# UNIVERSITY OF ARKANSAS.

# STRUCTURAL LUMBER IN SUSTAINABILITY

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## THE PROBLEM

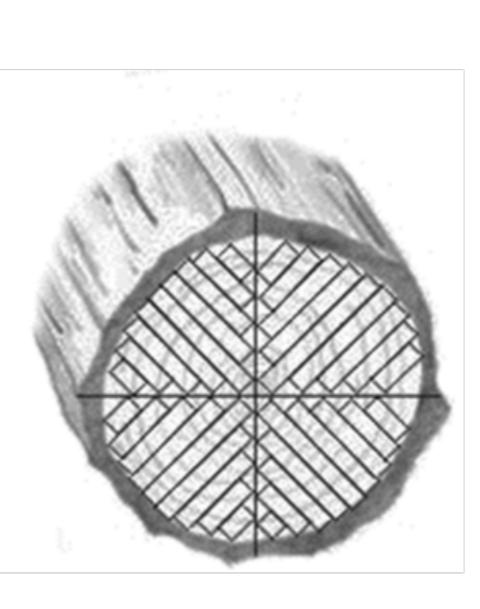
The understanding to find a new fundamental way to incorporate sustainable life resolutions into daily activities isn't always new ideas. Sometimes, the problem that we need to fix, isn't always the problem. In way's, reaching back to the roots of aestheticism and convenience provide older resolutions to newer ideas. And using these resolutions in a manner that can obviously continue our way of life without jeopardizing future generations and rejuvenate the thought processes that go into sustainability.

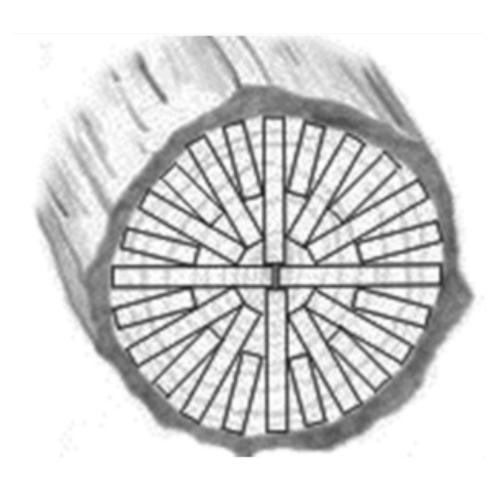
#### THE PROJECT

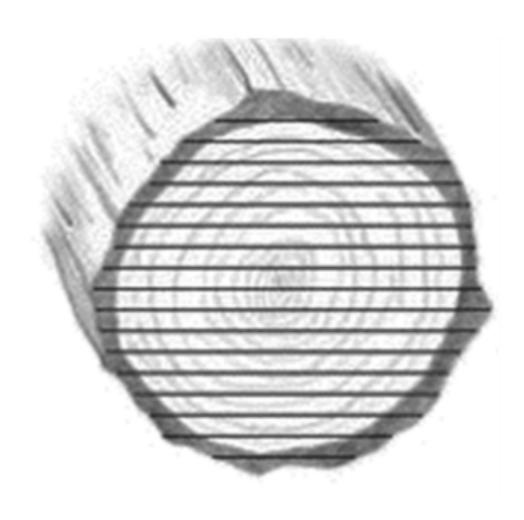
The project revolves around structural lumber, and how we can repurpose the ideas of using it. So not only is it being used to define a material that is more sustainable than other materials but to evaluate it on how it corresponds with the earth we live on and use it. Methods used would contain research, evaluations, and comparisons on how well it's properties are and how they can be distinguished between differing materials such as steel. Examples could be configured from the elasticity of a member when it comes in contact with loads, and how well that translates from loading properties, to cost, and it's overall life cycle analysis.

