

The Ethics of Information Stewardship in Architectural Practice

Paper Abstract for Consideration of the Fall 2007 Southeast Conference of Association of Collegiate Schools of Architecture at The Catholic University of America

Brian Sykes
Nicholas N. Varzandeh

Individuals in the fields of Architecture/Engineering (A/E), Construction and Facilities Management constitute interdependent communities of practice, each possessing different perspectives on the same information shared within any given project. A key distinction for the discourse of architecture is that it is ethically bound to consider the building/design as an end result and not a means to an end. Thus, as buildings increase in complexity and the amount of information about buildings continues to explode, how can architects provide an ethical model for information stewardship? This paper will examine models of information management from varying fields such as Knowledge Management (KM) to theories of Info-Aesthetics to ascertain which models offer the most ethical approach to information stewardship.

Building Information Modeling (BIM), Geographic Information Systems (GIS) and CAD/CAM manufacturing systems are all digitally based information systems that collect and manage different kinds of information. At the present time, these are divergent systems, which the market will ultimately force to converge. BIM, in particular, has the capacity to manage and analyze large amounts of information for buildings that continually grow in complexity and cost. Simultaneously, the ever-increasing societal pressure to understand the ecological consequences of buildings means that this information must be analyzed in such a way that the environmental impact of any given design is understood and mitigated before fabrication is commenced. Given that the environmental impact of a particular building is felt far beyond its walls, who should have access to this information and how quickly should they receive it? Are architects not responsible to the public for the health, safety and welfare of any given facility?

Additionally, KM professionals currently advise various forms of government to ensure that explicit knowledge is available to the public, particularly through the process of externalization using secular language and diagrams. Architects are notorious for obfuscating their design intentions through academic and professionally specific language. Architectural information stewardship should not only address the content of the information disclosed to the public but also the language in which it is communicated. Thus, views of information based on the needs of industry-specific businesses and the general public must be articulated using common standards for organization and communication of information and knowledge between and among various parties.

Finally, what compositional and formal experimentations within architecture should be conducted? Lev Manovich's theories of Info-Aesthetics and data mapping present new strategies to be mined by architects within the field of cultural production. Historical and archaeological information can be mapped and expressed within an architect's design intention in an attempt to generate multivalent readings of the project. As the database evolves into a more mature cultural product, how will architecture react? An architecture of information stewardship should consider all of these implications.

The Ethics of Information Stewardship in Architectural Practice

Outline of Proposed Paper for Presentation at the Fall 2007 Southeast Conference of Association of Collegiate Schools of Architecture at The Catholic University of America

- I. Increasing Importance of Information Management throughout the Discourse of Architecture (both academically and professionally)
 - a. Explosion in the complexity of buildings and the need for increased sophistication in information management and delivery
 - b. Increased need for access to timely, useful and streamlined information about buildings, building behavior and environmental impact.

- II. Ethical Responsibility of Architects – Past, Present and Future and the Potential Politics of Data Mapping
 - a. Current ethical responsibilities of architects
 - b. Current ethical framework within the Knowledge Management profession
 - c. Ethical models from the Knowledge Management profession that would be applicable architecture for ethical data mapping and management

- III. Further Information Stewardship: Potential Areas for Further Inquiry and Research
 - a. Management of environmental/ecological knowledge
 - b. Management of historic and archaeological information
 - c. Investigation of the aesthetics of data mapping
 - d. Development of case studies in organizational and individual resistance to change and in management of organizational change (“change management”)

Authors' Bio:

Nicholas N. Varzandeh is Director of Information Technology in the School of Architecture, Planning and Preservation at the University of Maryland, College Park. He previously worked as senior systems analyst and project manager at a large, international Washington, DC-based law firm, where he was responsible for development and management of strategic technologies, and knowledge management systems and programs.

Brian Sykes is a Building Information Modeling Consultant with AEC InfoSystems, Inc. and a graduate student at the University of Maryland, College Park, receiving his Master of Fine Arts in Sculpture. He has previously worked as associate architect for several architecture firms. He will begin pursuing the Master of Architecture program at the Alexandria Campus of Virginia Polytechnic and State University in Fall 2007.