

## KRUPALI A. UPLEKAR KRUSCHE

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University of Notre Dame, Indiana  
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### Curriculum Vitae

#### 1. Higher Education

Doktoringenieur (Dr.-Ing.), Department for Preservation and Design (Denkmalpflege und Entwerfen), *Technische Universität Dresden*, Germany.

Masters of Architecture, Spring 2003, Dessau Institute of Architecture DIA, *Hochschule Anhalt*, Germany.

Bachelor of Architecture, Spring 2001, *L.S. Raheja School of Architecture*, India.

#### 2. Previous Positions, Academic, Administrative, Professional, and Other Academic Positions

June 2006 to present, Founding Director, DHARMA Center (Digital Historic Architectural Research and Material Analysis), School of Architecture, *University of Notre Dame*, Indiana.

Aug 2006 to present, Associate Professor, School of Architecture, *University of Notre Dame*, Indiana.

Aug 2005 to June 2006, Visiting Assistant Professor, School of Architecture, *University of Notre Dame*, Indiana.

May 2003 to July 2005, Scientific Researcher, *Technische Universität Dresden*, Germany.

#### Professional Positions

January 2010, Principal Architect, *Lili Designs*, design firm in South Bend, Indiana.

January 2005 to January 2007, Chair, *INTBAU India* (International Network for Traditional Building, Architecture, and Urbanism - New Delhi, India)

May 2003 to January 2004, Research Assistant, *Jäger Ingenieur GmbH*, Dresden, Germany.

May 2002, Licensed Architect, *Council of Architecture*, India (COA).

Oct 2001 to Mar 2002, Architectural Designer, *Dr. Braun & Barth Architekten*, Dresden, Germany.

Sept 2000 to Dec 2000, Architectural Intern, *Nitin Parulekar Architects Pvt. Ltd*, Bombay, India.

Sept 1999 to Feb 2000, Architectural Intern, *Anil Salian and Associates*, Bombay, India.

#### 3. Books and Monographs

##### Books

Bharne, V., and Krusche, K. *Rediscovering the Hindu Temple, the sacred architecture and urbanism of India*, (Cambridge Scholars Press, Oct. 2012).

Fortini, P., and Krusche, K. *Methods of Documenting the Foro Romano from 19<sup>th</sup> to the 21<sup>st</sup> century*, (Forthcoming by 2014 in English and Italian, Electa Press – contract signed with the Soprintendenza Archeologica di Roma).

Krusche, K. *Mughal Tombs on the Yamuna River Front, the untold story of Taj*, (Forthcoming, Princeton Architectural Press – under discussion).

##### Exhibitions

Rome Forum Exhibition, Rilievo dello structure monumentali e ipotesi ricostruttive del foro Romano del XIX al XXI secolo. Exhibit of 19<sup>th</sup> century work of Ecole des Beaux-Arts architects, materials on Giacomo Boni's documentation, water color and 3D high definition DHARMA documentation, in cooperation with Prof. James Packer, Prof. Gil Gorski, Soprintendenza Speciale per i Beni Archeologici di Roma and World Heritage Center of UNESCO, (Forthcoming, 2<sup>nd</sup> April to 31<sup>st</sup> Oct 2014).

Yamuna River Front Study Exhibition, National Museum, New Delhi, India. Archeological Survey of India's (ASI) exhibit in April 2015 towards 150 years of ASI, titled *Rediscovering India*. In cooperation with ASI, and World Heritage Center of UNESCO, (Forthcoming Winter 2015).

### **Creative Work**

Villa Lilium, Design and Architectural execution of a house in South Bend, Indiana, (Summer 2011).

## **4. Refereed Publications**

### **Book Chapters**

Uplekar [Krusche], K. "Historic Preservation and its relevance today, Examination of Dresden's Frauenkirche in Light of the Venice Charter" in *The Venice Charter Revisited: Modernism, Conservation and Tradition in the 21<sup>st</sup> Century*, M. Hardy, ed., Cambridge Scholars Press, 2008, pp 446-461. ISBN: 978-18-4718-688-1.

