

The Specification as an Instrument for Colonizing Oceti Sakowin Lands

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ABSTRACT: In the nineteenth century, the United States positioned itself for industrial expansion by identifying potential territories for raw materials. Political agreements, such as treaties, formed the initial instruments for converting large swaths of indigenous lands into material territories. As treaty negotiations ended with the 1871 Indian Appropriations Act, new forms of agreements replaced them. Specifications emerged in architecture and construction as authoring tools for remote building sites as well as instruments for further delineating unresolved territories. As settlements filled presumably unoccupied lands, a growing need for lumber appeared. White Pine timber offered a solution with sources identified in the northern plains, a region occupied by Oceti Sakowin peoples. A close examination of the treaties and specifications written for white pine extraction and production reveals the specification as a political instrument for colonizing Oceti Sakowin lands.

Colonization extends across multiple scales in the built environment. In *At the Border of Decolonization*, Andrew Herscher and Ana María León unfold colonial processes as the “practice of seizing land from indigenous peoples. Colonization depends on the transformation of land and water into bordered territory that can be claimed, surveyed, defined, depopulated, and resettled” (Herscher & León, 2020). Though Herscher and León’s writing suggests cartographic images of vast bordered territories, colonial processes impact the building and material scales as well. Beyond scale, these processes share a common foundation; they are deeply grounded in the political agreements that shape them.

During the nineteenth century, the colonization of indigenous lands became synonymous with treaty negotiations made between the United States and indigenous tribes. Treaties comprised the political agreements that displaced indigenous lands into bordered US territories. As treaty writing abruptly ended with the 1871 Indian Appropriations Act, new forms of political agreements further expanded US colonization. Though the seemingly empty territories had been surveyed, defined, and mostly depopulated by 1871, the spaces had only started to be resettled. Simultaneously, the architecture and construction community in the US had embarked on a radical restructuring of agreements through organizations that governed the social, economic, and labor culture of building sites. Specifications materialized as tools of authorship for

the emerging profession of architecture (Osman, 2020). As technical documents, specifications allowed architects to control building sites from a distance through the selection or disregard of certain types of work and materials. As political agreements, specifications tied architects to the vast territories needed for material extraction and production. At the building and material scales, specifications became a political tool for resettling and extracting material from colonized land.

The westward expansion of US territory was ushered through white pine lumber. Used primarily in house construction, white pine offered resilience to warping and shrinking and was easy to saw. In the nineteenth century, potential white pine territory was identified in Oceti Sakowin lands, leading to a series of negotiations and conflicts between white settlers and Oceti Sakowin peoples. Oceti Sakowin, or people of the seven council fires, had inhabited the northern plains region of North America for centuries. Treaties and specifications defined the political agreements for colonizing their lands. By examining initial treaties written between the US and Oceti Sakowin peoples, specifications written for white pine houses, and the specifications written by white pine institutions, this paper unfolds the specification as a political instrument for colonizing Oceti Sakowin lands.

1 TREATIES MAKE TERRITORIES

“The first pine cut in the state [of Minnesota] was in 1818, at Rum River, and was used in the construction of Fort Snelling. The fort being sufficiently advanced for occupancy by 1822, a saw mill was built under supervision of the officers at the fort, at the falls of St. Anthony near Minneapolis” (Hotchkiss, 1898). This excerpt from George W. Hotchkiss’ 1898 publication, *History of the Lumber and Forest Industry of the Northwest*, establishes an origin for the white pine lumber industry in the state of Minnesota, even before declared statehood in 1858. More importantly, Hotchkiss’ statement ignores the history of the white pine forest and its inhabitants prior to industrialization. For centuries, the locations delineated by Hotchkiss had been inhabited by Oceti Sakowin peoples.

Dakotas, Lakotas, and Nakotas, or Oceti Sakowin peoples, originated from a single council fire among the pine forests of Mde Wakan, known presently as Mille Lacs, Minnesota. The confederation eventually split into Dakota, Lakota, and Nakota divisions with each band occupying various locations within Oceti Sakowin lands. Solid borders and permanent dwellings did not define the land, but rather intergenerational habitation by the nomadic Oceti Sakowin peoples in the northern plains region of North America (Figure 1). Other tribes inhabited space adjacent to the lands, including Ojibwe peoples, who dubbed Oceti Sakowin peoples “Nadeowaseau” a word meaning “Little Enemy”. The name was later shortened to “Sioux” by French settlers. By 1868, the immense expense of land occupied by Dakotas, Lakotas, and Nakotas had diminished into twenty-five bordered, sovereign reservations (CAIRNS, 2012).

