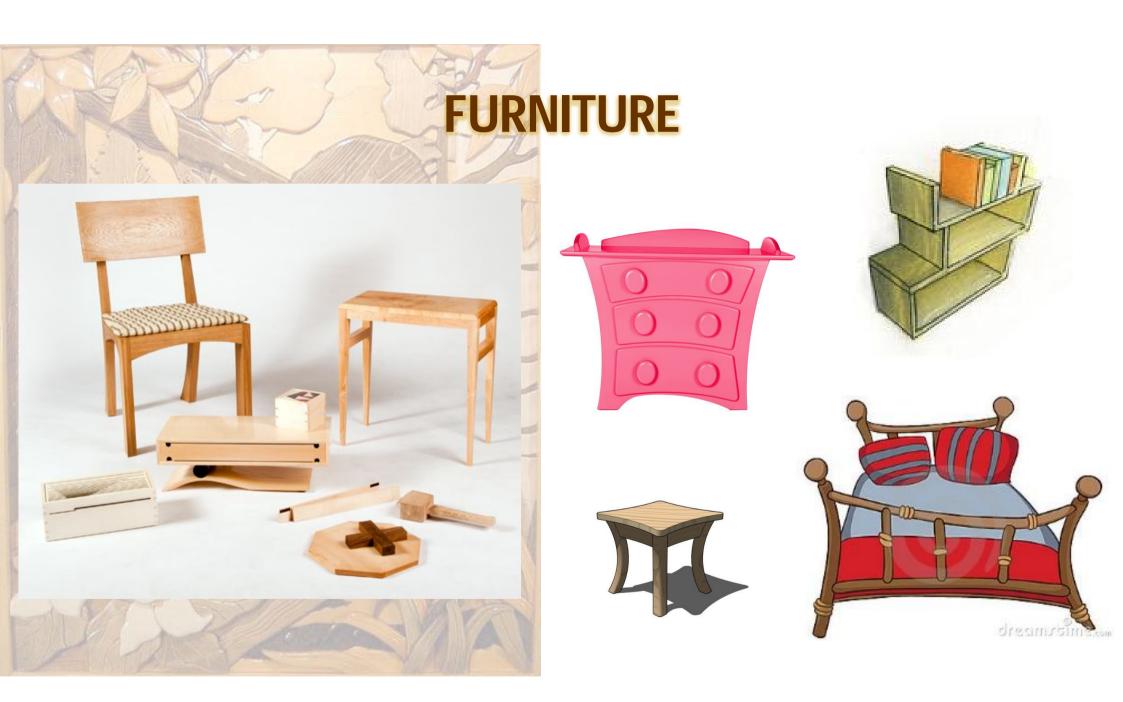
TIMBER FOR FURNITURE – ITS LIMIT IS YOUR IMAGINATION

Dr. Wong Tuck Meng

Director, Timber Industry Development Division, Malaysian Timber Council





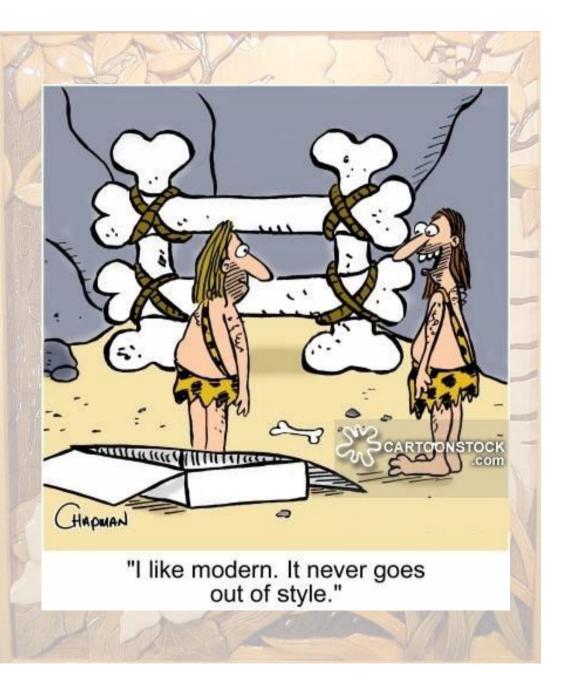
Why Timber is Popular?

