

Project NP3004: Transform key relationships at the Pre-Design phase of your project

Taming the Elephant in the Room

An initial concept by Tom Paul Haynes, Ph.D. Candidate, Co-operative Research Centre for Low Carbon Living (CRCLCL)

Nicolas Tesla "If you want to find the secrets of the universe, think in terms of energy, frequency and vibration."



(1) See Banksy



The culture of Owners, Architects, Developers and Financiers ...

determines how well they serve the entire supply chain & community...

when initiating the impacts that last for the whole lifecycle of the built environment project.

Can we address the 'elephant in the room' and make a systemic changes at the Pre-Design phase?

The context of the Research Questions is major built environment and community development projects that will be operational beyond 2050. Each of these projects has distinct **cultural patterns at the critical Pre-Design phase** that are at the basis of the foundational business case and project assumptions, including: project vision, formation of core team & investors, investment & development feasibility, compliance with legislation, project site and initial planning options, etc. Understanding this cultural pattern provides an opportunity to transform this early stage of the project's lifecycle and therefore its social and environmental impacts.

Q1. What are the cultural patterns (core components, processes and assumptions) of stakeholder groups for contemporary projects [A] (i.e. inspired by the principles of energy efficiency and resource minimisation)?

Q2. What are the cultural patterns (core components, processes and assumptions) of stakeholder groups for integrated projects [B] (i.e. inspired by the principles of regeneration and resonance)?

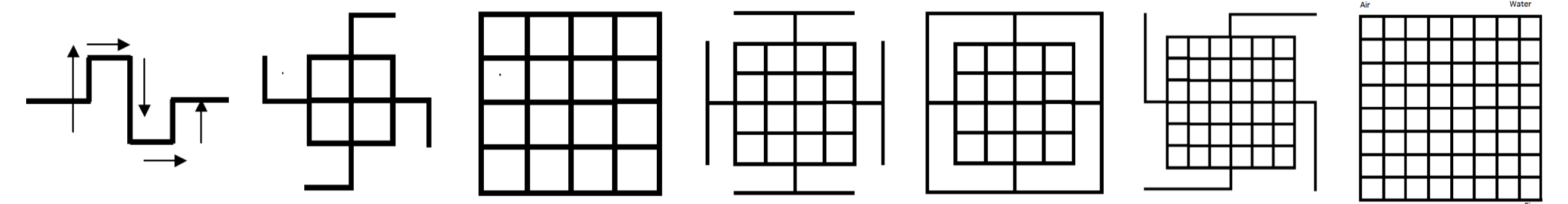
Q3. How can stakeholder groups be supported to change from a contemporary project culture [A] to an integrated project culture [B]?

- What is the personal journey of change?
- What would the change process look and feel like?
- What is the business case for making this change?
- What are the institutional and legislative barriers?