Treaties enabled the United States to acquire Oceti Sakowin lands and other indigenous lands through negotiated contracts. From 1805 to 1868, thirty-four treaties were negotiated between the US and Oceti Sakowin oyates or nations. The first treaty agreed upon by Lieutenant Zebulon Pike and Dakotas on September 23, 1805 ceded the land defined by Hotchkiss as the locations of the first pine cut, the first fort built, and the first saw mill established in the state of Minnesota. The first article of the treaty reads, “That the Sioux Nation grants unto the United States for the purpose of the establishment of military posts, nine miles square at the mouth of the river St. Croix...” (Treaty with the Sioux, 1805). Beyond the cession of land, the treaty established two tactics for treaty writing. First, the treaty identified the Oceti Sakowin confederation as a sovereign nation, although the improper “Sioux” was written. Second, the confederation was given authority to grant land to the US. Controversy cloaked official ratification, mainly because Lieutenant Pike acted as an agent of the US without authority and because Dakota leaders, who needed translators, did not represent all Oceti Sakowin peoples. Without regard for proper

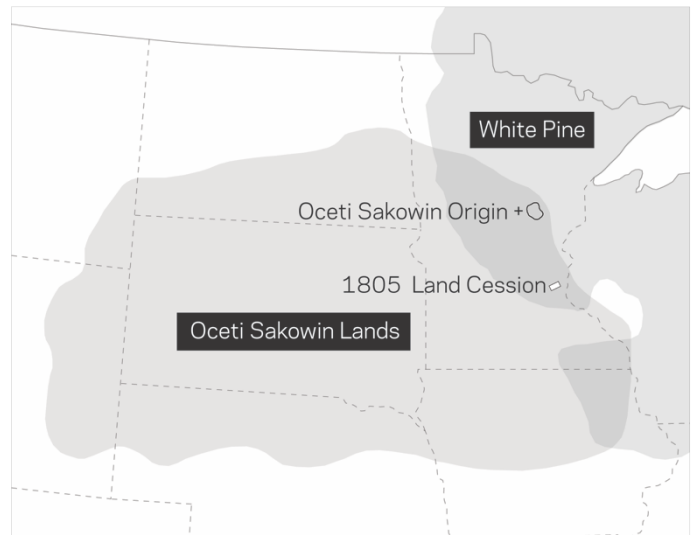


Figure 1. Oceti Sakowin Lands and potential White Pine Territory in the northern plains, 1805.

representation, the treaty still established the first location of white pine extraction in former Oceti Sakowin lands and laid the groundwork for future expansion of white pine production in US territory.

The final treaty made between the US government and Oceti Sakowin peoples, the 1868 Fort Laramie Treaty, emerged after decades of conflict between the two nations. Language not only reflects an exchange of authority over the land, but also implements methods for inhabiting and constructing a more permanent built environment within the bordered reservations of the “Great Sioux Nation.” Article IV of the treaty reads, “The United States, agrees at its own proper expense, to construct, at some place on the Missouri River, near the centre of said reservation where timber and water may be convenient, the following buildings to wit, a warehouse, a store-room for the use of the agent in storing goods belonging to the Indians, to cost not less than \$2,500...The United States agrees further to cause to be erected on said reservation, near the other buildings herein authorized, a good steam circular saw-mill, with a grist-mill and shingle machine attached to the same, to cost not exceeding \$8,000” (Treaty of Fort Laramie, 1868).

These written directives instituted the construction of Fort Bennett, a collection of timber military buildings along the banks of the Missouri River. Though the construction of Fort Bennett transpired outside of white pine territory, its position in Oceti Sakowin lands connected it to the territory’s origin. Ultimately, the written directives supported the ubiquitous spread of timber construction in the US through the establishment of permanent settlements. For Lakotas and Nakotas, who were nomadic, forced settlement produced systems of enduring spatial control. As saw mills became synonymous with settlements, their construction aided colonization.