Workability





Large variety of species available

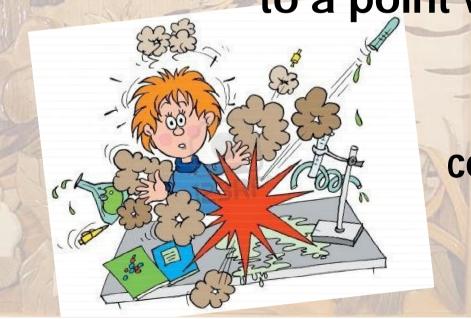


If a furniture designer only sticks to few proven species, customers will eventually get tired of the same old material and style.

Understand the material



to a point where you are



comfortable to experiment

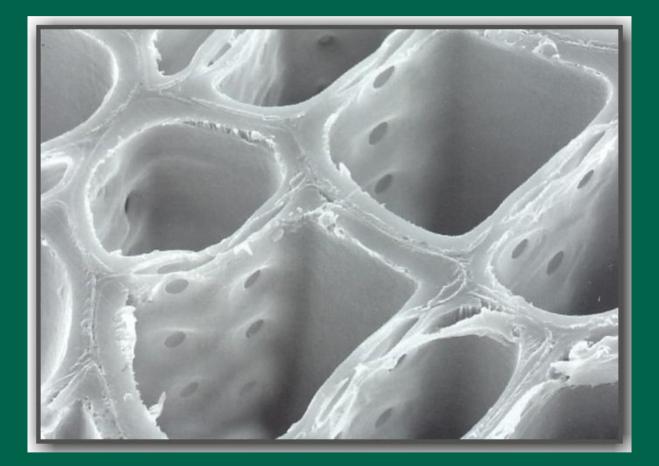
What timber is all about



NATURE OF WOOD

• ()

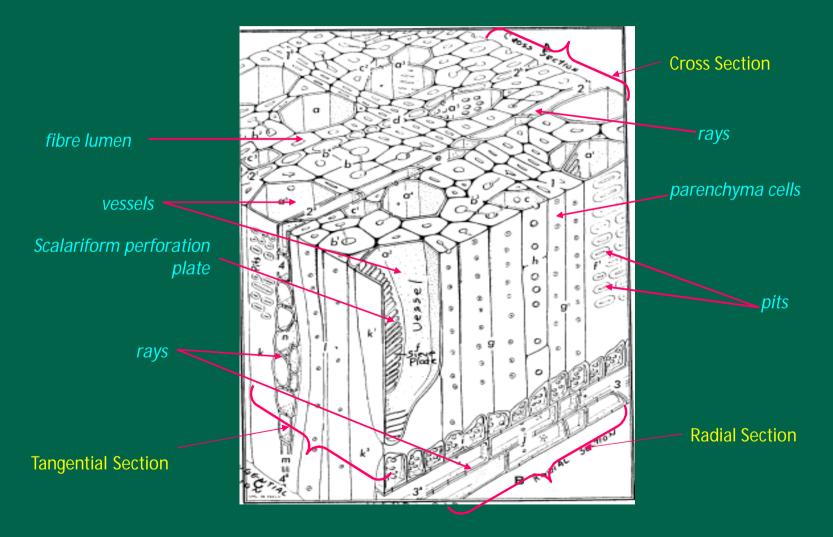
WOOD IS A BIOLOGICAL MATERIAL



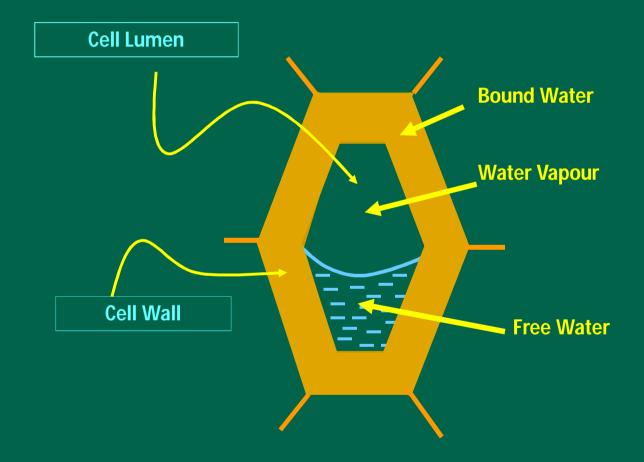
NO TWO PIECES OF WOOD IS EXACTLY SIMILAR



