We believe that it is critically important to preserve and communicate the memory of the Union Carbide disaster in Bhopal for realizing the possibility of a world free of disasters such as Bhopal. We believe that the structures of the MIC and Sevin plants and few remaining structures are, in the likeness of the remains of the concentration camps at Auschwitz and Buchenwald and other places, of tremendous educative value for future generations across the world and therefore must be preserved.

Excerpt from a letter by the survivors of the Bhopal gas tragedy to UNESCO (United Nations Educational Scientific and Cultural Organisation) seeking the recognition and protection of the heritage values of the Union Carbide plant in Bhopal.

New Delhi, India, 2009



The identity of Bhopal city is inextricably linked to the Bhopal gas tragedy of 1984, presumably one of the worst industrial disasters in the world. In an increasingly globalised world, the continued relevance of the Bhopal disaster concerns questions of power, justice and sustainable development. The structures and grounds of the former Union Carbide factory in Bhopal, the epicentre of the disaster, are a repository of history and stories that need to be told. Yet, the factory lies abandoned, decaying and still contaminated. The Bhopal2011 – workshop and symposium held in Bhopal in January 2011 focused on the possible transformation of the site into a place of remembrance and a resource for the city of Bhopal. Landscapes of Memory is a documentation of the process, insights and outcomes of Bhopal2011. It is also an exploration on how, engaging with the confronting legacy of such sites can contribute to a better understanding of our times.

A mAAN, SpaceMatters, NTNU and University of Gothenburg publication







3HOPAL2011

landscapes of memory

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Editors: Amritha Ballal, Jan af Geijerstam Associate Editors: Moulshri Joshi, Swati Janu Research Assistants: Janesh Raja, Swati Goel

Layout and Graphic Design: Amritha Ballal, Anuja Shrivastava, Jan af Geijerstam, Janesh

Raja, Ranjith Kumar, Sanjeev Kumar, Suditya Sinha, Swati Goel, Swati Janu

Cover Design and Chapter Covers: Amritha Ballal, Sanjeev Kumar, Janesh Raja

Produced & Printed: VAP Enterprises, H 24 Green Park Extn., New Delhi 110016, India.

Email: vapenterprises@gmail.com

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BHOPAL 2011

landscapes of memory

This book is a documentation of the Bhopal2011: workshop and symposium which was conducted in Bhopal, India between 23rd January and 4th February 2011. The action-research initiative explored the significance of the Union Carbide industrial site - its heritage as the site of the Bhopal gas tragedy, its present condition as an abandoned industrial brown field site and its relevance as a future site for commemoration of the victims of the world's greatest industrial disaster. The event and this publication is the result of the collaborative efforts of many individuals and institutions.

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Bhopal2011: workshop and Symposium was an initiative of







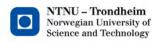
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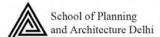






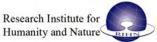


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Team

BHOPAL2011: Workshop And Symposium

Organising Committee:

Amritha Ballal, Partner, SpaceMatters, New Delhi Visiting Faculty, School of Planning and Architecture, New Delhi, India

India Core, modern Asian Architecture Network

Jan af Geijerstam, PhD, Historian and Independent Researcher, Stockholm

Member, The International Committee for Conservation of Industrial Heritage, Sweden

Moulshri Joshi, Assistant Professor, School of Planning and Architecture, New Delhi National Representative, The International Committee for Conservation of Industrial Heritage Core, modern Asian Architecture Network

Vishakha Kawathekar, Conservation Architect Assistant Professor, School of Planning and Architecture, Bhopal, India

Advisory Committee:

Raajkumar Keswani, Independent Journalist, Bhopal

Shin Muramatsu, *Professor, University of Tokyo and Founding Partner, mAAN*

Bosse Lagerqvist, PhD, Department of Conservation, University of Gothenburg

Dr Stuart Smith, OBE, General Secretary, TICCIH

Hans C. Bjonness, *Professor, Norwegian University of Science* and *Technology*

BHOPAL 2011 PUBLICATION Landscapes Of Memory

Editorial team:

