

Moving Historic Properties: A Valid Method of Preservation

During the summer of 2012 I participated in the dismantling of the Demeritt-O’Kane House, a house built in 1808. The Federal Style, two story and center chimney frame house possesses state and local historical significance to New Hampshire. According to James Garvin’s nomination of the house to the New Hampshire Division of Historical Resources (NHDHR), it is significant within the historic contexts defined by the NHDHR in three categories; Mixed agricultural and the family farm, 1630-present, Architecture in New Hampshire, 1623 – present, and Higher education, 1770-present.¹ The house was privately owned from 1808 to 1959 when the house was deeded to the University of New Hampshire. In 2012, the house returned to private ownership when the house was determined to no longer be suitable to the operations of the school’s Child Study and Development Center. Thus began the next stage in the house’s collective history. Preservation Timber Framing, a company in southern Maine, was hired to carefully dismantle, relocate, and reconstruct the house in York, Maine. This deconstruction and rebuilding could be described as a careful dissection and relocation. The overall procedure was performed with precise care, ranging from the removal of interior molding details to the large timbers of the structural frame. Each piece was documented and stored so that a catalogue could be created. This itemization will allow for a more efficient relocation and reconstruction of the house. The objective of this project was to protect a specific historic property from demolition. Using this mindset, it is compelling to investigate how we as a contemporary culture approach the preservation of historic buildings, in particular the ones that were built with notable expertise. In considering the Demeritt-O’Kane House, one can begin to

¹ Garvin, James. *Individual Inventory Form: Israel Demeritt House*. (New Hampshire Division of Historical Resource.) Date of Survey: July 2nd, 2001

marvel at how the original builders and occupants never could have considered the ultimate fate of their homestead. It is also important for historic preservationists to question whether moving the home to a different site, across state lines, severs the house's connection to its historical significance.

There is substantial research that can be done to prove that buildings have been getting moved just as long as they have been getting built. While the definition of preservation is rooted in ensuring that we will continue to be connected to our collective heritage, and it is important to consider how the practice of preservation was performed by our predecessors. As early as the 18th century, during American development for instance, preservation did not have the same connotation. Rather, it was an effort in protecting resources. These resources varied from harvested crops to the building materials and communal efforts encompassed in buildings. For that reason, many of the early relocations of buildings were based on the support of continued agricultural endeavors that helped sustain a community. W.H. Bunting states, “(b)oth post-and-beam buildings and old-time, rural communities survived in good part, by combining a strong basic framework with critical flexibility.”²

The early technology of moving buildings was quite rudimentary. The most advanced technique during the early years in this practice was accomplished by using screw jacks, wooden carriages, steel pole capstans or rope and pulley systems, as well as the brute force of oxen and/or horses. Located at each corner, screw jacks were used to lift the building which was then lowered onto the carriages. Once the carriages were secured to the sill with protruding spikes, the home was attached to the capstan or pulley system.³ Using this process, the early investment

² Bunting, W.H. *A Day's Work: A Sampler of Historic Maine Photographs*. (Gardiner: Tilbury House Publ. 2000) 136-39

³ Paravalos, Peter. *Moving a House with Preservation in Mind*. (Oxford: AltaMira Press 2006) 1-4

that had been put into the construction of the building was sustained. It was a logical procedure that aided in the protection of rural resources; barns and farm houses.

Within an urban context, 19th century relocation techniques became a bit more intricate. This included accommodating enough support for heavier, taller buildings and a consideration for those who occupied the building. The Hotel Pelham in Boston serves as a prime example of these advancements. The size and mass of the building were significant especially due to its masonry construction. It served as Boston's response to urban population growth and was America's first apartment building; containing both commercial and residential space. With the increase of motor traffic in the city, Tremont Street the road adjacent to the building was scheduled to be widened. The owner opted to put the technology of the time to the test and shift Pelham fourteen feet to the west. Nine-hundred-and-two rollers along with seventy-two screws were used to move the building at a rate of one inch per minute. It took approximately three months to complete the entire move, a feat that was accompanied by continued occupancy. Flex tubing and piping were manufactured to maintain continued supply of plumbing and gas to many of the residents who opted to continue living in the Pelham during the three months.⁴