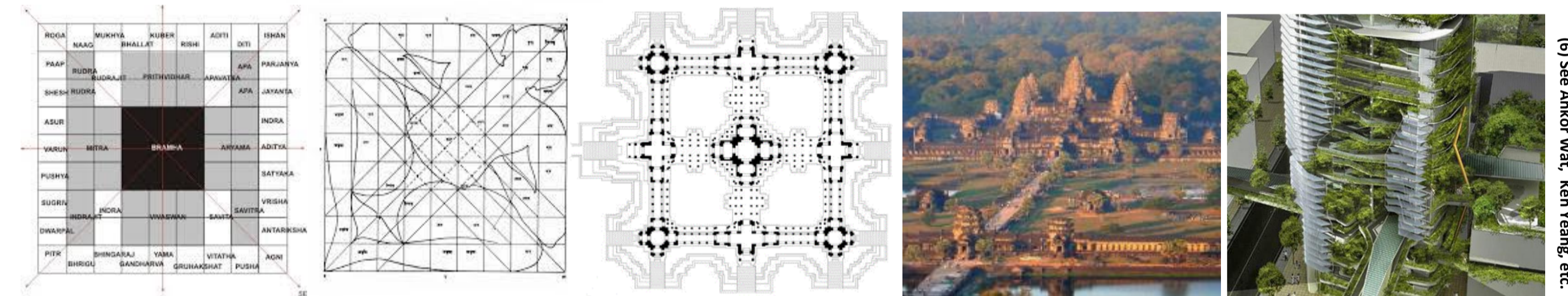
(4) See Cymatics

Hypothesis – That understanding deep patterns of nature can inspire a deeper Pre-Design culture. In this cymatic experiment, white salt is shaken onto a dark metal sheet. Under the sheet is a speaker that vibrates it with an increasingly higher tone. As the vibration increases the salt forms in to a series of predictable of patterns. Similar patterns of geometric evolution are defined in nature in terms of Pi, Golden Mean & the Fibonacci series. These concepts can also be applied to the culture of design.



(5) See Mercey

Ancient Wisdom Traditions. To facilitate this research Pre-Design stakeholders working on bilateral Australia - India projects will be identified. This is an appropriate context to introduce the knowledge of Vāstu Vidya (Vedic Architecture), persevered in India. This knowledge presents the concept resonance in principles of architectural design and community development. These integrated principles of nature can be expanded to guide the design culture in all its aspects (ranging from subjective to objective).



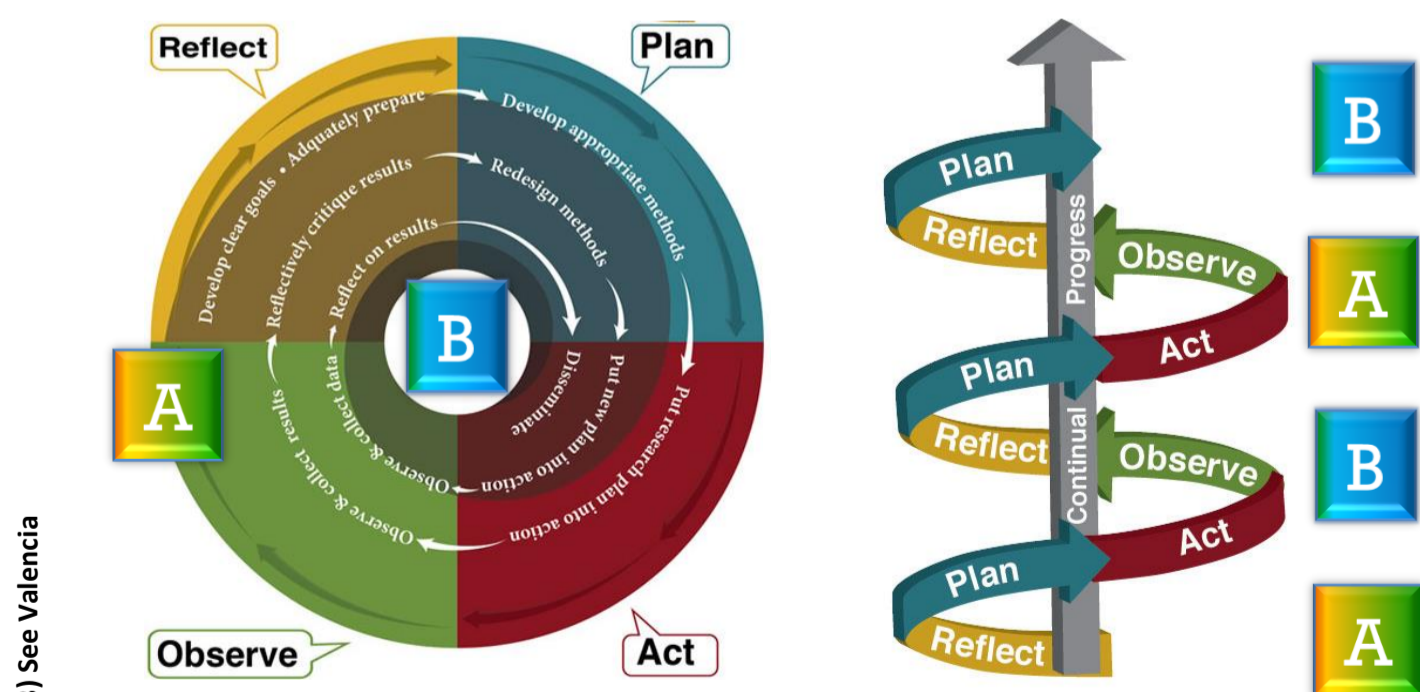
(6) See Ankor Wat, Ken Yeang, etc.