Editors: Amritha Ballal, Jan af Geijerstam Associate Editors: Moulshri Joshi, Swati Janu Research Assistants: Janesh Raja, Swati Goel

Layout and Graphic Design: Amritha Ballal, Anuja Shrivastava, Jan af Geijerstam, Janesh Raja, Ranjith Kumar, Sanjeev Kumar, Suditya Sinha, Swati Goel, Swati Janu

Cover Design: Amritha Ballal, Sanjeev Kumar **Chapter Covers**: Amritha Ballal, Janesh Raja

Participants

WORKSHOP

Unit Masters

Bosse Lagerqvist, Diana Walters, Jeeth Iype, Kai Weise, Manoj Mathur, Munish Pandit, Nalini Thakur, Norihito Nakatani, Rohit Jigyasu, Sakiko Nomura, Setiadi Sopandi, Shin Muramatsu, Vishakha Kawathekar

Workshop Jury

Jagan Shah, Meera Dass, Rachna Khare

Resource persons/ Organisations

Raajkumar Keswani, Nidhi Chopra, T.R. Chouhan, SPA Bhopal, Department of Bhopal Gas Tragedy Relief & Rehabilitation, Bhopal Gas Peedith Bhopal Gas Peedith Mahila Udyog Sanghathan, ICJB, Sambhavna Trust

Unit Members

Aditi Sahu, Aditya Bhardwaj, Andreas Brunvoll, Andreas Nilsson, Angita Das, Ankita Gupta, Anupam Sunil, Anupriya Goswami, Ashish Chauhan, Atul Sahu, Daichi Kanazashi, Dara Farhaniza, Didzis Jaunzems, Eiichi Nishiyoshi, Elena Archipovaite, Gunjan Sawhney, Harinarayan, Ingebjørg Øveraasen, James Ro, Jonathan Sutanto, Jubin Cheeran Roy, Jyoti Mithal, Kania Prita Anggriany, Kao Terada, Kiky Wikantari, Laura Laudere, Loveleen Rai, Manasi Mangalgiri, Maria Elena Toledo Martinez, Monika Shukla, Nishant Gautam, Nishant Tyagi, Parishwad Omkar Gajanan, Pawas Bisht, Prateek Singh, Ramita Shrestha, Rinyo Ngilyang, Rushank Mishra, Sachin Dev Sagar, Sanjeev Kumar, Saurabh Chawla, Shantanu Yadav, Shiva Rajvanshi, Shivangi Singh, Shubhranshu Upadhyay, Swati Goel, Tarun Chaurasia, Tore Hanssen, Varun Pal, Vina Lestari, Vineet Shrivastava, Yasuhiko Uchihara, Yosuke Nakajima

SYMPOSIUM

Presenters

Aditya Ghosh, Ambika Dabral, Björn Ola Lind, Bosse Lagerqvist, Constantin Canavas, Diana Walters, Eka Swadiansa, James Ro, Nissar Khan, Hans Christie Bjønness, Rama Lakshmi, Saptarshi Sanyal, Sumedh Patil, Swati Janu, Tina Wik, Torkel Lundberg

Panelists

Adbul Jabbar, Aditya Ghosh, Arti Jaiswal, Dr Meera Dass, Rachna Khare, Jagan Shah, Prof Sanjeev Singh, Raajkumar Keswani, Satinath Sarangi, Swati Janu, T. R. Chouhan, Tina Wik, Vishakha Kawathekar

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History is the certainty produced at the point where the imperfections of memory meet the inadequacies of documentation.

