

FINISHING AS A MAIN DETERMINANT IN FURNITURE DESIGN FOR US LOW-MID PRICED MARKET

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ABSTRACT

Finish remains one of the most important selling factors in furniture category as it's the first thing a consumer sees. Trend towards casual styles, limited source of cheap but good-enough solid wood, preference of sustainable products, appreciation for wood, home rental trend, price point and preference for millennials in choosing furniture, constant demand for timeless furniture items, improvement of finishing technology, e-retailings, and US-China sino wars, all highlight finish as a crucial factor in furniture design. This article aims to provide foundational knowledge of why finishing is important for low-mid priced furniture designs.

Keywords: finish, wood, furniture, US

BACKGROUND

As a furniture designer, there are plenty of ideas to convert as designs. But without in-depth knowledge of material, finish, price, trend, market demand, production techniques, furniture style, bestseller furniture, and global issue; designs often only results in rendering. This article aims to discuss deeply about finishing and its relation to many other aspects in furniture business.

METHOD

This article applies qualitative, descriptive analysis method, conducted through numerous Vietnam factory surveys in 2011-2019, literature studies, and trusted furniture retailing articles.

RESULT & DISCUSSION

Furniture Solid Wood Materials

Rubber wood is a light colored, medium-density wood (similar to ash or maple) which commonly grow on tropical area such as Malaysia, Thailand, and other regions in Southeast Asia, result from rubber plantation. Rubber wood is often branded as environmental friendly wood (sustainable), because the wood is used after the latex is harvested, thus prolong its life cycle. Thus compare to choosing other solid woods which seem to destroy 100-years of ecology, this wood is popular for its quick grow period. Latex production typically reduce after 20-30 years of harvesting, and during these times the wood start to change function as furniture wood source. This wood can be found in many areas in Vietnam with affordable prices. This wood has big pores and not suitable for premium furniture, but for its strength and price, this wood is ideal for low-mid priced furniture. The wood grain is rather pale and plain, susceptible to fungus, thus require extra finishing.

There are around 2 million hectares of acacia plantation worldwide, with 3 species. Vietnam owns around 1.1 hectares of acacia, with growing cycle of 5-10 years (Nambiar, et al., 2015). This quick grow cycle allows it to be popular for furniture wood source. Mango wood is commonly found in tropical Asia or Oceania. This wood is also popular as sustainable wood, as after the trees stop producing mango fruits, the wood can be used for furniture.



Figure 1. Rubber wood – Acacia wood – Mango wood
Source:

During some opportunities to visit multiple factories in Vietnam, these are some wood variants based on price and categories.

Table 1. Wood Variants used in Vietnamese Furniture Factories

Factory	Categories		Materials
	Price	Product	
Great Veca	mid	Casual dining	Mango hickory, mindi, rubber wood, acacia (solid & veneers)
Green river Furniture	mid	Bedroom, dining, home entertainment	Rubberwood, pine, poplar & mango solids & oak, cherry, birch & pine veneers.
Poh Huat Furniture	Low-mid	Bedroom, dining, home office, wall units, home office, bathroom vanities	Rubberwood, poplar, pine, alder & oak solids & cherry, oak, birch, walnut, primavera, mindy, acacia, hickory and mango veneers
San Lim Furniture	mid	Bedroom, dining, entertainment, occasionals	Poplar, rubberwood & pine solids & cherry, birch, primavera, oak, ash & walnut veneers.
Timber Inds	mid	Bedroom, dining, home office, occasionals	Rubberwood, poplar, pine solids

Source: Hartanto, 2019; Furniture Today

From this table, it is justified that based on price, indeed rubber wood, mango wood, are commonly used for low-mid priced furniture.

Furniture Finishing Techniques

Table 2. Types of Finishing

Chemical Treatment	Natural finish, pigment finish, wax polish, staining, glazing & toning, pickling & liming, bleaching, distressing, water-based finish
Physical Treatment	Distressing, wire-brushing, hammering
Surface addition	Veneer, laminate (faux marble, faux leather, HPL, paper, and others)

Source: Hartanto, 2019

There are plenty of finishing techniques, and it evolves everyday with advancement of technology and machineries. Almost every types of wood used for furniture require chemical treatment, as it is used for protection from fungus and termite, and serve extra function as color. Physical treatment is a finishing trend as because market demands for furniture which slightly look imperfect, similar to wabisabi concept. Behind the demand, it is actually how big retailers (which commonly are trendsetters) to direct consumers to use lower quality wood (grade C-D) because high quality wood are expensive and hard to get. Surface materials industry also improving their products with more and more new materials made to mimic actual wood (called engineered wood). Paper printing technique is also more sophisticated today as it can be used to cover low quality wood (such as MDF).





