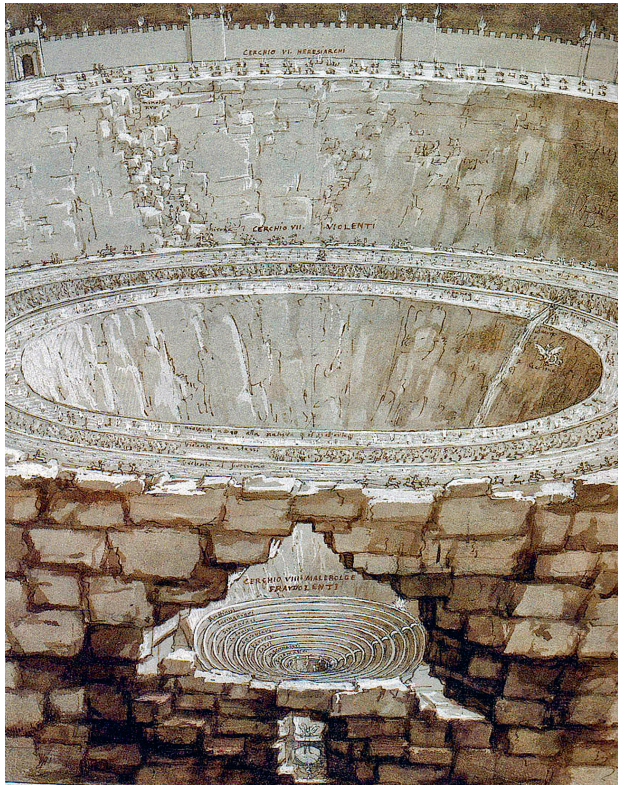
3

3. Karl Neupert, *The Hollow Earth Theory, 1935*

4a-4b. Giovanni Stradano, illustration of the 9 circles of the Inferno - *La Divine Comédie de Dante Alighieri, 1587*



4a



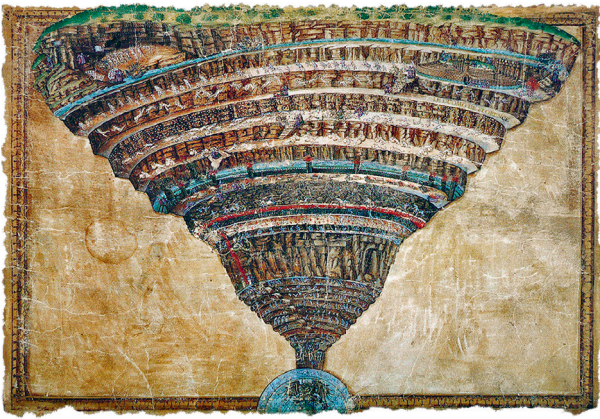
4b

1. Sandro Botticelli, *The map of the Inferno* - *Divine Comedy*, 15th century, Vatican Apostolic Library

2. Adams W. H. Davenport, *Beneath the Surface or the Wonders of the Underground world*, 1876, Ed. T. Nelson and Sons, London

3. Arthur Young, *Through Hell with Hiprah Hunt*, 1901, Ed. Zimmerman's, New York

4. Giovanni da Modena, *L'Inferno*, 1408-1415, Chapelle Bolognini - San Patronio Church, Bologna





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