Living and Sustainability: An Environmental Critique of Design and Building Practices, Locally and Globally

Abstract / Initial Proposal Form:

1. Paper / Proposal Title:
The Small House Service Bureau: Modeling sustainable housing

2. Format:
Written paper / verbal presentation

3. Author(s) Name:
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4. University or Company Affiliation:
Virginia Tech

5. Abstract (300 words):
This paper outlines how the Architects’ Small House Service Bureau systematized affordable housing in the early 20th century as a possible model for affordable and sustainable housing in the 21st century. Founded in the mid-western United States in 1919, the Architects Small House Service Bureau (ASHSB) consisted of a group of architects dedicated to well-designed and sustainable single-family houses. While established for single-family houses, the systems, methods and approach of the ASHSB
provide a lens through which sustainable and affordable housing might be envisioned today.

The methods used by the ASHSB include (1) standardized details, materials, methods and approaches to design that could be easily customized to a specific site, (2) collaborations with industry to create affordable designs, (3) peer review to ensure design excellence, and (4) mass production of designs to allow for affordable solutions. Since the ASHSB existed between 1919 and 1937, the construction materials were inherently sustainable in that they were locally obtained and sourced. The way in which houses were placed on the site took advantage of prevailing winds, passive solar strategies and involved minimal destruction of the local habitat. In other words, the methods and approaches reflect contemporary sustainability approaches such as those captured in LEED for Homes.

While this paper discusses a historic approach to single-family houses, the lessons provided by the ASHSB provide a model for approaching today’s challenges for sustainable and affordable housing. First, the ASHSB had a mission larger than the members and their need to be financially viable as individual designers. Second, the internal review and standards ensured that each design met a certain quality threshold and embodied the collective knowledge regarding construction standards and affordability. Finally, the designs were widely published and available to all people who were interested in building an affordable house anywhere in North America.

6. Author(s) Biography (200 words each):

Lisa M. Tucker, PhD has been a practicing designer and architect for 20 years with a specialization in sustainability and historic preservation. She is a professor at Virginia Tech and teaches upper level design studios and design theory and research courses and is the Program Chair and Graduate Program Coordinator for Interior Design. She holds degrees in Architecture and Architectural History from the University of Virginia and a PhD from the University of Missouri—Columbia in Architectural Studies.

Dr. Tucker has served as the President of the Interior Design Educators’ Council in North America as well as the President of the American Society of Interior Designers Virginia Chapter. She has been recognized by Design Intelligence as one of the Most Admired Design Educators (2010) and has won multiple teaching awards including the IIDA Educator of the Year Award in 2016.

Dr. Tucker is the author of three books on sustainable design: Sustainable Building Systems and Construction for Designers, Cradle-to-Cradle Home Design: Process and Experience and Designing Sustainable Residential and Commercial Interiors. She also
wrote American Architects and the Single Family House: Lessons Learned from, the Architects’ Small House Service Bureau.