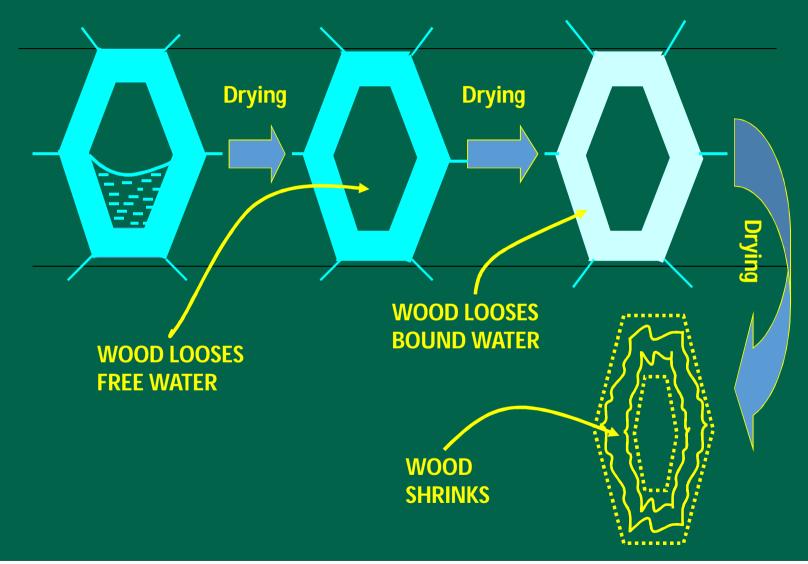
WOOD IS ANISOTROPIC



WOOD IS HYGROSCOPIC



HOW DOES WOOD SHRINK?