The urban and agricultural examples provide a method by which we can return to a simpler concept of historic preservation. Taking a page from the moving of a barn in the 1800s or the great move of the Pelham, would it not be worth it to reassess what preservation means by today's standards? In this context, preservation should be pursued by whatever means necessary, which includes the relocation of buildings. This is not to say that moving a building is the first method to be pursued. To the contrary, only after all options have been exhausted, then relocation should stand as a valid method of saving a building. According to the National Register, under Criterion Consideration B, "Moving a property destroys the relationships

⁴ Paravalos, 8

between the property and its surroundings and destroys associations with historic events and persons.”⁵ While this statement may be partially true, it acts to discourage this method of preservation. The criterion provides a series of “hoops” that must be jumped through in order for a relocated property to be considered for a National Register listing. A bullet pointed version of the list allows for a simplistic understanding of the criterion:

- Eligibility for Architectural Value:** *Must retain historic features.*
- Eligibility for Historic Associations:** *Must be the single remaining property associated with a historic event or person.*
- **Setting & Environment:** *Must still have orientation, setting, and general environment comparable to original site.*
- Association Dependent on Site:** *Will not qualify if sole reason for historic significance is connected to the original site.*
- Properties Designed to Move:** *Must be located in a historically appropriate setting. (automobiles, railroad cars and engines, and ships)*
- Artificially Created Groupings:** *Artificial groupings not eligible unless achieve historical significance since its assemblage.*
- Portions of Properties:** *Portions of buildings have lost integrity of design, setting, materials, workmanship, and location.*⁶

Conceptually speaking, consider a nationally registered historic building that is in threat of being demolished due to a developer’s acquisition of the site. Also imagine that this building has been bought privately and in order to save it, relocation is the last option available. The building’s new location does not resemble the original site and thus the relocation of the building will likely cause it to lose its status on the National Register. Without this status, the property and its owner loses important incentives such as federally funded grants, federal tax credits, preservation easements, international building and fire code alternatives.⁷ These guidelines appear to be short-sighted and have no consideration as to how history operates. If relocation is the final option and must be performed to assure its survival, is that not a part of the building’s

⁵ “National Register Bulletin: How to Apply the National Register Criteria for Evaluation,” http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_7.htm

⁶ National Register Bulletin

⁷ “NRHP Program: Fundamentals,” http://www.nps.gov/nr/national_register_fundamentals.htm

collective history? I propose that an additional criterion be added to the *National Register's Criteria Consideration B*:

-Adequate Documentation: *Adequate documentation of the building in its original setting and the sequence of its relocation (by text, photographs, drawings, etc) assure that the property's move is another point in its collective history. The property shall become or remain listed if the submitted documentation is approved by NPS professionals.*

While the guidelines under Criteria Consideration B don't entirely discourage relocating properties, they do create a significant hindrance to the practice. The efforts and practice of historic professionals and advocates would be much more successful if collectively we returned to a mindset similar to the 18th century farmer or the owner of the Pelham Hotel. The comparison between the "red tape" of the NPS' Criterion Consideration B and the 18th century farmer reveals the transition in our culture's collective understanding of preservation. What the regulations and jargon have done is to obscure the real reason why we should seize whatever method possible to preserve well constructed properties. Resources deserve solid protection.

In 2007, Richard Moe, the President of the National Trust for Historic Preservation, delivered a speech about historic preservation's role in fighting climate change. During that speech he made a poignant comment. "It all comes down to this simple fact: We can't build our way out of the global warming crisis. We have to conserve our way out. That means we have to make better, wiser use of what we've already built."⁸ Moe is talking about the greater resource of our planet and the built-environment's role within that global context. By approaching historic properties with a "wiser" mindset, Moe is not pointing out a specific how-to-method of doing this. He is simply saying it must be done. For this reason, there must be an open approach

⁸ Moe, Richard. "Sustainable Stewardship: Historic Preservation's Essential Role in Fighting Climate Change"

in which all methods of preservation are worthy of consideration. Thus relocation belongs as an equally important technique in the preservationist's "tool belt."

Additionally, Moe also points out how through historic preservation our society is provided with a tangible linkage to our past. This linkage, embodied in surviving national historic properties, provides us with a working knowledge of society's past successes and failures which allows for us to refine our future.⁹ It is in society's best interest to access information about past techniques in preservation not only to understand procedures, but also to reflect on the surrounding philosophies of such techniques. The agricultural landscape posed some challenging circumstances for the 18th century farmer, and economically in some cases the moving of a barn was a sound option. During this time period, in order to support livestock and crops, it would not be uncommon to move a barn to access a better water source.¹⁰ A problem of this nature is quite foreign to modern man, but the philosophy has not changed. It has just been hidden.

