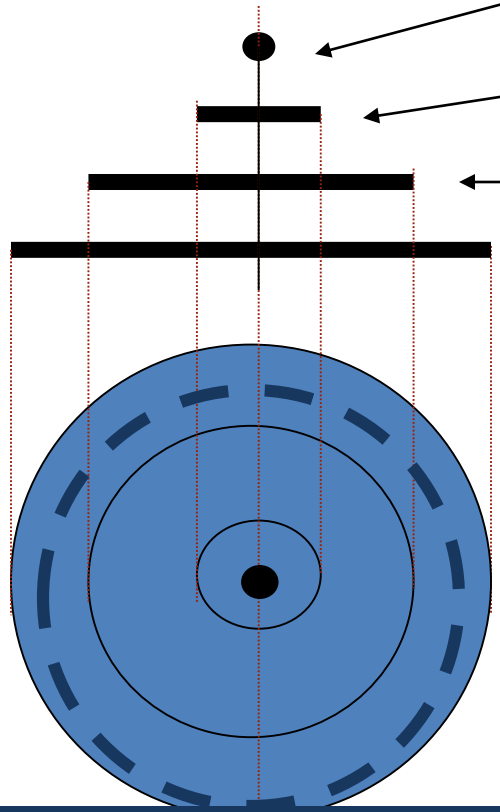
VARANASI

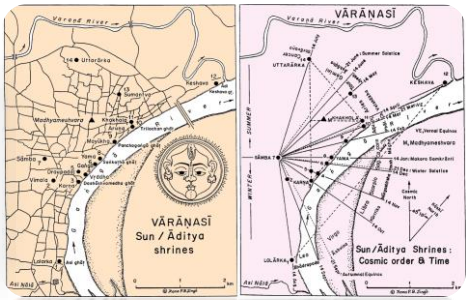
A mega-iconic , inter-disciplinary and Inter-institutional project

December 21, 2013

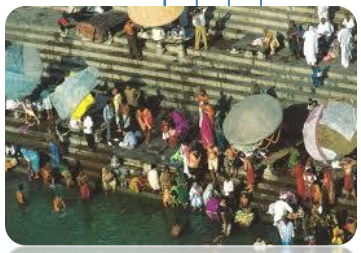
Varanasi: a design algorithm



Varanasi: a four phased recovery



Physical Cartesian	Mental Habitual	Cognitive Mythical	Cosmological All-pervasive **Cybernetics IV**
Reductionist	**Observational / Participatory**	**Co-evolutional**	**Integral**



Sakyamuni Buddha enters the citadel of Vedic learning (*Saraswat sadhana*) – comes to 'Saranganath', Varanasi: 670 BCE

……Re-turns THE WHEEL OF DHAMMA

Recovery through 'Sandhi'

To establish linkages between iconographic re-interpretation of architecture and engineering patterns of Vedic and Buddhist periods based on:

a) **Identification of underlying common patterns: built-forms; shape grammar; principles of design; styles and continuity embedded in the two layers**
b) **Earmarking a methodology to establish the continuity**
c) **Re-interpretation of Indian history of science linking the two period of remote antiquity**

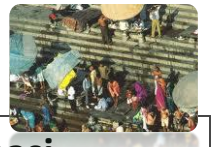
(Research need: Works of Dr. A. Koomarswamy, IB Horner, E B Havell)

SANDHI – ASI interface

Project C/3: To take up **a set of re-explorative projects** in the 'Heritage City' of (VARANASI) for studying the patterns of:

- **Cosmological and geo-morphological footprints leading to original evolution**
- **Green habitat and ecological habitat of educational systems**
- **Water management and infiltration gallery systems**
- **Public health engineering system and 'people-centric' social infrastructures**
- **Community planning and social management systems**
- **And re-position them in the contemporary framework of application**

Methodological framework & Deliverables



- **C/3/1:** An exploration of the **ancient geo-morphology and riparian system of Varanasi**

- **C/3/2:** An assessment of the Cosmological models and sacred myths associated with **the green and ecological habitat of various town planning orders and urban design systems of Varanasi**
– and a subsequent assessment of Water management systems of Varanasi and Public health engineering system and 'people-centric' social infrastructures

- **C/3/3:** A study of the **order of community planning and social management systems** – evolved in the recent past to the present time

- **C/3/4: Archaeological services: Conservation, adaption, re-use and re-modeling of various 'sacred' ecosystems of Varanasi**

- **C/3/5: Augmentation of civic services and utilities systems of Varanasi in current framework**