2 SPECIFICATIONS MAKE SETTLEMENTS

Hundreds of treaties were written between the United States and indigenous tribes in the early nineteenth century. As treaties generated territories through the inscription of bordered land, settlements arose to fill and lay claim to smaller plots (Herscher & León, 2020). US Legislative Acts such as the 1862 Homestead Act encouraged and further enabled white settlers to claim up to one-hundred and sixty acres of surveyed plots if they could live and build upon them. In 1871, settlement making advanced colonization as treaty writing between the US and indigenous tribes abruptly ended with the Indian Appropriations Act. The Act stipulated that “no Indian nation or tribe within the territory of the United States shall be acknowledged or recognized as an independent nation, tribe, or power with whom the United States may contract by treaty...” (Indian Appropriations Act, 1871). If treaty negotiations had established procedures for writing political agreements between two nations, the Indian Appropriations Act of 1871 effectively diminished the status of tribes. Dakotas, Lakotas, and Nakotas were further named wards of the US. Land was no longer agreed upon as bordered territory, but rather taken through built settlements. Years of historic conflicts such as the Wounded Knee Massacre and Battle of Little Big Horn ensued. In spite of this, new forms of political agreements evolved to aid in the settlement of former Oceti Sakowin lands.

Concurrent to the making of territories, the architecture and construction community in the US launched a radical restructuring of agreements through organizations that governed the social, economic, and labor conditions of building sites. Architectural professionalization in the US started with the founding of the American Institute of Architects in 1857 and continued with the spread of uniform instruments used for practice (Johnston, 2020). Contracts, drawings, and specifications arose as agreements made among architects, contractors, and owners. As industrialization intensified access to new methods of material extraction and production, the specification materialized as the most direct link to the expansion of newly formed US territories and their raw materials. The origin of specification writing in the US underlies this territorial settlement production.

In architecture, the specification grew as a tool for authorship (Osman, 2020). Though current standards issued through institutions such as the Construction Specification Institute (CSI) impact contemporary writing, specifications had developed long before standardization. Beyond the legal requirements they addressed, specifications offered a written format for translating the organization and sequence of work on a construction site from architect to contractor. The political and economic impacts of the document stemmed from the architect’s agency to select or disregard certain types of work and materials for a

building site. Like other architectural and construction practices in the US, specification writing can be traced to England during the mid-eighteenth century, when architects’ supervision of the site had shifted to contractors (Lloyd Thomas & Amhoff, 2015). Written directives allowed architects to conduct work remotely. The written format stemmed from English patent directives used to supplement drawings. Newly industrialized tools and equipment needed writing to instruct their operation. As Michael Osman indicates in *Specifying: The Generality of Clerical Labor*, written directives carried into patent law in the US starting in the 1790’s. In the lumber and timber industry, new machines powered by steam needed to be explained through writing rather than drawing; specification writing subsequently swept through industry (Osman, 2020). In industrial and architectural production, specifications allowed control over the operation of equipment or the construction site in the absence of oral directives. As political agreements, specifications tied architects to the territorial production of settlements.

Once treaty writing between the US and indigenous tribes halted with the 1871 Indian Appropriations Act, the treaty expired as a political tool for colonization. Alternatively, specifications replaced the treaty as a tactic for occupying fresh territories. Specifications and treaties share some similar objectives, although primary differences lie in their explicitness and the make-up of the agreeing parties. Treaties are negotiated and made between two nations for control of territories; specifications are agreed upon between an architect and contractor for control of building sites. If treaties determined who occupied the land, specifications determined how the land should be occupied.

In the mid-nineteenth century, some of the first specifications written in the US were by architects who designed wood-framed buildings (Osman, 130). These were largely distributed through building manuals and pattern books written for houses intended to fill newly expanded US territory. One pattern book was George E. Woodward and Edward G. Thompson’s *Woodward’s National Architect*, published in 1869, one year after the ratification of the Fort Laramie Treaty. Based in New York, Woodward and Thompson understood the role of specification writing in maintaining control of building sites from a distance. In the introduction they write, “the forms of specifications given are such, that they may be adapted to any of the designs, so that full and final estimates can be obtained from local builders. They will also serve as hints for the preparation of specifications for any class of dwelling houses” (Woodward & Thompson, 1869).