The evolution of both why and how buildings are relocated is another indication that the practice is a valid method of preservation. Consider how the automobile has shaped and shifted how we live today. With more and more advancements, the motor industry is addressing the complicated predicament of global warming and responding by creating more efficient and cleaner running cars. Buildings, similar to the automobile, are entities that were constructed to enhance our way of life. The built environment plays a significant part in our global warming and "taking care of what is already built"¹¹ is an endeavor in which all options should be considered.

⁹ Moe

¹⁰ Bunting, 136

¹¹ Moe

The threat of demolition is one of the most common reasons a building will be moved. As a Richard Moe points out in his speech, “demolishing a 50,000-square-foot building would create nearly 4,000 tons of waste. That’s enough debris to fill 26 railroad boxcars- headed for a landfill that is already almost full.”¹² Using common sense, one can see that preservation through the maintenance of a building is the most sustainable practice that can be exercised. Paravalos spells it out in his text that fifty trees are saved per home moved; one tree yields 100 board feet, an average home requires 5,000 board feet. By tallying up these numbers, he deduced that based on the estimated 35,000 buildings moved annually, approximately 1.75 million trees are saved each year.¹³ In combination with these figures, also take into account the drastically reduced carbon foot print when the entire new construction phase is removed from the equation. To move a threatened building, of any square footage, is an integrated component in the support of a sustainable environment.

In the profession of Historic Preservation, the moving of properties should be embraced, not discouraged through a series of restrictive guidelines. According to the most recent publication released by the U.S. Department of the Interior, John Obed Curtis lists three methods to moving a property; moving intact, total disassembly, and partial disassembly. As Curtis points out, the optimal procedure to ensure retaining of the architectural fabric is moving a building intact.¹⁴ Looking at some examples of intact moves provides a better understanding as to the benefits of this practice.

The advancement and precision developed by structural movers is a testament to the importance of protecting the built environment. An early moving pioneer, John Eichleay, Jr. is

¹² Moe

¹³ Paravalos, 16

¹⁴ Curtis, John Obed. *Moving Historic Buildings*. (Washington D.C.: Heritage Conservatio and Recreation Service. 1979) 19-23

most notable for his move of a mansion 163 feet up a cliff face in the year 1903. Using a hybrid of landscaped manipulation of the cliff and traditional timber cribbing and rigging with screws and horse power only, Eichleay saved the mansion from destruction.¹⁵ While the move of the building ultimately cost more than the construction of the home itself, and was thus not an economically sound endeavor, the feat paved way for future complicated moves.

In Carlo Massarella's source *Monster Moves*, he tells the stories of a variety of different relocations. Each one is unique due to the type of property, the old and new sites, and the method of its transport. The endless possibilities of challenges that are likely to be encountered during relocations have pushed movers and preservationists to be adaptable and to utilize modern technology and machinery. All methods employ the same technique of trying to "fool the building into thinking it's not being moved", meaning that in order for the building to remain perfectly intact, it requires maintaining at a level state in order not to disrupt or compromise the structural integrity of the building.¹⁶ Structural movers have mastered lifting buildings over other buildings, as well as transporting them by water, on the back of flat bed trucks, by crane, etc. in such a way that proves moving buildings is a viable technique. These feats are not solely exercises in vanity or a display of brute force and ingenuity; they are also legitimate means towards protecting the built environment. While a building in transit is a novel event, structural movers over time have developed and fine tuned a tool that enables preservationists to ensure the survival of threatened historic resources.

Each year buildings continue to be saved from the wrecking ball by moving them to new locations. As a society, we need to understand our role in the survival of our built environment, particularly by saving historic properties with structural value. History does not end with our

¹⁵ Pavaralos, 9-11

¹⁶ Massarella, Carlo. *Monster Move: Adventure Moving the World's Biggest Structures*. (Buffalo: Firefly Books Inc.) 11

actions. Time will continue to pass and threats will arise, both expected and unexpected, to historic structures. If by some unfortunate event a historic property is on the brink of its demise by demolition, its relocation ensures the continuance of its historic merit. Within the global environment that we have created, it is important to recognize existing resources and protect them. This lesson can be learned from the persistence of our ancestors who supported their communities with the aid of oxen or horse or by the turn of a capstan. We have not developed these techniques to simply discover if particular moves are possible. Rather we have developed these techniques as an assurance that relocation will remain an option in the preservation of historic places.

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