Figure 2. Bedroom Sets using Paper Finish
Source: Livingspaces.com, 2019

Common people might think this bedroom set as MDF covered with veneer, some might even think this is solid wood. In fact, there are a lot bedroom sets with retail price below USD500 with just paper finish (below USD599 are millenials' favorite price). This is because it is impossible to produce with solid wood and veneer, the cost is much higher than targeted retail price.

Good quality wood are commonly shown as is with natural finish, as the beauty and authenticity lies on the wood grain, and that's what consumers look for. Low quality wood are commonly covered as much as possible with various finishing, or designed as if the wood defect is the accent (as in industrial or distressed furniture). Mother earth is running out of wood, thus manufacturers use whatever methods from whatever available (Puspita & Sriwarno, 2016).

Furniture Styles

Table 3. Popular US Furniture Styles

			
Casual: <i>Transitional, Lifestyle, Coastal, Rustic and other casual styles</i>	Contemporary: <i>Architectural Modern, Art Deco, Asian/Oriental, Industrial, Mid-Century Modern, Retro/Post-Modern, Scandinavian and Urban/Loft</i>	Traditional: <i>American, English and German Traditional, Campaign and Plantation, Colonial, Formal French and Italian, Neoclassic and Victorian</i>	Country: <i>American, English and French Country, Cottage/Lodge, Mediterranean, Mission/Arts & Crafts, Pennsylvania Dutch and Shaker</i>

Source: Furniture Today, 2018

There are a dozen furniture styles. Major retailers (which commonly are trendsetters too) often gives new terms, jargons, and styles, because furniture design indeeds keep developing everyday. However for US market, there are 4 standard styles (and its substyles) mostly represent the current market demands: casual, contemporary, traditional, and country. Casual and contemporary often surrounds in simple lines and forms. To the contrary, traditional and country have classic complex lines, forms, and profiles. Thus, it is clear, simple forms rely more on finishing, while complex forms rely on the form itself. Based on survey in 2018 by Furniture Today, by comparing all products of bedroom, formal dining, casual dining, retailers claim that 27% of sales are from casual style. Casual was the most sellable style in 2017, with 31% for youth bedroom, 33% for dining furniture. Traditional style sales declined from 30% to 24%. Casual dining set below USD599 had market share of 40% in 2017. Sales for sustainable materials increased since 2015, from 20% to 45% (Argetsinger, 2018). Thus it is clear that choice of materials will go more towards sustainable wood like rubber wood, instead of those exotic ones. Again, rubber wood is pale, thus finishing is required to elevate the value of the wood.

Timeless Furniture Pieces

There are many American style furniture which are always favorable from time to time, such as chesterfield sofa, parsons chair, parsons table, mission chair, ladder back chair, napoleon back chair, saddle stool, shaker chair, and many more. As an analogy, Indonesians will always love fried rice, soto, etc. People will always innovate with these kinds of food, in terms of flavor, presentation, ingredients, but maintaining the classic style. Similar to timeless furniture, manufacturers will always innovate in terms of form, construction, material, and finishing. Often times innovation can not be too extreme as it will remove the classic forms, thus finishing has been always the easiest way to refresh timeless furniture items.



Figure 3. Timeless US Furniture
Source: Hartanto, 2019

Finishing is the last step of furniture production, thus diversifying from this angle will be much easier, rather than diversifying the forms, sizes, or shapes.

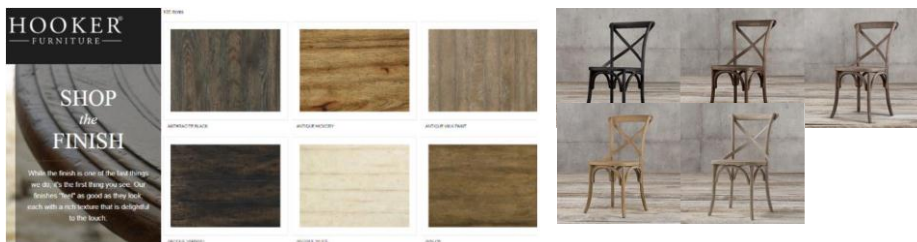


Figure 4. 105 Finishing Alternatives on Hooker Furniture – Finishing as Product Diversification Strategy
Source: Hooker Furniture; Restoration Hardware, 2019

US market appreciation on wood (Leslie & Reimer, 2003) results in innovation on how online retailers sell their furniture. Even wood panels are sold as an actual reference before buying furniture, thus customer can feel the distress level, or the wirebrush level. This is also there is always difference between photos and actual products. That explains how important finish is to US market.