Nineteen designs for dwelling houses and three sets of specifications categorized according to carpentry, masonry, and plumbing comprise the bulk of *Woodward’s National Architect*. The authors’

promise of adaptable specifications is made evident in the generic language used to define timber quality and type. “Furnish all the Timber used in the construction, of good sound square-edged quality, free from any and every imperfection tending to impair its durability or strength, and as well seasoned as any convenient market will afford. The Sills, Posts, Floor Joist and Rafters, to be of Chestnut, Pine or Spruce, and the remaining framing timber of Hemlock, Pine or Spruce, at the option of the Contractor” (Woodward & Thompson, 1869). Quality was interpretable as classification systems were non-existent and the species of wood was left to local market availability. Contractors were given agency to choose the quality and type of wood depending on their location.

In spite of the generic language used for accommodating local available materials, moments of specificity do arise in modes of construction made possible through white pine. “Furnish all the lumber of white pine where not otherwise specified of good sound quality, and as well seasoned as the market affords” (Woodward & Thompson, 1869). This material focused directive speaks to the ubiquity of white pine as an already available construction material in the Northeast region of the US. As territories were colonized in the west, potential extraction sites such as Oceti Sakowin lands were identified for production of the lumber.

Timber building manuals and pattern books like *Woodward's National Architect* were prolific and instrumental for occupying new US territory. The generic drawings and specifications contained in the manuals and books allowed for flexible adaptations of houses to be constructed across multiple building sites. As territories were divided and constructed upon, the collection of permanent houses along with other civic and public buildings solidified settlements into new urban towns and cities. Specifications allowed these building sites and settlements to be controlled remotely. More importantly, moments of specific material selection written in the specifications, such as white pine lumber, implicated architecture and construction in the expansion of territories needed for raw material.

3 TERRITORIES MAKE MATERIALS

Colonization of Oceti Sakowin lands was impacted by territorial settlements as well as the extraction and production of white pine lumber. As previously discussed, the first pine cut, the first fort constructed, and the first saw mill built in former Oceti Sakowin lands manifested through the first treaty negotiated between the US and Dakotas, Lakotas, and Nakotas in 1805. The treaty produced a territory identified for its raw material. Yet, raw material remains useless in architecture and construction until it has been processed and moved to a building site. Specifications make this

transformation possible. In *Empire, State & Building*, Kiel Moe explains the connection between the document and territory by stating, “it is evident that every specification for construction immediately invokes a specific territory, a specific intake and circulation of matter/energy, and has a specific inherent velocity, all of which remain abstract and unknown to architects” (Moe, 2017). Though specifications are briefly explored in Moe’s examination of the Empire State Building, Moe’s statement regarding their invisible impact upon territory is profound. White pine specifications written in the nineteenth and twentieth century therefore were political instruments for the colonization of territories needed for extraction and production. Part of the invisible relationship Moe describes between architects and material territories originates from the evolution of specification writing in the US. For example, the generic language found in George E. Woodward and Edward G. Thompson’s 1869 specifications pursued a particular building typology constructed with discretionary timber species. With industrialization, typologically organized specifications gave way to guides written by material producers and institutions for optimizing material selection according to lumber grades and classifications. In this way, the specification became more specific. In the US, this evolution lasted decades and unfolded concurrently with the occupation of indigenous lands. For Dakotas, Lakotas, and Nakotas, colonization occurred through the advancement of white pine. Specifications for the material evolved with it.

After the 1805 treaty negotiated between Lieutenant Pike and Dakota leaders established the initial territory for white pine extraction, other potential sites were identified and treaties followed. Despite this, turbulent encounters between white settlers and indigenous peoples surfaced frequently. Beyond the origin of white pine territory, George W. Hotchkiss’ *History of Lumber and Forest Industry of the Northwest* tells of one particular encounter between a group of lumbermen and Ojibwe peoples. “In 1838, a party of lumbermen who were operating on Snake River, in anticipation of the ratification of the treaty of 1837, were attacked by a band of Ojibways and fled down the St. Croix in their canoes; a few miles below the falls they were met by the first steamboat that had ever ascended the St. Croix, and from her learned of the ratification of the treaty; this led to their return and resumption of their logging operations in which they were no longer molested” (Hotchkiss, 529). This form of occupation, legitimized through treaty making, connected territorial control with material production.

