A CONTINUING REVERENCE FOR WOOD

Martin A. Hubbe [a] and Urs Buehlmann [b]

Our ancestors knew a great deal about wood. They had to in order to do well in life. Wood has played a dominant role in human infrastructure for many generations, and for most of that time woodcraft has depended on the decentralized knowledge passed down among families and guilds. This editorial, while celebrating the knowledge, skills, and insights of the woodworkers of past generations, also calls for a renewed attention to wood's unique character, including characteristics that today are too often classified as "defects." We may need to take lessons from generations past to truly derive the best value from wood resources.

Keywords: Wood, Tradition; Woodworking; Crafts

Contact information: a: Department of Wood and Paper Science; College of Natural Resources; North Carolina State University; Campus Box 8005; Raleigh, NC 27695-8005 USA; hubbe@ncsu.edu; b: Virginia Tech; Brooks Forest Products Center; Mail Code 0503; 1650 Ramble Road; Blacksburg, VA 24061 USA; buehlmann@gmail.com

Looking Back

Since times eternal, wood has been the primary material supporting humans' striving for survival. Thoreau captures this ultimate importance by saying that "*It is remarkable what a value is still put upon wood even in this age and in this new country – a value more permanent and universal than that of gold.*" Guilds grouped around particular products and skills (carpenter, cabinet maker, wood turner, buggy maker, etc.) sustained and advanced humanity's knowledge and skills and passed it from generation to generation. *"Sycamore wood was used for making milk pails as it doesn't give off any taste; wild cherry trees were known by lumberjacks as widow-makers because the "explosive energy" in their sprung trunks would fling a chainsaw back in your face... (Roger Deakin - Wildwood: A journey through trees)*" are examples of such unwritten wisdom that was swept away by the industrialization starting in the 18th century. In the industrialized world, what was a vast array of woody materials from many different species for many different uses to the skilled craftsmen, became a standardized, uniform material, one similar to the next. What were "character-marks" and were used to decorate their work to the wood craftsmen before, became "defects" and were turned into waste once industrialized production took hold.

In his book *A Reverence for Wood* (Wilfred Funk, Inc., 1965), Eric Sloane recounts a story from US history set in 1965 concerning the demolition of an old wooden barn. The protagonist, who is determined not to waste any of the old weathered wood, insists upon starting with the roof and taking down the barn piece by piece. He finds himself marveling at the workmanship of the traditional barnbuilders. Drawing on their collected experience and attention to detail, such builders were able to build structures to last a lifetime. The wood in each item of the barn was chosen for a reason. Aspects such

as density, grain patterns, shrinkage behavior, and rot resistance all were considered. Indeed, the whole community depended on their knowledge of wood and woodworking in order to maintain a prosperous livelihood.

A more studious, but less artistic approach to the same topic is given in a volume *Tools and Technologies. America's Wooden Age* (Kebabian and Lipke, editors, Fleming Museum, University of Vermont). Here the emphasis is on the tools, rather than the wood. The authors trace wooden construction back to a 300 thousand year old site in France. Metal woodworking tools, such as chisels, saws, and files were well known already in Egypt in 700 BC. The mortice-and-tenon method of framing houses gave way to the modern "2X4-type" construction only in the 1800s, with the emergence of automated circular saws and mass-produced metal nails.

Wood's Character and Characteristics

In the foreword to Christian Becksvoort's book *In Harmony with Wood*, John Cole writes that understanding is the key to working harmoniously with wood, and that one should understand the idiosyncrasies of planting trees, thinning, pruning, deciding when to cut, drying, shaping, jointing, and finishing. He states that the worth of a finished object is not necessarily in the wood itself, but how well and intelligently it is used. The author takes pains to emphasize the importance of choosing an appropriate wood for a given role. Some species have good rot-resistance, whereas others do not. Some species have a distinctive appearance. Some species shrink more than others during the dry months of winter. In fact, the author devotes considerable space to describing various strategies that woodworkers have used over the years to deal with the much greater transverse shrinkage and expansion of wood, compared to its relatively stable longitudinal length. The author asserts that "in the past, most wood was worked green." Unseasoned wood can be described as soft, pliable, and workable with simple tools, including the manual tools available to craftspeople even in the distant past. By immediately putting the wood to use, as soon as it was cut, it was possible to take various measures to minimize warping – such as incorporating each piece firmly into a structure. "Wood is too precious a resource to be wasted through incompetence," he writes. Sloan's protagonist in the book *A Reverence for Wood* admired the "wood-wise" society that had built the barn, and one can sense a note of self-criticism at the lack of wood-knowledge among the general population of his (our) day. As 44 years have past since the story was written, one can assume that – except for specialists – the general population must know even less about wood.

Lessons from our Forebears

As we move from the "industrialized world" into the "information age" with a renewed urgency for sustainability, wood knowledge will once again become critical for the most efficient and effective use of the world's dominant raw material. Long-living wooden structures without chemical protection will only become a reality if the future professionals once again acquire the detailed knowledge about the use of different species and obtain the fundamental understanding of the techniques best used to achieve long-lasting, beautiful, and functional solutions with wood. Then, we will no longer have to just admire the skills of our forefathers, but can be proud of our own achievements.