Applying these principles of nature. The principles of Vāstu Vidya (Vedic Architecture) describe how to align the building and community with the natural world (as opposed to presenting stylistic elements). They are seen represented in the ancient structures such as Ankor Wat and it is proposed that they can be integrated into the contemporary design process and projects.



(2) See Reed & Wang

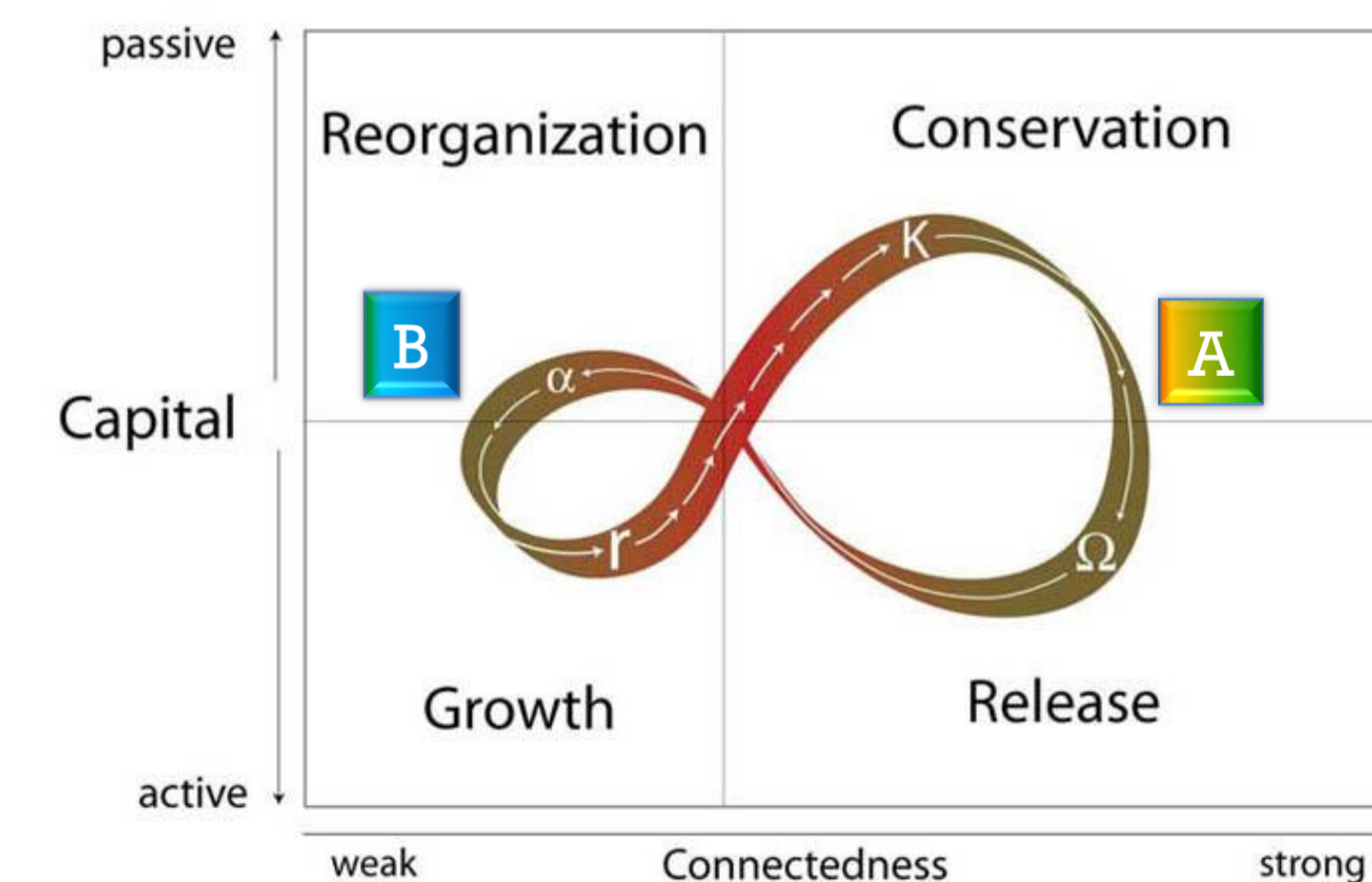
A: The 'elephant in the room' is that sustainability as energy efficiency and resource minimisation does not address a fundamentally extractive & destructive design cultural context
B: The concept of resonance proposes extending the current sustainable design principles. The aim is to re-enchant design with a holistic understanding of design within a natural system



