From Re-Claimed Wood and Back Again: Reintroducing WWII Salvaging Practices

Madison Nacker

MSU Center for Community and Economic Development

Domicology White Paper Series #3

23 July 2019

Salvage drives were common during the Second World War in the United States in order to collect household goods that could be used in the war effort, but what about the collection of materials in order to build the physical structures of houses themselves? A critical but often overlooked component of the war effort was reuse, salvage, and conservation of materials such as lumber in order to continue construction during wartime. While a large amount of construction was for the military, non-military structures such as homes were built as well. Americans in the 1940's were motivated to salvage and reuse materials out of necessity since there were labor shortages in the construction and lumber sectors. Any new materials produced were needed for the war effort, but in postwar America there is an almost exclusive reliance on the use of virgin wood. Different reasons for the salvage and reuse of materials are manifesting in the 21st century including depletion of forests, climate change, and the growing stream of waste in landfills. By analyzing the practices and procedures for the reuse of building material during World War II, practices could be developed that would work in the present day.

Lumber in particular was a valued commodity during the 40's used not just for shipping containers but for building hangars, barracks, ships, trucks, planes, and bridges. It could be said that "in the Pacific Northwest, the raw material of greatest value to the war grew tall and green" (Burns 2016). This raw material, however, went to the war effort. Local construction such as housing relied on reuse and salvage, and one such home still stands in Meridian Township, Michigan. The home was built in one of the oldest neighborhoods in the Lansing area on Hamilton Road, which

used to be the old plank road to Detroit. Built in 1946, each room in the brick cape cod was built using a different type of wood. Types of wood floors in the home include 3" fir, 1" oak, 3" oak, and 2.5" oak. Closets were built with a different wood from the floors as well.

The current residents of the home, Michigan state representative for District 69 Julie Brixie and her family, discovered the variety of wood and its history as the house underwent a major renovation in 2003. As they made the attic into a master bedroom and added an extension, they realized that between the ceilings, walls, and floors, every other board and joist was reused lumber painted in different colors. After doing some research, Rep. Brixie discovered that the local lumber yard during the war had no men available for milling the lumber, and the only available supply was used lumber from abandoned, destroyed, or deconstructed structures. Many abandoned buildings were thus stripped of usable materials during the time.

The reuse mindset when Representative Brixie's home was built is the same as her and her husband's mindset in the present. They reused as much wood as possible in the renovation as well as salvaged materials of their own: their church, St. Casimir in Lansing, allowed parishioners to take what they wanted before the demolition of a 1920's school on their property. Seventeen oak doors with windows were salvaged from the school to put into the Brixie's home. They also purchased a grain storage facility for only $250 to use as a garden shed, among other small reuse projects. As Rep. Brixie states, "It may cost more in labor, but environmentally you are so far ahead. What I've found from my own home, building materials used before are of incredibly better quality, and gives you a much more valuable product in the end than if you had bought it new." Not only did the construction on

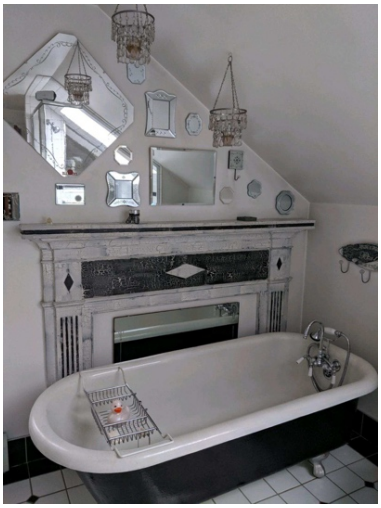

Figure 2: Salvaged Materials in the Brixie's Bathroom

their home have a much lower environmental impact, but it was also within their budget and fit with the look they desired.

The Brixies had a very positive experience with their reuse projects, but it is much more difficult today to find materials like the salvaged structural wood that was already a part of their home. Motivated "do it yourselfers" that are able and ready to find a supply of usable salvaged wood are few and far between. Even with the extra effort needed, however, Rep. Brixie found that job satisfaction was much higher among the construction employees who worked on her home because working with salvage and reuse allowed them to be more creative, think on the job, and the end product was much more satisfying. The workers would come up with new ways to salvage materials on the spot and enjoyed working with a greater margin of error, as nothing was expected to look "cookie cutter," according to Rep. Brixie.

Figure 3: Reclaimed Timber Frame

A new paradigm called Domicology is researching salvage, reuse, and deconstruction. Domicology is the "the study of the economic, social, and environmental characteristics relating to the life cycle of the built environment" (LaMore, n.d.). Domicologists explore the possibilities of structural lumber salvage and re-grading as well as state and local policies that would increase the amount of materials salvaged during demolition and reused in new construction. Currently, it is difficult to reuse structural lumber due to a budding yet inconsistent re-grading system (Schroeder 2017), yet there is an increasing need to find creative and adaptive ways to reuse old buildings and salvage materials. Clearly, pioneers in Domicology like the Brixies have demonstrated that material salvage and reuse has many advantages for homeowners and the environment: a home that lasts generations from salvaged structural lumber is not only possible, but ideal as well.

References

Burns, J. (2016, December 08). How World War II Put the Chainsaw into The Hands of The Northwest Logger. Retrieved from https://www.opb.org/news/series/battleready/chainsaw-history-world-war-2-forests-lumber/

Carolina Timberworks. (n.d.). *Reclaimed Wood Timber Frames*. [Photograph]. Retrieved from https://www.carolinatimberworks.com/our-work/reclaimed-wood-beams/

LaMore, R. (n.d.). Center for Community and Economic Development: Domicology. Retrieved from https://domicology.msu.edu/

Schroeder, L. (2017). Recycling your home: Can structural wood be reused for the same purpose? Retrieved from https://greatlakesecho.org/2017/07/12/recycling-your-home-can-structural-wood-be-reused-for-the-same-purpose/

Von Schmidt, H. (1941). *A Blow to the Axis, More Lumber for the Army.* US Army Official Poster, Washington D.C.