- **C/3/6: Boosting creative economy of traditional knowledge systems in Varanasi and re-position them in the contemporary framework of application**

Research Background 1: Varanasi seat of *Sama* (Psalms)

Deeper meaning of SANDHI

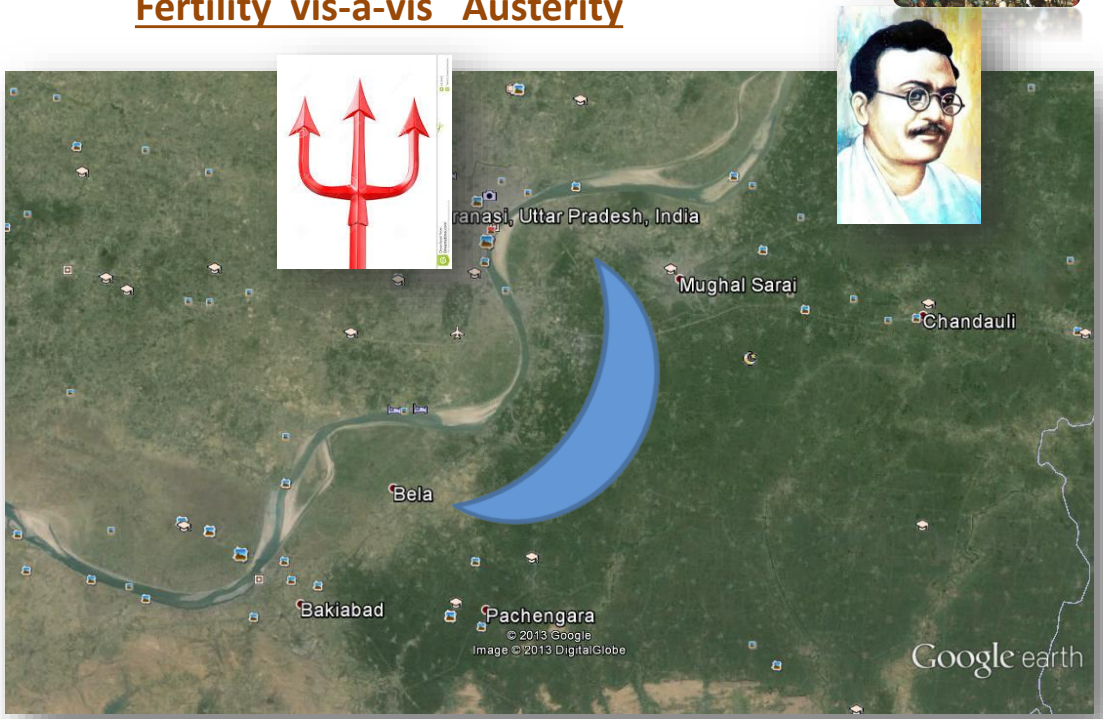
***Sangama* (*Makara: Ganga*) + *Sanjama* (*Kurma: Yamuna*)**

Fertility vis-à-vis Austerity

In Vedic tradition **Triveni Sangam** is the **confluence (SANDHI)** of three rivers. *Sangama* is the Sanskrit word for confluence. The point of confluence is a sacred place for Cosmological connections with the terrestrial. A bath here is said to wash away all karmic frictions and foster the path to evolution and eventual enlightenment (Bodhi).