Extraction makes evident the latent potential of white pine until production renders it useful for construction. Saw mills and forts were essential to this production. Saint Anthony Falls, the only major

natural waterfall on the upper Mississippi River, became the site and power source for the first saw mill in former Oceti Sakowin lands. Built in 1822, the saw mill resulted from the 1805 treaty and the subsequent construction of Fort Snelling. Forts not only reinforced points for trade, but also the protection of material production. In 1858, settlements such as Minneapolis and Stillwater arose from the territory to help sanction statehood for Minnesota. By 1870, both settlements had grown into cities with seventeen saw mills between them. Together these mills produced over two-hundred million feet of lumber, one-hundred million shingles, and almost fifty million laths in 1873, all valued at seven million dollars (Hotchkiss, 1898). Though processing white pine developed as a lucrative economic venture, moving the material was limited. Lumber had to be rafted to points along the Mississippi and St. Croix Rivers. The introduction of railroads into the US landscape brought forth methods for moving white pine outside of the territory.

In the second half of the nineteenth century, white pine extraction and processing had already pushed Dakotas to western lands occupied by their Lakota and Nakota kin. The open lands guaranteed a nomadic life for following and hunting bison. However, the open land also provided potential ground for US railroad expansion. Beyond ending conflict and establishing a more permanent built environment, the 1868 Fort Laramie Treaty also introduced railroad construction to the remaining Oceti Sakowin lands. Article XI compelled Lakotas to relinquish territory outside of defined reservations and to ignore US settlers traveling through the territory. Railroad construction dominated the explicit intentions of the agreement. Article XI reads, “And they, the said Indians, further expressly agree: First, That they will withdraw all opposition to the construction of the railroads now being built on the plains. Second, That they will permit the peaceful construction of any railroad not passing over their reservation as herein defined” (Treaty of Fort Laramie, 1868). Railroad construction was tied to the territorial implications of white pine extraction and the further colonization of Oceti Sakowin lands. As railroads populated new US territory, new methods for moving materials from Minnesota’s saw mills prevailed. By 1880, Minnesota dominated white pine production in the US; “lumbering” in Minnesota became synonymous with white pine (Figure 2). More first class saw mills and lumber companies appeared throughout the state. Directories such as Rand McNally & Company’s 1891 and 1893 *Lumberman’s Directory and Reference Book of the United States and Canada* categorized wholesale, retail, commission dealers, and manufacturers according to location and the types of timber sawed or dealt in. The reference book also offered rules for inspection, classification, and measurement of lumber and provided state laws for lumbering. Finally, the book indexed hundreds of railways, water routes, and express

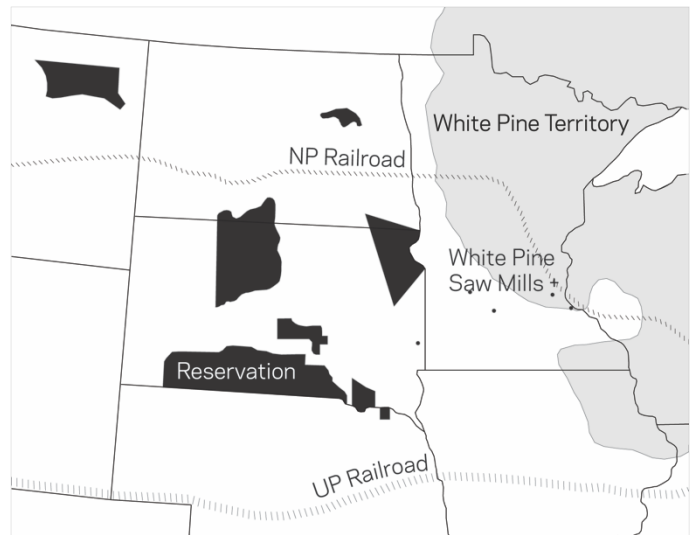


Figure 2. White Pine Territory and Oceti Sakowin Reservations in the northern plains, 1890.

companies for moving material. Directories like these put forth initial standards for developing the lumber industry and solidified extraction and production practices essential to colonial tactics in the US.