Julian Barnes, The Sense of an Ending, 2011



Introduction

Amritha Ballal



Memory is treacherous territory – a constant, subconscious process of filtering our past, which we struggle to grasp. What we choose to remember or forget is simultaneously affected by externalities and rooted in the deepest recesses of our individual psyche. Objects trigger memories; the tangible carries intangible associations. What then of public memory? How much more fraught does the process of public commemoration get? The focus of this publication is the Union Carbide site, where the Bhopal gas tragedy originated. This site houses the tangible reminders of the disaster -comprising of rusting metal, crumbling concrete, dense overgrowth on contaminated soil, laboratories with instruments, offices with paperwork, machine rooms with warning signs and storehouses with dangerous chemicals left behind as they were on the on the night of the Tragedy. Yet, time has passed, more than 26 years and the site has come to be associated not just with the Tragedy of 1984

but also with the ensuing struggle for justice that continues to this day. Some people see the factory as the physical anchor of any future commemorative efforts. For them, the factory structure is a powerful reminder of the dangers of the reckless development in a city that paid a terrible price in its pursuit. Many others see the factory as an eyesore and believe that Bhopal is best rid of this rusted reminder of a terrible past. Many Bhopalis would rather their city is associated with its beautiful lakes, forts and palaces than with industrial disasters. Public memory is thus closely linked to the construct of cultural identity. This merits an exploration on whether the uncertain future of the Tragedy site is, to some degree, a consequence of the popular understanding of heritage – as that which celebrates our past achievements but fails to include narratives of injustice, discrimination and past mistakes. Is the attempt to eradicate such symbols, effectively a selective overwriting of history in order to construct a

1.1 The Laboratory area in the Union Carbide Factory site

triumphant cultural identity? Both memory and landscapes shift with perspectives. How the physical landscape of the Union Carbide site is viewed has much to do with how people wish to remember the Tragedy. Given the importance of the site and complex issues that concern its rehabilitation, the site has emerged as an important case in the study of inclusive, relevant ways of engaging with public memory.

Bhopal2011 – Landscapes of Memory is a documentation of Bhopal2011 Requiem & Revitalization – International Workshop & Symposium which took place in Bhopal, India in January 2011. At the concluding session of the event, researchers presented their findings after an intensive tenday workshop that focused on the legacy of the Bhopal gas tragedy of 1984. A cross section of Bhopalis in the audience, including survivors, activists, government officials, artists, former employees of UCIL, journalists, scholars and other citizens, participated in the proceedings, often engaging in impromptu debates. This may seem unremarkable unless one takes into account that 26 years of struggling with the tragedy and its painful, unending aftermath has impacted the city, leaving it fragmented and increasingly locked into unyielding positions – angry, defensive, fatigued or alienated.

Over the years, discourse on the Tragedy has become increasingly limited in scope as it became a distant memory for most of us – from a global Tragedy, to a country's onus, to a city's burden and now a conflict between 'perpetuators' and 'survivors' of the Tragedy. This myopic view pushes the Bhopal narrative to the fringes of popular consciousness as an inspiring vet ultimately depressing saga of the endless struggle of the victims against immensely powerful forces. In doing so, it exempts the rest of the society from the crucial debate on the global socio-political hierarchies that precluded the Tragedy and have done very little since then to contain its fallout. This leaves the survivors vulnerable and isolated in their struggle for justice. It also compromises the legacy of the Tragedy and the lessons we can derive from it as a society. The political and social divides around the issues relating to the Tragedy and a resistance to view sites with contemporary, painful pasts as heritage - need to be addressed as part of the process of transformation of the site into a publicly accessible site for remembrance and empowerment for the local community. Bhopal2011 provided a platform for discussion, debate and dialogue towards this end by expanding the discourse and contextualising the tragedy within the shared heritage of Bhopal. The event was conceptualised as an action-research initiative to increase awareness on the issues related to the rehabilitation of the Union Carbide site and contribute to their resolution. At the same time, the initiative aimed at building knowledge and capacity of the various students, researchers and institutions that participated in the event.