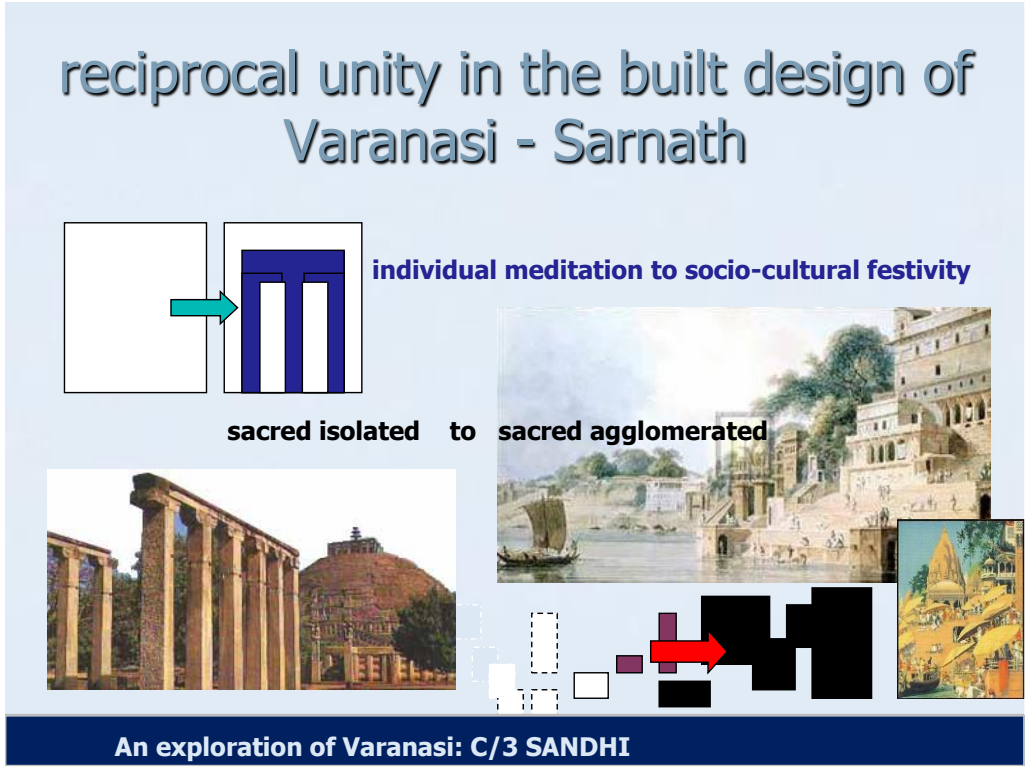
The sacred pitcher of immortality originates (Kumbh) in the **SANDHI of Ganga (descending), Yamuna (ascending) and Sarsvati (middle path) at Sangam.**

Northbound Ganga (inverted) thus becomes Yamuna and the resultant is '*Saraswat*' (the harmony or SANDHI)



PROJECT A/2: *Murta -----→Raag-----→Saraswat*

Kobiraj, G. (2011) 'Kasi-r Saraswat Sadhana', Prachi
Lahiri, S. (2010) 'Personal Diary'
Works by Nandalal Bose: Gate of Sister Nivedita school

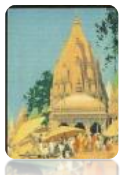


Investigation from perspectives of geophysical survey, hydrogeology and engineering geology combining to geo-archaeology further based on Varanasi and Eastern Vindyachal belt

Collaboration with IIT BHU, Gnana Pravaha… Students' participation & E-archiving processes

E-Portal and students' based activities: VARANASI

Becoming truly International …..India of the Ages



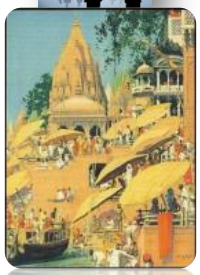
Educational outreach 2:

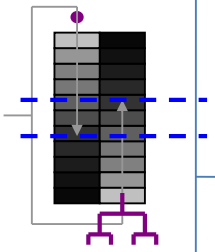
A Case and then an international program

Center of Humanities

Research, Foundation Courses, Electives and Projects

Team: IITKGP (lead team) with IITBHU + others





Mandate - International Program and Academic outreach:

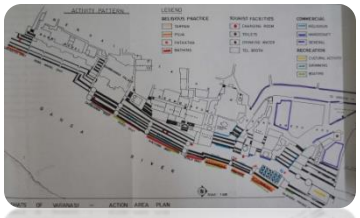
-exchange program with leading invited international faculty for courses and summer programs

-International workshops – development of course curricula

-Workshop on (for instance):

1. **Geo-spatial Cosmogony Model of Varanasi**
2. **Town Planning based embedded layers of Varanasi (chronology) – folklore, pilgrimage**
3. **Historical resources and natural systems planning in Varanasi (river based)**
4. **Micro-zonations and utility services planning (traffic; pollution; vehicular free zones; creative economic zoning….)**
5. **Integrated Planning Strategies with Saranath (Saranganath) – Indo-Japanese Funding**
6. **Recovery and regeneration model**

Explorative multi-dimensional project on VARANASI : C/3 SANDHI



The community and sub-regional systems…

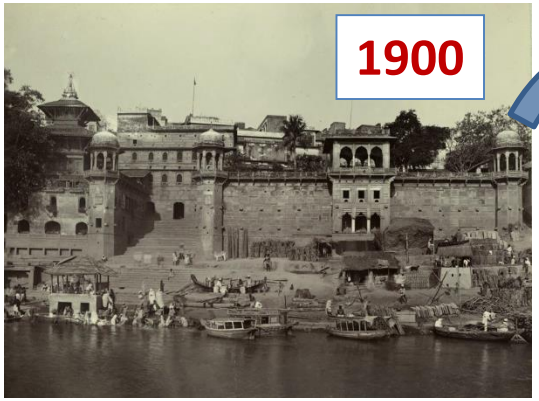
Recovery through 'F-o-Cities'