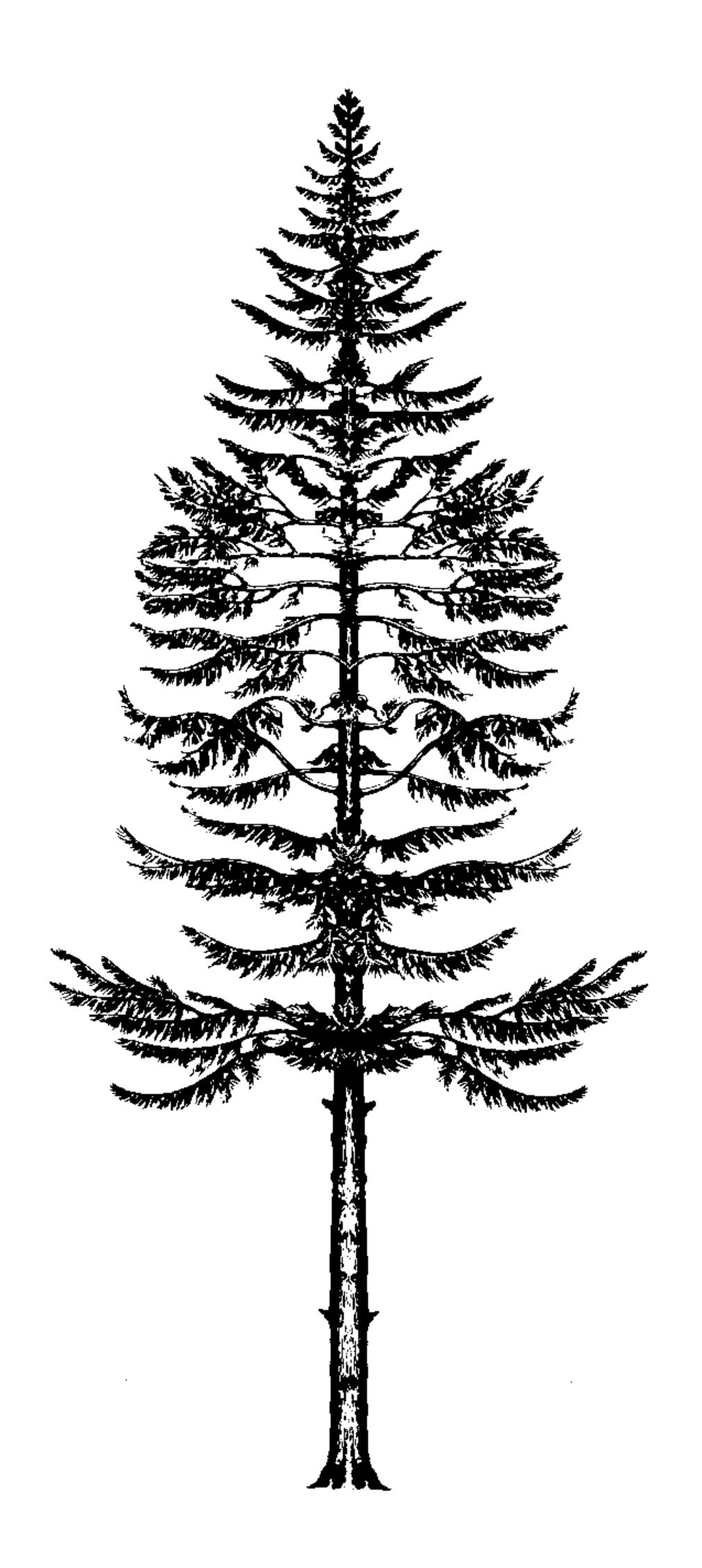
## THE OUTCOME

Structural lumber being used in a industry that relies so heavily on convenience and cost really plays well when choosing this material. So the outcome of life-cycle cost analysis really stands no chance.









### SUSTAINABILITY

The project enriches the ideas that go into sustainability, especially since it's such a familiar and worldly member to obtain. But, the extremities that go into the processes of how structural lumber compares to other materials is misconceiving. Considering the fact that no two material are alike, the idea behind searching for better materials in the sustainability field isn't always about find new extravagant ways to incorporate in the construction process. It sometimes just comes down to regulating the aesthetic ideas of precedent forming fundamentals.

#### **EXPERIENCE**

This project has been influenced by a lot of contributing factors through experience and applicable research. From the beginning, the idea was to familiarize myself with properties of certain application, and try to manipulate the generalized form of what it has been defined by. And in this case, structural lumber is infinite when unmasking the true potential that it offers. So, in a sense, the project isn't really over until there is a material that can widely outstep the properties of structural lumber.