The workshop was structured into five units. Each unit dealt with a certain theme that was significant to the Union Carbide site within a broader theoretical scope, which the multicultural and multidisciplinary participants could engage with. The themes for the units were – *Union Carbide site as* heritage and resource, landscapes of regeneration, space as a container for memory, inclusive heritage management and expression of memory through art. Together, the units looked at evaluating the heritage values of the Union Carbide site, seeing how its rehabilitation can contribute to overall urban regeneration of the surrounding under-developed precincts, how the site can be interpreted as a future memorial, how an inclusive management process can protect the legacy of the site and the interests of different stakeholders and finally looking at the role that creative disciplines can play in communicating the essence of the Tragedy that transcends its different, sometimes conflicting narratives. The symposium involved presentations of paper and panel discussions on related issues between various stakeholders in Bhopal and visiting students and researchers. This publication builds further on the themes that were the focus of Bhopal2011. The book does not present the outcomes of the workshop and the symposium papers as different sections. Rather, it combines and organises them thematically. The book reflects in tone, the twin focus of action and research that defined Bhopal2011. Moreover, the variety of cases and perspectives in the papers help put the work of the units, which centred on Bhopal into a wider global perspective. The editorial team has worked towards retaining the individual viewpoints of the authors in order to reflect the diversity of opinions that the future and past of the Union Carbide site generate.

The first chapter Prologue establishes the context of Bhopal2011, introducing the reader to the unfolding narrative of the Bhopal gas tragedy. An opening essay by Raajkumar Keswani, which is a transcript of his talk at Bhopal2011, evocatively describes his personal experience with the Tragedy, right from the time when as a young journalist and activist he made many urgent and insistent, but futile attempts to warn the city of the impending disaster at Union Carbide. The graphic essay 'Timeline of an unfolding disaster' by Jan af Geijerstam and Swati Janu helps summarise the key points in the decades-long narrative of the Tragedy. A copy of the exchange of letters between the survivors and the then Director of UNESCO India, Minja Yang, draws attention to the threatened legacy of the Union Carbide site and its urgent need for rehabilitation, and sets the tone for the chapter Discourse and Dissonance. This chapter describes in detail the context, concept and process of Bhopal2011.

The following chapter *Artefact* explores the link between object and memory. It is also a means to introduce the reader to the Union Carbide site. The workshop unit 'Union Carbide site as heritage and resource' delved into the debate of the intangible values that qualify tangible objects and sites as heritage. Arguing for a holistic valuation of heritage, they initiated a mapping of the Union Carbide site based on a multilayered heritage valuation framework. The chapter also looks into the various ways in which heritage sites are a public resource and the challenges that keep them from being harnessed as such. Bosse Lagerqvist's paper presents a flexible, inclusive framework for valuation of heritage that can be adapted to specific conditions of different sites. Nalini Thakur throws light on the threats facing our built heritage in India, and the challenges inherent in the ground realities of its management; Aditya Ghosh and Swati Janu's paper on the potential of the thermal power plants of Delhi for adaptive reuse elaborates the difficulty in appreciating defunct industrial zones as heritage and resource.

The chapter *Context* establishes the setting of the site, of the city, and of the tragedy in time and space. From charting the historical evolution of Bhopal to mapping everyday life around the factory site, this chapter helps us understand the city that the tragedy impacted irreversibly. The unit 'Bhopal

March – Landscapes of regeneration' attempted a unique way of understanding the site, by reflecting upon what lies outside it. By mapping and observing the daily life of the people living around the site, and those most directly affected by the tragedy and its aftermath, the participants gained a deeper and wider perspective of the problems and possibilities of rehabilitating the Union Carbide site. Norihito Nakatani's study of Hiroshima highlights how acknowledging hidden traces of the past in the built environment provides continuity and relevance for urban planning interventions. Jeeth Iype shows how carefully planned built interventions can have social and cultural outcomes beyond the project brief, through his experience in designing a clinic for survivors near the factory in Bhopal. The organisers share their experiences of 'discovering' Benazir College – a beautiful, rustic palace. now in ruins - for the Bhopal2011 workshop. Meera Dass writes on the ingenious engineering and sustainable urban development initiatives of the erstwhile kingdoms of Bhopal through the centuries. This is in contrast with the continuing environmental disaster and short-sighted planning that Bhopal is associated with today.