(3) See Valencia

Proposed Methodology. Discussion regarding the proposed qualitative methodology for this research is currently focussing on an Action Research approach. This approach is structured around a workshop that engages with a diverse set of Pre-Design stakeholders through a cycle of reflection, planning, action and observation. The workshop supports action to move from the stakeholder's current state [A] to their overall goal in a vision of their preferred future [B].

This process is supplemented with Appreciative Enquiry interviews. These longer interviews allow for deeper feedback, listening and self-reflection on the workshop process and related activities by both researcher and community members.



(7) See Panarchy

Anticipated Impact: Panarchy describes that systems go through a cycle of growth & decay. Think of the analogy of a redwood forest that grows (at point r) and establishes (K) itself, and then is destroyed (Ω) by a raging fire. It cannot regrow as a forest so it reorganises (α) as a wetlands & re-establishes itself.

This Ph.D. research looks at how the culture of the Pre-Design phase can be re-conceptualised and extended at a fundamental level. The impact of the research is to support the Pre-Design culture going from representing the collapse of the old unsustainable system [A], i.e. a traditional design context, to reorganisation as a new system [B]. To extend the analogy of the 'elephant in the room' the proposal is to engage the elephant as manageable baby and train it with compassion and understanding before it grows up!

Notes, References & Credits

Description of references and credits this poster. Note poster is developed as an early stage Ph.D. concept.

1. Top panel image is from an installation called "The Elephant in the Room" from the "Barely Legal" show by graffiti artist Banksy, held in an industrial warehouse in Los Angeles, California in 2006.
2. The middle panel shows is adapted from "Regenerative Design Framework" by Architect Bill Reed and appears in the entry under Regenerative Architecture – Encyclopaedia Sustainability Science Ch303 by Reed, B. & Mang, P. Note letters A and B have been added, as well as the concept of 'resonance' to the diagram.
3. The methodology diagram is adapted from www.valenciacollege.edu "Elements Action Research" documentation
4. The screenshot images are taken from "Cymatic Experiment" (https://www.youtube.com/watch?v=GtSCBbHAg) to illustrate the evolving patterns naturally occurring in nature. There are many other examples that could have been provided in terms Pi, Golden Mean & the Fibonacci series in natural structures on many scales and contexts: from sub-microscopic to plant or animal kingdoms including human scales; to geological, weather systems and cosmological scales.

5. The evolution of Vāstu Vidya represents an ancient wisdom tradition describing the objective and subjective patterns of resonance. Images are adapted from "Fabric of the Universe: Origins, Implications, and Applications of Vastu Science" by Dr. Jessie J. Mercey ND PhD PhD mst. 2008. Various indicative Vastu plan images from websites: www.nepalpropertymarket.com; .au.pinterest.com/lotusvillas0208; au.pinterest.com/pin/507921664201497029/
6. The image of Ankor Wat (www.interessantes.at) represents an famous archaeological building designed along ancient Vastu principles. The building detail from an image of Dr. Ken Yeang's EDITT Tower www.au.pinterest.com/pin/227150374928070288/ is there to describe that these principles could be applied to a contemporary sustainable building. This application could both be in terms of meaning, shared experience and culture (i.e. subjective) as well as the planning, structures and functional organisation and ornamentation of the design (i.e. objective).
7. The concept of 'panarchy' has been developed by Holling in 1986 and describes the evolution of systems. Holling CS. 1986. Resilience of ecosystems: local surprise and global change. Referred to in Panarchy: Theory and Application by Allen C.R., et al 2014. image from http://mmnh.typepad.com/rogers_archaeology_lab/2013/02/panarchy.html. Baby elephant image from www.buzzfeed.com. Copyright of images with respective owners.

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