Uplekar [Krusche], K. "Transforming Historic City Centres: Integrated Approach of Urban Design and Historic Preservation" in *New Architecture and Urbanism, Development of Indian Traditions*, D. Prasad, ed., First Edition, New Delhi: INTBAU India, 2008, pp 103–6. ISBN: 978-81-7525-879-2.

### **Articles**

Krusche, K., Golesh, L. and Hughes, R. "3D Documenting the Roman Forum," *The Journal of Preservation Technology*, The Association for Preservation Technology International, APT (under review).

Uplekar Krusche, K. "Heritage, Tourism & Conservation at the Taj Mahal," *Indian Architect and Builder*, Jasubhai Media, Dec 2011, Vol 25 (4).

Uplekar Krusche, K. and Hardin Kapp, P. "The need to integrate Digital Documentation and 3D Scanning with Traditional Hand Measuring techniques," *Change in Time*, An International Journal of Conservation and the Built Environment, University of Pennsylvania, (Forthcoming).

Uplekar Krusche, K., Ajjain, D. Anders, S., Dokonal, I. and Kapadia, J. "History, Morphology and Perfect Proportions of Mughal Tombs: The Secret to Creation of Taj Mahal," *Archnet-IJAR*, International Journal of Architectural Research, Archnet-Design media Lab at MIT publishing, Vol 4, Issue 1, 2010, pp 158-178. ISSN - International 1994-6961.

### **Conference proceedings**

Krusche, K., and Sweet, C. "Documenting National and World Heritage Sites: The need to integrate Digital Documentation and 3D Scanning with Traditional Hand Measuring techniques," *3D Digital Documentation Summit*, National Center for Preservation Technology and Training, National Park Service, U.S. Department of the Interior, (Forthcoming).

Krusche, K., Sweet, C., Sweet, J., and Turner, P. "History in 3D: New Virtualization Techniques for Innovative Architectural and Archeological Scholarship and Education," From the scientist to the citizen: communicating digital archaeology, *Computer applications and quantitative methods in Archaeology Conference 2012*, University of Southampton, UK (Forthcoming).

Uplekar Krusche, K. Conference Proceedings, *2010 Leica Geosystems HDS Worldwide User Conference*, San Ramon on September 24, 2010.

Uplekar Krusche, K. "Keeping Up With Heritage: Tourism and Issues of Conservation at Taj Mahal, India," *World Heritage and Tourism: Managing the Global and the Local*, June 2-4, 2010, Quebec City, Canada, Presses de l'Université Laval. ISBN PDF: 978-27-6379-438-9.

Uplekar [Krusche], K. "Transformation of Historic Urban Centers: Finding the urban origins of Bombay and planning its future" at the *12<sup>th</sup> International Seminar Forum UNESCO*, Hanoi Architectural University, Hanoi. ISBN 978-84-694-1784-3.

Uplekar [Krusche], K. "The Reconstruction of the Frauenkirche," 11<sup>th</sup> Issue of *Sacred Architecture*, D. Stroik, ed., Journal of the Institute for Sacred Architecture, January 2006.