The chapter Custody highlights the challenges in the process of public commemoration. It presents the work of the unit that worked on approaches and ideas for designing a memorial for the Bhopal gas tragedy. Reflecting on the difficulties in giving form to the varied expectations of different stakeholders, the chapter throws light on the museological and design challenges of creating a memorial. The unit participants used the master plan by the architecture firm SpaceMatters for the Bhopal gas tragedy memorial at the Union Carbide site as a starting point for further explorations. The memorial design and vision by SpaceMatters is also presented in this chapter. Rama Lakshmi's paper talks of the potential that the memorialisation process for the Bhopal gas tragedy holds in setting an inclusive curatorial framework for designing museums in the country. Eka Swadiansa's paper elucidates the design components of a holistic and inclusive memorial, based on case studies of award winning designs by architect Tadao Ando.

Process highlights the need for a long term vision and inclusive management strategies for the successful

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remediation of a conflicted site like the Union Carbide factory site. Successful projects rooted in a similar context as that of Bhopal, inform of the various strategies and challenges in the rehabilitation of the Union Carbide site. Diana Walters makes a case for museums to recognise and cater to the diversity of their audience, and be alert against unintended exclusion due to insensitive design. Saptarshi Sanyal highlights how the shortcomings of the heritage-monitoring frameworks in the country can inadvertently damage the very heritage value of the sites they seek to protect. Maria Greger's paper presents Phytoremediation as an environmentally friendly and economic addition to the decontamination strategy for the Bhopal site. Underscoring the symbolic power of healing with nature, the author makes the argument that to achieve lasting positive change due importance must be given to having the proper process for rehabilitation of Union Carbide site, instead of focusing soley on the immediate results.

The chapter Legacy illustrates the global relevance of Bhopal and its connection to other sites with a similar legacy of pain and injustice. These places have a historic significance and contemporary relevance that needs to be protected and harnessed. The chapter presents different cases that Bhopal can relate to, such as those that are associated with the International Coalition of the Sites of Conscience. Björn Ola Lind and Torkel Lindberg, artists from Sweden, present their experiences from Marieberg, an industrial community in Sweden, recovering from the effects of dioxin contamination by chemicals from Dow industries. Constantin Canavas presents the case of the Stoltzenberg plant in Germany, whose remediation has aided in spreading awareness on industrial contamination and issues of negligence in the operation of the plant. Shalini Sharma's paper on the activist movement in Bhopal, talks of how the movement now identifies with other issues and struggles not just in India, but the world over – interconnected to sites and communities with a shared legacy of struggle for justice and dignity.

Finally, *Reflections* presents the insights from the unit masters, participants and organizers on the Tragedy, the themes that the participants worked on, the city of Bhopal and the process of the workshop itself. This publication and the Bhopal2011 event that it documents is a small attempt

to throw light on the enormous challenges that remain in overcoming the aftermath of one of the world's greatest industrial disaster. Yet, it also highlights how Bhopal can increase our knowledge and understanding of these very issues, and contribute towards increasing our resilience as societies in dealing with them. This outcome is not a given, but the collection of experiences in this publication indicate that an inclusive, sustained engagement with the memory of Bhopal has the potential to positively alter a forgotten landscape of continued disaster and neglect. I end here with unit masters Norihito Nakatani's reflection on the promise and challenge of their work in Bhopal.

"... maybe our unit recording and research will be used sometime in the future if someone needs it. If someone is not concerned about our recording, it will never re-appear. Our activities have many possibilities in the future – our recording will become a memory in the future."

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