At this point, lumber manufacturers and institutions transformed specification writing practices by issuing optimized guides for architects to reference. Bureaus and Associations formed to market lumber for use in construction. In 1915, the White Pine Bureau organized and established its headquarters in St. Paul, Minnesota across the river from the white pine saw mills. The Bureau represented two White Pine organizations: The Northern Pine Manufacturers Association of Minnesota, Wisconsin, and Michigan and the Associated White pine Manufacturers of Idaho. Responsibilities of the Bureau included promotion through publications such as *The White Pine Series of Architectural Monographs* (Whitehead, 1917-1918). As these books exhibited structural and architectural applications, the bureau offered a more direct guide for specifying the material in the 1917 *White Pine in House Construction and White Pine Standard Grading Rules*. Organized according to standards in three territories, the stated purpose of the guide was “to furnish Architects with such authoritative information as will enable them to easily and correctly determine and as a result to properly specify the various grades of White Pine Lumber desired for use in house construction” (Lindsay, 1917).

Because natural inconsistencies such as knots and warping were common in lumber, the aim of the manual was to “harmonize the natural differences which exist in the characteristics of the different stocks” (Lindsay, 1917) in order to create equal market values. To use the guide as a writing tool, architects first determined the territory from which the white pine would be extracted from, such as the Northern Pine Manufacturers Association’s territory in Minnesota, Wisconsin, and Michigan. Then, a class of use was

selected. Class one referred to houses of the highest grade in which quality outweighed costs. A class three house elicited cheapness in which cost was prioritized over quality. Class of use determined the subsequent grading rules for white pine. Next, architectural elements and their location within the house were considered. Sill & Posts, Box Sills, Joists, Floor Linings, Studding, Rafters, Sheathing, Cornices, Fasia, Shingles, and Lath were a few of the thirty-one architectural elements categorized. Finally, a grade of white pine was selected according to its location in the construction of the house. White Pine Finishing, Beveled Siding, Flooring, Shiplap, Grooved Roofing, Common Boards, Fencing, Dimension and Timbers, Thick Common Lumber, Factory Lumber, and Lath could be selected according to a letter grade (B through E) or a number grade (one through five). Photographic reproductions and descriptions of the grade, stock sizes, recommended uses, and approximate differences in cost between grades accommodated this information in order to solidify the architect's decision. The method of selection considered in the guide optimized white pine specification writing for architects. The *White Pine in House Construction and White Pine Standard Grading Rules* directly connected resulting specifications to a territory. Unlike *Woodward's National Architect*, which simply suggested white pine, architects in 1917 could determine which territory white pine would be sourced from. In the publication, grades and lumber sizes were explicit; implicit were processing and movement locations as well as trees and land needed for extraction.

4 CONCLUSIONS

From the first white pine tree cut along the Rum River in 1818 to the material's standardized production, specifications written for white pine construction were entangled in the territorial marginalization of indigenous lands. Specifications included in building manuals, pattern books, and manufacturers' guides implicated architecture and construction in the historical transformation of Oceti Sakowin lands into white pine territory. As political agreements, treaties and specifications are both accountable for the creation of territories, although the delineation of seemingly unsettled land is more directly linked to treaty negotiations. Yet, specifications create an initial need for territories and the raw materials they possess. The increased selection of certain materials and products expand territories to meet demand. The evolution of white pine specifications from the mid-nineteenth century to early twentieth century further supports this correlation. Generic language written in pattern books such as *Woodward's National Architect* of 1869 indicate unknown territories for the extraction and production of lumber. In the book, directives written for houses intended to resettle newly acquired

territories in the US offered substitutes in the absence of materials like white pine. Later specifications written in the early twentieth century by institutions such as the White Pine Bureau indicate a shift in precision. As territorial borders and locations solidified, so too did points of extraction, saw mill construction for processing, and railroad expansion to move the material. Specific territories advanced precise specifications. Size and quality of the material were meticulously considered. In architecture and construction, the effects of white pine extraction and production in former Oceti Sakowin lands extend beyond a simple reckoning with historic colonial practices. Instead, specifications must be understood as instruments for connecting seemingly benign material selection to vast territories.

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