## 5. Other Publications

### Citations of my work

- Gorski, G., and Packer, J. *Architecture of the Roman Forum in the age of the emperors*, Cambridge University Press, (expected date of publication 2013-2014).
- Rana, P. "Q&A: How Safe is the Taj Mahal?" *The Wall Street Journal*, Oct 28, 2011, India Realtime, (republished by Big Think, Geospatial World).
- Howard Kunstler, J. "What We Can Learn from Transylvania," *The Kunstler Cast: Conversations with James Howard Kunstler*, Oct 12, 2010.
- Kuntz, T. "Transylvania: Green, Not Blood-Red," *The New York Times*, October 8, 2010, Idea of the day, (republished by World News Network, Business Week).
- John, R. "University of Notre Dame, Design VI, Fourth Year Undergraduate Studio," *The Classicist*, No.8, From the Academics, Spring 2009.
- Brussat, D. "Parsing the Classical Temples of India," *Providence Journal*, Sep 13, 2009, Architecture Here and There.
- Mhatre, K. "The Mumbai Mills and INTBAU-India: An inquiry by design," *Indian Architect and Builder*, Jasubhai Media, July 2005, Vol 18 (11).
- The International Committee for the Conservation of the Industrial Heritage, "Revitalisation of Mumbai Mills," Number 29, Spring 2005.
- Bowman, C. "Building Character in El Cerrito: Visiting architects are trying to give the city a sense of place," *San Francisco Chronicle*, August 8, 1997, Chronicle East Bay Bureau.

### Local publications

- Flanagan, M. "Architecture professor leads Taj Mahal preservation," *The Observer*, Nov 9, 2011, News, (republished by AIAS, American Institute of Architecture Students).
- Walljasper, J. "What We Can Learn from Transylvania (Really!)," *Notre Dame Magazine*, Autumn 2010, (republished in New York Times and Energy Bulletin).
- Fosmoe, M. "ND prof: Cost of preserving architecture not prohibitive," *South Bend Tribune*, March 09, 2008.
- Fosmoe, M. "Center for History presents Merle Blue awards to trio," *South Bend Tribune*, July 18, 2006.
- Fosmoe, M. "Copshaholm project: Restoring a historic mansion subject of study, Architecture students analyze historic South Bend home," *South Bend Tribune*, April 26, 2006.

## 6. Invited Lectures and Addresses

### Invited Lectures

- "The Roman Forum, some findings," *University of California Berkeley*, Joint Meeting of the 2012 PNC Annual Conference, December 7-9, 2012 (forthcoming).
- "Mumbai Old City Core – Urban History, Preservation and Planning," *Technische Universität Dresden, Germany*, Institut fuer Baugeschichte, Architekturtheorie und Denkmalpflege, June 13, 2012.
- "3D Documenting of the Roman Forum: A New Perspective on American Heritage Sites," *ALA San Francisco (American Institute of Architects) and ICAA - Roman Forum Fall Lecture Series, 2011*, The Walt Disney Family Museum, 104 Montgomery Street, The Presidio of San Francisco, September 16, 2011.
- "Use of 3D scanning technology in Historic Preservation" at *School of Architecture, University of Illinois at Urbana-Champaign* on Oct. 23, 2009.
- "Restoration of Saxon houses" at *Universitatea din București, at Bucharest, Romania* in May 2004.

### Moderator

Round-table discussion on the *International Master's Programme on Architectural and Structural Design*, at *Technische Universität Dresden, Germany*, December 18, 2003.