WOOD IS BIODEGRADABLE









DESIRABLE PROPERTIES



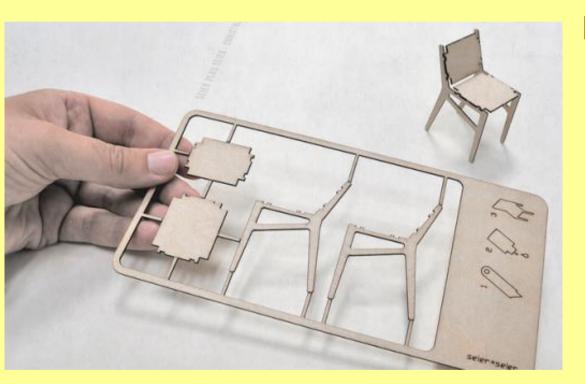
WORKING PROPERTIES



Drilling

Gluing

Polishing



Planing

Finishing

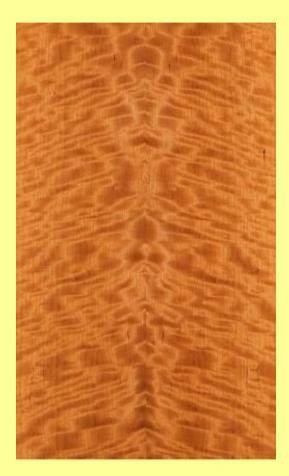
Staining

COLOUR

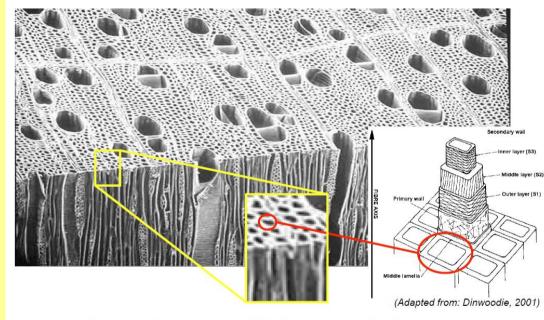


FIGURE





GRAIN



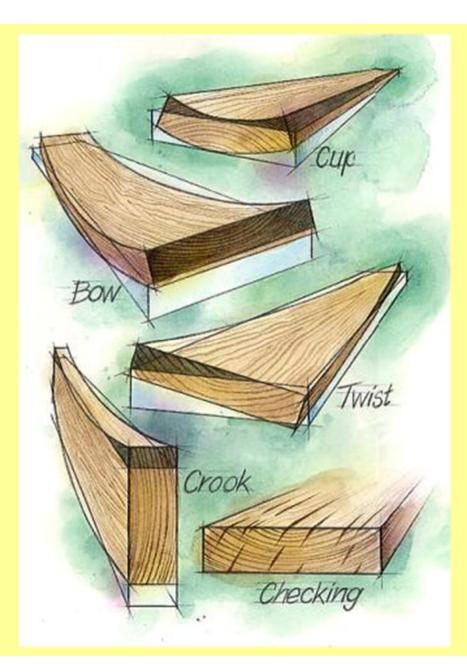
(Source: Society of Wood Science and Technology)

Coarse

Fine

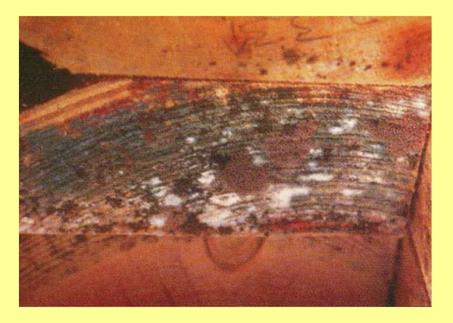
DIMENSIONAL STABILITY





DURABILITY





CHOOSING TIMBERS FOR FURNITURE

WORKING PROPERTIES

Select timber with good working properties



Bintangor



Dark red meranti



Nyatoh

Ebony Despite heavy and difficult to work It has outstanding beautiful black colour





COLOUR



Wide range of colours and shades







Colour of timber can also be changed through staining



Rosewood

FIGURE

Not generally used

Supply is limited and uncertain





Padauk





Rengas

Teak

Nyatoh

GRAIN

Enhance the design

Vary depending on cutting direction



Cherry flat sawn

Cherry quarter sawn

Cherry end grain

DIMENSIONAL STABILITY

Prevent excessive movement in service:

Choose timbers with good stability

Match the moisture content of the furniture and ambient atmosphere



Design to allow minimal movement





Merbau



MIX AND MATCH



















Rubberwood



- Light colour with visible grains
- Easy to work with
- Planes easily with smooth finishing
- Consistent supply





Nyatoh





- Red colour with stripe figure
- ✤ Fine grain
- Easy to saw and work



Sepetir



- Light golden brown timber
- Dark brown streaks
- Difficult to resaw but easy to plane and produces a smooth surface







Dark red meranti



- Red timber
- Stripe figure
- Easy to saw and work and produces a smooth planed surface
- Large dimensional movement



Kembang Semangkok



- Yellow to light brown
- Attractive oak-like figure
- Easy to work and plane
- Large dimensional movement



Damar minyak





- Creamy yellow, sometimes with pink tinge to light golden brown
- Fine texture and shows a silky sheen
- Easy to work and plane
- The planed surface is smooth and lustrous



Merbau





- Dark brown with fine grain
- Growth ring figure
- The most stable timber in Malaysia
- Slightly difficult to work



Rengas





- Dark red core, streaked with blood red or black streaks
- Fine grained timber with a smooth finish
- Slightly difficult to work
- The planed surface is moderately smooth



Bintangor





- Reddish timber with rather coarse grain
- Easy to work and plane
- Extra work to obtain a smooth finish

Acacia mangium



- Pale yellow to grey brown
- Occasionally streaked
- Easy to work and plane



Cherry



- Reddish timber
- Clear defined stripe figure
- Fine-textured and finishes well



Oak





- White Oak and Red Oak
- White Oak has better stability
- Nice figure appearance of large rays





Walnut





- Dark chocolate-brown to purplish-black
- Grain is usually straight, but can be irregular





Sapele





- Red timber with very distinct stripe figure
- Looks like local Dark Red Meranti



Rosewood



- Most well-known timber in the world
- Medium orange to dark reddish brown
- Sometimes with darker black streaks





Teak





- Solden or medium brown, with colour darkening with age
- Raw, unfinished wood surfaces have a slightly oily or greasy feel due to natural oils
- Easy to work