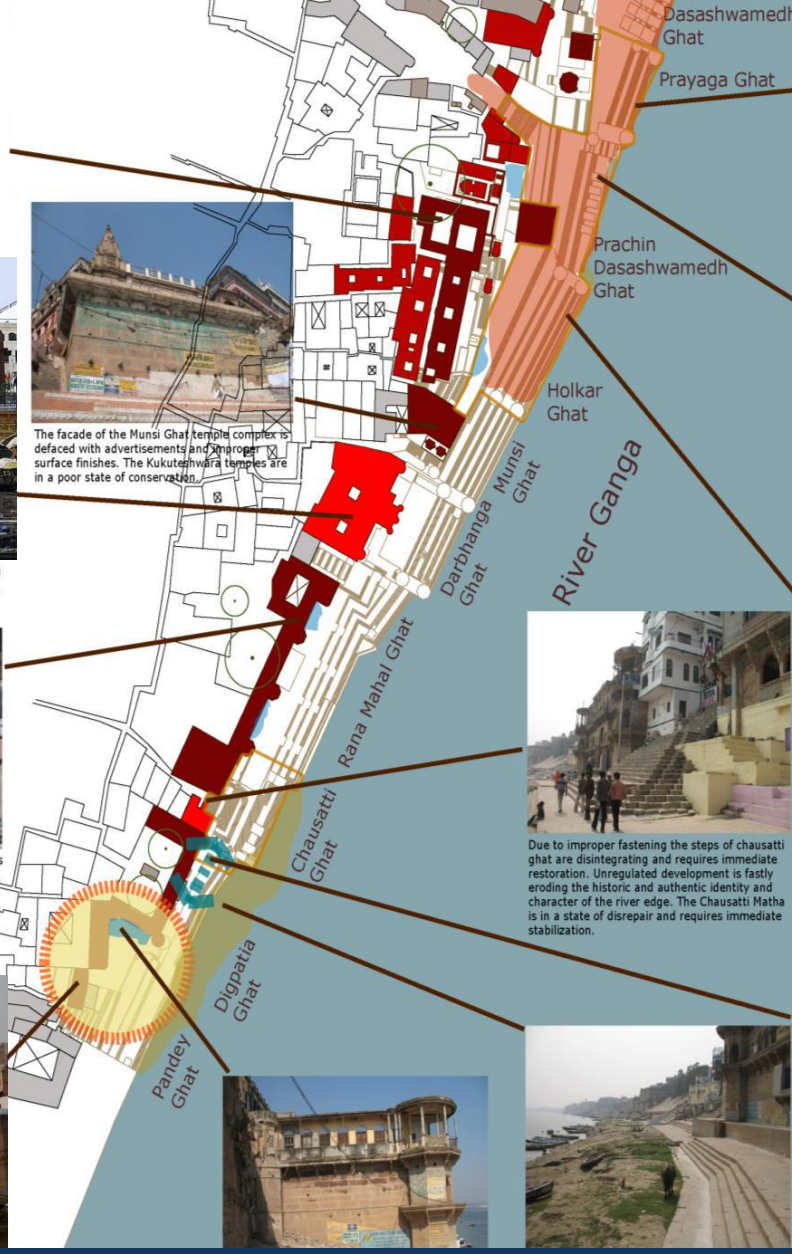
•**C/3/2:** An assessment of the Cosmological models and sacred myths associated with **the green and ecological habitat of various town planning orders and urban design systems of Varanasi**

– and a subsequent assessment of Water management systems of Varanasi and Public health engineering system and 'people-centric' social infrastructures

•**C/3/5: Augmentation of civic services and utilities systems of Varanasi in current framework**