### Conference Papers

- “Merging Technology and Tradition: Integrating Traditional Hand Measuring Techniques and 3D Scanning into Preservation Education,” *Preservation Education: Sharing Best Practices and Finding Common Ground*, Providence, Rhode Island, September 8-9, 2012.
- “Documenting National and World Heritage Sites: The need to integrate Digital Documentation and 3D Scanning with Traditional Hand Measuring techniques,” 3D Digital Documentation Summit, *National Center for Preservation Technology and Training*, National Park Service, U.S. Department of the Interior, July 10-12, 2012, the Presidio in San Francisco, California.
- “History in 3D: New Virtualization Techniques for Innovative Architectural and Archeological Scholarship and Education,” From the scientist to the citizen: communicating digital archaeology, *Computer applications and quantitative methods in Archaeology Conference 2012*, University of Southampton, UK.
- “Documenting National and World Heritage Sites: The need to integrate Digital Documentation and 3D Scanning with Traditional Hand Measuring techniques,” *Heritage Recording and Information Management in the Digital Age*, School of Design, University of Pennsylvania, Philadelphia, November 19 & 20, 2010.
- “The benefits of applying HDS for archaeological studies of the Roman Forum,” *Leica Geosystems HDS Worldwide User Conference*, San Ramon, September 24, 2010.
- “3D Documenting the Roman Forum: A New Perspective on World Heritage Sites,” *Institute of Classical Architecture & Classical America*, New York, September 16, 2010.
- "Sustainment of Heritage: Tourism and Issues of Conservation at Taj Mahal, India," *1<sup>st</sup> International Conference World Heritage and Tourism: Managing for the Global and the Local*, Laval University, 2-4 June 2010, Quebec City, Canada.
- “Sprawl Repair: The New Frontier,” *Traditional Building Conference INTBAU-USA Symposium*, Baltimore, Oct, 2009.
- “Traditional architecture – old and new buildings, bringing sustainable development in today’s economy,” *Triennale V International Conference* in Bologna, Italy, September 25, 2009.
- “Transformation of Historic Urban Centers: Finding the urban origins of Bombay and planning its future,” *12<sup>th</sup> International Seminar Forum UNESCO*, Hanoi Architectural University, Hanoi, Vietnam, April 07, 2009.
- “Preservation, Architecture and Urbanism: How are we originally Green?” *Traditional Building Conference* in Chicago, Sept 19, 2008.
- "Traditional Architecture and Its Relevance in Asia," *Traditional Building Conference* in New Orleans, Oct 18, 2007.
- “Frauenkirche in light of the Venice Charter,” *Venice Charter Revisited Conference*, Modernism and Conversation in the post-war world in Venice, Nov 2, 2006.
- “Contemporary practice and issues on preservation,” *Traditional Architecture: Building and Teaching in the 21st Century*, Traditional Architectural Group TAG, RIBA in UK, May 26, 2006.
- “Pattern Book for Saxon Villages of Romania,” *International Conference for the integrated development of Sibiu and the Saxon Villages of Transylvania*, MET, World Bank, UNESCO and UNDP at Bucharest, Romania, Nov 2004.

### Local lectures

- “Palladio in India,” *From Vernacular to Classical: The Perpetual Modernity of Palladio*, at the Notre Dame School of Architecture, June 11, 2011.
- “A Digital Tour of the Roman Forum,” *Science Café*, Globes – a new interdisciplinary program in global linkages of biology, the environment, and society, University of Notre Dame, March 31<sup>st</sup> 2011.

“Using Technology for the Benefit of Tradition: Lessons Learned from the Neumarkt Development, Dresden, Germany, and New Ways to Use Load Bearing Masonry,” *Durability in Construction Colloquium* at the Notre Dame School of Architecture, October 26-28, 2010.  
“Historic Structure Assessment,” at the *Restore Michiana Conference* in South Bend, March 24, 2007.

## 7. Notable Contributions

### International Partnerships

UNESCO, World Heritage Center, four-year partnership, Memorandum of Understanding based on on-site access to world heritage site, access to UNESCO funds and student research internships in Paris at the UNESCO office and on-site projects.

Archeological Survey of India partnership on the Yamuna River Front Study. 3D documentation of tombs in India. Akbar’s tomb and Itmud-ud-daulah’s tomb. Studying the historic parts of the city of Mumbai with 18 undergraduate architecture students, 1 civil engineering student, 1 graduate student and 2 faculty, Spring 2012 and Summer 2008.

Soprintendenza Speciale per i Beni Archeologici di Roma partnership to document the Roman Forum. 3D documentation of the Roman Forum, with 4 undergraduate architecture students, 1 civil engineering student, 2 graduates, and 3 faculty, Summer 2010.

Technische Universität Dresden and INTBAU – International Network for Traditional Building Architecture and Urbanism partnership to document the Medieval Saxon Villages of Transylvania, Romania. Along with undergraduate and graduate students of School of Architecture, PhD student from Medieval Institute at University of Notre Dame and INTBAU Romania, March 2009.

