

2016 Virtual Dialogue on Harmony with Nature – Theme Earth Jurisprudence

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1. What would the practice of The Arts, Media, Design and Architecture look like from an Earth Jurisprudence perspective? How is that different from the way that The Arts, Media, Design and Architecture are generally practiced now? And, what are the benefits of practicing The Arts, Media, Design and Architecture from an Earth Jurisprudence perspective?

As an architect and university professor, I am responding specifically about the practice of earth jurisprudence in architecture. As the discipline responsible for the design of the built environment, architecture has a critical role in the achievement of harmony with nature.

The practice of earth jurisprudence in architecture would look different in terms of 1) land use, 2) accommodation of other species, 3) energy use in the built environment, 4) water use in the built environment, 5) material use in the built environment.

1. **Land use.** In the practice of earth jurisprudence in architecture, new construction will improve the ecological integrity of land. This means that new construction will take place primarily on brownfield or otherwise already-damaged sites and that construction will be an act of repair and reconnection.

2. **Other species.** In the practice of earth jurisprudence in architecture, the design of sites and buildings will be guided by the responsibility of offering interconnected and functional habitat for humans and for other species including plants and animals.

3. **Energy use.** In the practice of earth jurisprudence in architecture, the design of buildings will be integrated with distributed renewable energy generation for the operations of buildings. Buildings will be designed with passive strategies in response to local climates to require little or no additional energy for heating and cooling.

4. **Water use.** In the practice of earth jurisprudence in architecture, buildings will be designed to maintain or improve water quality in the watershed with responsible use of water and with appropriate treatment of waste.

5. **Material use.** In the practice of earth jurisprudence in architecture, buildings will be constructed and operated in consideration of the ecological context of the extraction, manufacturing, use phase, and disposal of materials. Materials will be renewable or reusable and will not generate pollution for people or for other habits in any life cycle phase.

Currently, buildings that are built according to best practices (such as those built to the Living Building Challenge in the United States) begin to achieve the principles described above. True earth jurisprudence in architecture would require widespread adoption of these principles for new construction and for the retrofit of the existing built environment.

The achievement of the principles described above would 1) begin to restore functioning relationships between human communities and the natural environments on which these communities depend and 2) offer hope for the sustenance of a biologically diverse natural world.

2. What promising approaches do you recommend for achieving implementation of an Earth-centered worldview for The Arts, Media, Design and Architecture? (Note: depending on the discipline, approaches could also be theoretical, although practical approaches should be prioritized).

In order to implement earth-centered architectural practice, a combination of economic incentives and legal frameworks (such as financial lending structures, monetization of ecological functions and values, conservation laws, and the extension of codes for public health to include ecological health) are necessary in order to:

1. Repair and protect land for ecological integrity, including within the built environment.
2. Establish and steward interconnected and functional habit for humans and for other species including plants and animals, including within the built environment.
3. Ensure distributed, renewable energy generation including for zero carbon-equivalent emissions.
4. Repair and protect hydrological systems, especially within the built environment.
5. Manage the ecological contexts of material lifecycles.

3. What key problems or obstacles do you see as impeding the implementation of an Earth-centered worldview in The Arts, Media, Design and Architecture?

An earth-centered worldview has a foothold in the discipline of architecture, as evidenced by programs such as the Living Building Challenge. At the moment, these programs are implemented in very limited circumstances. Obstacles to broader implementation of earth-centered practices for architecture include: ingrained cultural paradigms, wasteful existing water, transportation, and energy infrastructure, existing building, zoning, and land-use codes, and existing real estate and banking structures.

4. What are the top recommendations for priority, near-term action to move The Arts, Media, Design and Architecture toward an Earth Jurisprudence approach? What are the specific, longer-term priorities for action? (Note: give 3 to 10 priorities for action).

Priorities:

Short term imperatives:

1. Avert catastrophic climate change by connecting the built environment to sources of renewable energy.
2. Avert catastrophic climate change by restricting the manufacturing of high-greenhouse gas emitting building construction materials such as cement and steel.

Longer-term imperatives:

1. Mandate improved care of watersheds in the built environment with a focus on fresh water use and site-scale bio-filtration.
2. Mandate conservation and repair of ecological function and connected habit to support biodiversity.