Morphology of Ghats:
A natural transformation





VARANASI: an exploratory ground-centric recovery

Design green places of learning…

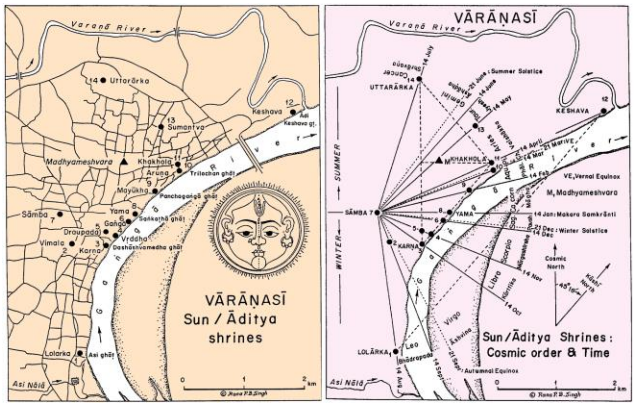
Recovery through 'Design'

•C/3/6: Boosting creative economy of traditional knowledge systems in Varanasi and re-position them in the contemporary framework of application

Ritual art and crafts; riparian economy; culinary styles; weaving; music & performing arts

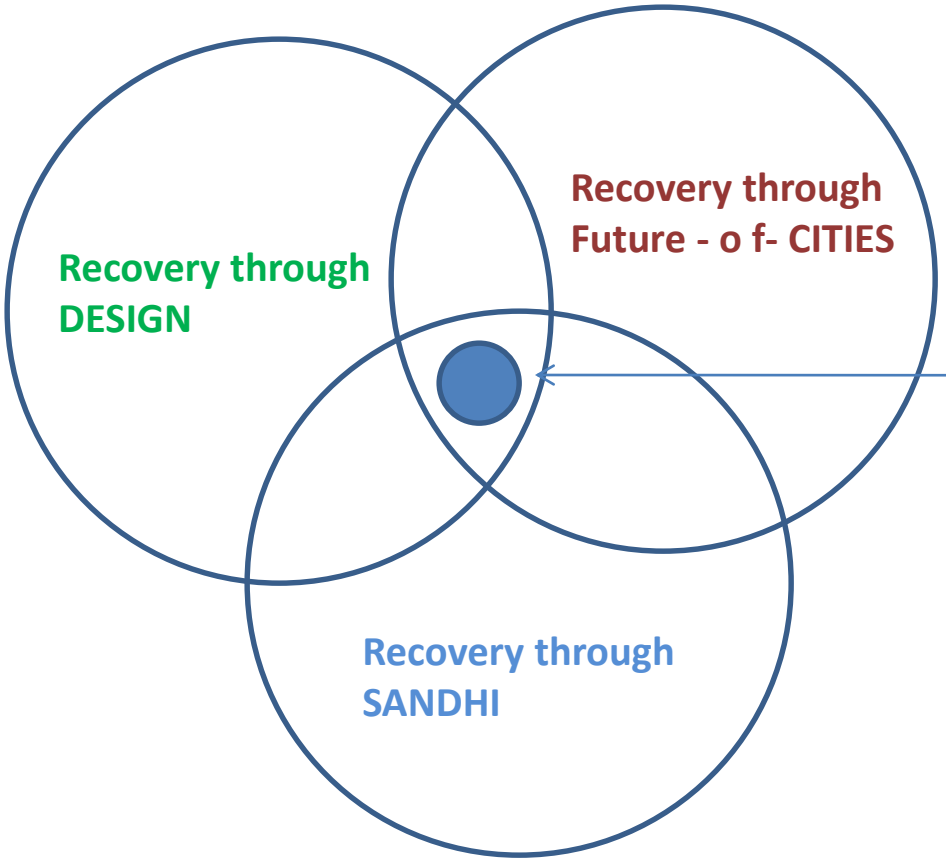
Re-design of an ancient City: 3 R

But only a re-covery, a re-cognition, a re-vival



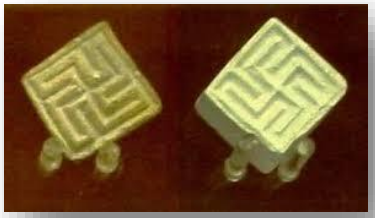
Place (Geography) Folk-Work (Anthropology-Economics) Shape grammar (Cosmic)

A ground-centric recovery



FEW & IMMEDIATE IMPORTANT TARGETS: VARANSI PROJECT

CREATION OF VARANASI WEB PORTAL	JANUARY	2014
MAKING OF PRELIMINARY PROGRESS REPORT	FEBRUARY	2014
MAKING OF EXHIBITION TEMPLATES	MARCH	2014
MAKING OF ADVANCED PROGRESS REPORT (DRAFT PROJECT REPORT)	AUGUST	2014
ONE PAN-IIT WORKSHOP	DECEMBER	2014



http://www.arp.iitkgp.ernet.in/sandhi/

Thank you