### Workshops and Conferences organized

“The Role of Traditional Architecture and Historic Preservation in today’s cities,” *Symposium on Historic Preservation*, School of Architecture, *University of Notre Dame*, September 2009.

“Archeometry Seminars,” Institute for Structure and Nuclear Astrophysics, *University of Notre Dame*, September 2008 to September 2009.

“Joint doctorate program in the field of 3-years duration at the European level, as a common cornerstone of both the ERA (European Research Area) and the EHEA (European Higher Education Area),” *IQN network and Technical University Dresden* for EUA, March 2005.

Workshop and 5 day Charette with 26 architects from India and abroad on “Revitalization of Mumbai Mills,” Mumbai, India. In partnership with *INTACH and Rachna School of Architecture*.

“INTBAU India Inaugural Symposium,” New Delhi, India. Key speakers: ICTP member and founder of the Congress for the New Urbanism, Andres Duany, and INTBAU Committee of Honour member Elizabeth Plater Zyberk, Dean of the Miami School of Architecture, lectured on “The New Urbanism,” January 2005.

Preparing the Master Course in Architectural and Structural design of Masonry at *Technical University Dresden*, 2004 to 2005.

“Pattern book workshop,” *Laslea Romania*. Results presented at the Sighisoara conference in Bucharest, October 2004.

“Transylvanian Village Development Workshop,” Workshop in the Saxon village of *Laslea, Romania*, September 2003.

## 8. Grants and Sponsored Programs

Sponsorship of all on site equipment, Leica Geosystems HDS, Rome, Italian office and Indian partners Elcome Technologies, support in June 2010 and January 2012.

Grant funding for the Center for Research Computing, Visualizing the Roman Forum: Archaeology, Documentation, and Interpretation, 1800-2014.

Sponsor – Office of Vice President for Research, Position – Principal Investigator in

partnership with Center for Research Computing, January 2012.

Grant funding for Undergraduate and Graduate students research travel fund, Documentation of Historic city core of Mumbai and 3D documenting Mughal tombs, India, November 2011.  
Sponsor – Office of Vice President for Research, Position – Principal Investigator in partnership with Archeological Survey of India (ASI).

Grant funding till 2014, DHARMA World Heritage research, Research on monuments in India, Italy and Romania.  
Sponsor – Office of Vice President for Research, Position – Principal Investigator in partnership with Chris Sweet, Center for Research Computing, and Paul Turner/Ben Keller (Civil Engineering), November 2011.

Grant funding for the Kellogg’s International Educational Opportunity Grant Program, Documentation of Historic city core of Mumbai, India, November 2011.  
Sponsor – Kellogg Institute for International Studies, Position – Principal Investigator

Grant funding for Undergraduate and Graduate students research travel fund, 3D Documentation of Mughal tombs, Agra, India, November 2011.  
Sponsor - Center for Undergraduate Scholarly Engagement, Position – Principal Investigator in partnership with Archeological Survey of India (ASI).

Grant funding for Undergraduate and Graduate students research travel fund, 3D Documentation the Roman Forum, Rome, Italy, July 2010.  
Sponsor - Office of Italian Studies and Center for Undergraduate Scholarly Engagement, Position – Principal Investigator in partnership with Soprintendenza Speciale per i Beni Archeologici di Roma and Prof. James E. Packer from Northwestern University.

Grant funding till 2011, DHARMA World Heritage research, research on monuments in India, Italy and Romania, June 2009.  
Sponsor – Joint funding by School of Architecture and Office of Vice President for Research, Position – Principal Investigator in partnership with Center for Research Computing, Prof. Mark Schurr, Chair of Anthropology and Paul Turner/Ben Keller (Civil Engineering) undergraduate.

Faculty Speaker Support grant for Romanian Architecture and Preservation specialist, Mihai Cazan, Nanovic Institute for European Studies, May 2009.

