

JULY 01 - 04 1999 XI'AN P.R.CHINA

AGENDA & PROSPECT

FOR THE TURN OF THE CENTURIES

8TH
INTERNATIONAL CONFERENCE
OF UNDERGROUND SPACE



OPENING PLENARY

Recording and Protecting Underground Industrial Heritage
André Guillerme

The Fourth Wave in the development of underground space and current situation prospects,
development strategy in China
Qian Qihu

WORKSHOP A: UNDERGROUND HERITAGE FOR THE TURN OF THE CENTURY

WORKSHOP A1

The Underground Heart of Naples
Patrizia Galdieri

Pointe-a-Calliere The Montreal Museum of architecture and History
Francine Lelièvre

Underground space and city tourism – Research of the tourism pattern of Chinese basin city
on Loess Plateau
Song Gongming, Han Xiaoli

The Diefenbunker, From Cold War Fortress to Cold War Monument
Jacques Besner

WORKSHOP A2

Researches on Consolidating Measures to Unsafe Rocks Of Tianlongshan Grottoes
Zuo Guobao, Wang Yousong, Zhang Yan

Evaluation and Preservation and Case Study of the Underground architectural Heritage
Zhu Guangya,, Chen Yi

WORKSHOP A3

Decline and Rehabilitation of the Sunken Courtyard Type Dwellings Based on the example of
XIZHANG village in LingBao City Henan province
Qu Deyin, Xing Yan

Initial Probe into the Cave Dwelling Culture of Qing Dynasty of China
Wang Jun

Initial Inquiry on the Culture environment of Cave Dwelling Village on the Loess Plateau
Han Xiaoli, Song Gongming

A Probe into Mankind Cave Dwelling

Zuo Guobao, Zheng Qingchun, Li Jiangping, Feng Dongqing, Cheng Hongping

Breathing Architecture: The Venetian Grotto-Villa Garzadori-da Schio

Barbara Kenda

The salutary surroundings of Cave Dwelling House and Quadrangular Residence

Tong Yuzhe

WORKSHOP A4

Some analysis about the Present Situation and Development of Cave Dwelling in Shanxi

Province

Shi Xianghong

The Environmental Questionnaire Survey and the additional Future Problems about Yao-Dong Dwellings

Yasuko Yoshino, Joseph Akira Yoshida, Kaisuaki Sekiguchi, Toshimasa Kawanishi, Liu Jiaping, Wang Zhu and Zhang Shuping

Measurement Result of Thermal Pattern, air Quality Sound and Lighting Conditions in Yao-Dong Dwellings

Katsuaki Sekiguchi, Joseph Akira Yoshida, Toshimasa Kawanishi, Yasuko Yoshino, Liu Jiaping, Wang Zhu, Zhang

Ameliorating the Indoor Thermal Environment of Yao Dong by Using Sun Space

Liu Yanfeng, Liu Ya, Liu Jiaping

On the Planning and Design of Cave Dwelling Building in the Chengguan Village of Gu County

Zuo Guobao, Dong Hai, Tian Xuehong and Chen Ying

A Case Study on Sustainable Building based on the traditional cave dwelling mode located in north of Shaanxi

Yang Liu, Liu Jiaping

Indoor Thermal Environment in Yaodong

Yan Zengfeng, Liu Jiaping

WORKSHOP B: AGENDA OF THE UNDERGROUND SPACE IN THE NEXT CENTURY

WORKSHOP B1

Preparing sufficient underground space resources for urban development in the 21st century

Tong Linxu

The New Underground Planning Map of The Netherlands a Feasibility Study of the Possibilities of the Use of Underground Space

Monnikhof R.A.H., J. Edelenbos and R.A.A. van der Krogt

An exploratory study on the development of underground space in China's city

Kang Yingnan, Guan Xijun

The Primary Effect and Problems of Geological Factors in Opening up the Underground Space in City

Liu Yuhai, Chen Xiaojian

WORKSHOP B2

Studies on Urban Underground Space Planning

Wang Jingxia, Li Xun, Sun Mingcheng, Wang Kai, Bao Wengqing

Developing long term strategies for the underground space

R.A.A. van der Krogt, Jurian Edelenbos and René A.H. Monnikhof

Resource Space Urban Fabric a study of the development of underground space in Beijing

Mo Jian Meng Xiaoying

WORKSHOP B3

The architectural Design Concept of Urban Underground Network Spaces - Special Analysis for underground Interconnected Space using Space-Syntax Software

Kamal El-din, S. Ibrahim, J G Hetherington

Spaces and functions in Underground Constructions - Methodology and tools for architectural design

Federica Castiglioni, Evasio Lavagno

Urban development and Underground Space's Utilization

Wenqing Wang, Xiuwen Wang

The aesthetic Value of Underground Space System in Urban Design a sorts of idea, of method & of theory

Ren Yunying

WORKSHOP B4

Coming in and coming out underground spaces

Nicolas Remy

The Utilization of the Underground Space and the Research on Lighting Quality of Residential Buildings

Zhu Aimin, Zhu Yili

Ecological Development and Ecological Construction are foundations to Prosperity Study of Development Countermeasure of Fushun Open Coalpit

Li Guiwen, Zhang Lingling, Xu Qin, Chen Xuebin, Cheng Fei, Xu Congzhi

Acoustics Characteristics in an Underground Hemisphere Exhibition Space of Takayama Festival art Museum

Michihiko Yoshimura, Shigeyuki Seta, Masazumi Shioda, Hiroshi Chikahisa

Green architecture and it's in Shanghai

Liu Jie & Lin Qing

WORKSHOP B5

Study on the Wind Water Environment in Reconstructing the Cave Dwellings in Cliff-side