European Studies beyond classroom grant funding to study architecture of Saxon Villages and Churches, Romania, Nov 2008.  
Sponsor – joint funding by Nanovic Institute, Office of Undergraduate Research, ISLA and Medieval Institute, Position – Principal Investigator.

Grant funding for Course Development Grant, October 2008.  
Sponsor – Center for Social Concerns, Position – Principal Investigator.

Seed grant funding for Documentation of World Heritage sites in India, April 2008.  
Sponsor – by Office of Vice President for Research, Position – Principal Investigator.

3D Laser Scanner and Photogrammetry Equipment Restoration and Renewal program, December 2006.  
Sponsor – University of Notre Dame, Position – Principal Investigator.

Conference on New Architecture and the development of an Indian Tradition, March 2006.  
Sponsor - Nabha Foundation and INTBAU, Position – Chair INTBAU India.

Joint Doctorate Program in Europe, March 2004 to March 2005.  
Sponsor - EUA – European Universities Association European Commission, Position - Coordinator for project from Technical University of Dresden.

Workshop on revitalization of Mumbai Mills, India, January to March 2005.  
Sponsor – Prince of Wales Trust & British Council, Position – Workshop organizer.

IQN – International Quality Network for PhD researchers, March 2003 – Feb 2004.  
Sponsor – DAAD (German foreigner exchange service), Position – Organizing committee.

Workshop in Laslea Commune, Romania, May 2004.

Sponsor - PREM – Preparing Romania for European Membership, Position – Workshop organizer.

Preparing the Master Course in Architectural and Structural design of Masonry (incomplete due to limited funds), September 2003 to November 2004.

Sponsor – TUDIAS (Technical University Dresden), Position – Coordinator.

## 9. Scholarships and Fellowships

Aug 2003 to July 2005, Research fellowship, *Technische Universität Dresden*, Germany.

June 2003 to Feb 2004, DAAD scholarship (Deutscher Akademischer Austausch Dienst), *Technische Universität Dresden*, Germany.

May to August 2004, DAAD scholarship (Deutscher Akademischer Austausch Dienst), Stibet Program, *Technische Universität Dresden*, Germany.

October 2002, Havard University GSD + Anhalt Excursion and Joint Studio, *Hochschule Anhalt*, Germany.

June to Aug 1997, US summer school scholarship, *Prince of Wales Institute of Architecture*, London, UK.

## 10. Distinctions, Honors, Awards

2008, Course Development Grant for Research and Documentation of Historic Buildings, Center for Social Concerns.

2006, Merle D. Blue Excellence in Humanities Award, Northern Indiana Historic Society.

2006, Southhold Award for Historical Preservation, The Historic Preservation Commission of South Bend and St. Joseph County.

## 11. Professional Memberships

The International Committee for Documentation of Cultural Heritage (CIPA) member, International Committee of ICOMOS (International Council on Monuments and Sites), March 2012.

The International Council on Monuments and Sites (ICOMOS) USA member, January 2010.

UNESCO World Heritage Center member, Forum UNESCO-University and Heritage (FUUH), April 2009.

Society of Architectural Historians (SAH) member, March 2009.

Advisory Committee Member for Historic Preservation Commission of South Bend and St. Joseph County, Indiana, USA, March 2007.

Advisory Committee Member for Northern Indiana Center for History, Indiana, USA, January 2007.

Founding member for INTBAU USA, October 2007.

The National Trust for Historic Preservation member, November 2007.

Advisory committee member, Cyark (non-profit organization that digitally preserves cultural heritage sites), Orinda, California, February 2008.

The National museum of American History member, July 2008.

Founding member for INTBAU Germany, October 2004.

Founding member for INTBAU India, January 2004.

Council of European Urbanism member (CEU), Nov 2003.

Management Committee Member, INTBAU International, August 2003.

Prince of Wales Institute of Architecture Alumni (POWIA) member, June 1997.