Chen Qigao, Liu Caifeng, Feng Ya

"Hope Project" in Countryside China - The Probed about New Type of School of Earth Sheltered Habitat

Hou Yan

The practical research of green settlement on the Loess Plateau a Pilot Project in Zao Yuan Village

Wang Zhu, He Yong, Wei Qin, Li Limin

Cave dwelling in Shaanbei

Caroline Bodolec

The support of new Yao-Dong as an ideal revival of traditional technology for the sustainable well-being of mankind

Joshimasa Kawanishi, Kanrunori Onishi, Toshimasa Kawanishi

The Role of Underground Space in the Construction of Chinese "Shan-Shui City"

Zhu Maming

The New Model Cave Dwelling Buildings

Li Junhuan, Lu Dongjun

The Underground district Underground Space Research in urban residential district

Zhao Kexin

WORKSHOP B6

An Outstanding "Green architecture" A work that was born nature imitated and recreated by the architects and transplanted to Beijing

Hou JiYao, Wang Jun

Modernology Study of Underground Urban Space in Japan

Kenji Okuyama, J Nishi, T Seiki

Underground space utilization under the hillside near urban area in Japan and it's case study
Takafumi Shimogochi, Yukiyasu Tenjin, Masaki Nakajima, Tsukasa Fujimoto, Norimichi Ohki

Study of Landscape for Underground
T.Tanaka, J.Nishi, T.Seiki

Consideration on the Subway Mural Design
Yu Jinjun

WORKSHOP C: NEW CHALLENGES OF THE URBAN UNDERGROUND DEVELOPMENT

WORKSHOP C1

Development Plan of a Storage-Transport Network for Earthquake Disaster Utilizing the
Subway Line No. 12
Kenji Sato

Feasibility of Underground Transit Malls in Japanese Cities
*Yoji Nitani, Hideaki Aoki, Harutoshi Matsutani, Akio Shindo, Hiroya Taguchi, Toshiaki Takeda,
Yuzo Iida, Yasuo Shiromizu*

Simple Space and Pure Exhibits
Shi Xiaolan

Counter measure of sustainable development of Shanghai underground space
Lu Lili, Wang Yaoming

WORKSHOP C2

Study on the General Design Theory of Cities' Underground Streets
Geng Yong-Chang, Zhao Xiao-Hong, Gao Bo-Yang

Underground mall /underground car park plans of Kamiya-cho, Hiroshima City
Naofumi Yasumara, Takaaki Sakamoto, Kazuhiro Noda, Noriaki Masaki Developing

Underground Public Space Winter Cities
Liu Deming

Predicting Trading Level in the Underground of Montreal: Significance of Office Building
Location
John Zacharias

WORKSHOP C3

Urban road tunnels, success and check: TEO in Lyons and Prado-Carenage in Marseilles
Sabine Barles

On Wuhan subway and underground space construction

Xie Xingbao, Xie Qian

At or Below Ground Level, Which Urban Transport Systems in the 21st Century ?

Jean-Paul Godard

WORKSHOP C4

Some aspects of regulations on underground construction in Switzerland

Xiao Shuan

Incentives used in the development of the Montreal's Underground City

Jacques Besner

Cost and value of urban underground space: the case of Paris

Sabine Barles

WORKSHOP D: UNDERGROUND CONSTRUCTION: TECHNOLOGICAL ASPECT

WORKSHOP D1

Mathematical Model of Cutting Saturated Dense Sand in Tunneling

Jisong He, W.J. Vlasblom

Dynamic Response of the Tunnel in the soft soil

Yan Shenghai, Guo Jianli

WORKSHOP D2

Effective Utilization of Underground Space for Road Development using a New Tunneling Technology in Urban areas

Naovuki Odagiri, Hiroshi Dobashi, Kenji Namikawa, Shinichi Egawa, Akira Saito

Application of photogrammetry on rock displacement measurement

Yuzo Ohnishi, Chun Zhang, Satoshi Nishiyama, Kunihiro Hayashi, Atsushi Okamoto

A technique for building large and deep underground chambers using a pneumatic caisson

Michio Ishii

WORKSHOP D3

The Synthetic System for Evaluating Safety in a Fire

Osamu Ishino, Kumagai Gumi

New spatial forms to reduce the effects of blast waves in underground spaces

E. H. Mahmoud, J G. Hetherington

WORKSHOP D4

Control of Indoor air Quality

Angui Li, Lei Sun, Qing-hong Zheng

New Technique of administration of Underground Ventilation System Characteristic Graph of System

Lu Yuanyuan, Xu Ruilong

Study on Environmental Engineering Geology of Underground Space Exploitation in littoral Cities of Eastern area in China

Li Xiangran

Primary investigation on the heat and humidity distribution models of yard with water reservoir in summer

Zhiyi Wang, Ji aping Liu

Studied of Loess Cave Waterproof Technology

Wulian, Yangzhiwei

WORKSHOP D5

One hundred years of underground use for water distribution in France

Marco Beros

The Development and Utilization of Urban Underground Garage

Han Xuanjiang, Zheng Dongming, Huang Guanglong a Network of

Underground Multi-Purpose Tunnels for the Renewal of a Large Urban area

Evasio Lavagno, Daniela Scaramuccia

WORKSHOP D6

Spatial analysis of Kunda in West India

Yuko Shinyashiki, Katsuhiko Yashiro

Underground Caverns in Design and Construction

Harald Wagner Davorin Kolic

Dynamic and Synthetic Design Evaluations of Tunnel Entrance and Inside Based on Semantic Differential Method

Yoshihiko Tanabashi, Yujing Jiang

Studies on the compound waterproof structure for the deformation caps of underground buildings

Kang Yingnan, Wang Feng

Underground Building and Chinese Climate

Lu Aimin