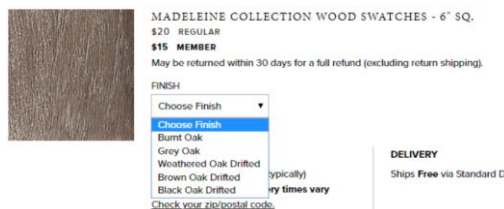


Figure 6. Color Panel for Sale
Source: Restoration Hardware “Madeleine Collection Wood Swatches”, 2019

Furniture Trends

Based on Consumer Buying Trends survey by Furniture Today 2015, millenials are the largest consumers for these three furniture categories: 58% casual dining, 56% bedset, and 52% working desks. The other categories frequently bought by millenials are occasionals and mirror.

Trend #1: More renting

Based on Pew Research Center report, 36.6% US families rent houses on 2016, the highest number since 1965. Housing prices raise, housing bubble, increased amount of student loan (Bozick & Estacion, 2014), delayed marriage age, delayed plan of having kids, less priority of owning houses (Fisher & Gervais, 2011), are trends predicted to sustain until 2020. In relation to furniture, thus renter will opt for cheaper furniture. Furniture prices depend highly on types of materials, thus the options are limited to cheap woods such as rubber wood, acacia wood, mango wood, and panels (MDF, particleboard) which need extra attention on finishing.

Trend #2: Online Retailing

Buying online, instant access to catalogs and prices, consumers know what they want more than ever. While searching for furniture, there are a number of factors affecting the buying decision, such as price, shape, style, finishing, and many others. In relation to furniture, it is clear that fascinated finishing will attract consumer's eyes.

Finishing Trends

Table 4. Top 5 wood preferences for dining room

Millenials ages 18 to 34	Walnut, oak, mahogany, cherry/maple, ash
Gen X ages 35 to 50	Walnut, mahogany, oak, cherry, maple
Baby Boomers ages 51 to 69	Walnut, mahogany, cherry, oak, pecan

Source: Furniture Today & Apartment Therapy survey, 2015

Gray is millenial's first choice for neutral color, and blue is main choice for pigment color. Four out of 10 millenials surveyed by Furniture Today and Apartment Therapy claim their homes as balanced, with neutral colors. They also choose furniture with simple lines, wire-brushed finish, low sheen – 10%, before was 30%, as this kind of finish accentuate the wood grain more clearly.



Figure 7. Distressing & Wire-brushing process
Source: Mikesaurus, 2019

Wood variants such as oak, pecan, acacia, mango, with low sheen and wire-brushed finish, which show wood grain and tactile effect; warm colors such as brown; many levels of distressing, are dominant trends, replacing gray that had been trend for many years before. Though there are a dozen other options, such as black, blue, and others which can always be casual colors to choose.

US-China Trading Wars

Before trading wars, China was number one furniture exporter to US. As of 2018, US imported US\$5.7 billions wooden furniture, US\$5.3 billion upholstered furniture, and US\$7.2 billion metal furniture (stainless steel and aluminium, O'Neill, 2019), and almost US\$1 billion for mattresses (Baertlein & Naidu, 2019). With US policy of

raising import tariffs to 25% for Chinese products (including furniture), a lot of Chinese manufacturers relocated their factories to Vietnam as the closest border to reduce costs. Moreover with China government policy to move toward high tech industries, such as aerospace. Vietnam is also a country with enormous resource of rubber and acacia plantation, competitive wages, and equipped with good stitching techniques (for upholstered furniture). Wanek Furniture, as an example, have affiliated with the largest US retailer and supplier (Ashley Furniture), to move 50-70% mattress production from China to Vietnam since 2019. Man Wah, the largest upholstery manufacturer in China, have built new factories in Vietnam as large as 23 hectares in 9 months to cope with trade wars, and have exported over 4000 containers per month before covid-19. (Shoulberg, 2019). Vietnam is currently number 1 furniture exporter in Asia, following China footsteps (Chaponniere, et al, 2010; Walcott, 2015). Thus this article and observation on Vietnam furniture industry confirms its importance on furniture businesses.

CONCLUSION

Here are, summary from multiple aspects, why finishing is important for US market furniture design in low-mid priced categories:

1. US is number one worldwide furniture importer, thus trends and design direction will automatically follow.
2. Millennial is number one US furniture consumer, and their favorite style is casual style.
3. Furniture design trends will go toward casual style with simple and straight lines, thus require innovative finishing to balance the product value compare to other thousands of similar offerings with the same style in the market.
4. Millennials appreciate solid wood sustainable furniture, in low-mid price range (up to USD599), in line with their annual income of USD35,000 – 100,000.
5. Millennials with nomadic and renting house lifestyle, delay plan to have a marriage, kids, house (and thus furniture) need more product variety simply for eating and sleeping (casual bed set and casual dining set).
6. Furniture prices depend highly on material prices and wage cost, thus low-mid targeted retail price narrows down the option to only several solid wood such as rubber wood, acacia wood, mango wood (all of them are relatively cheap, strong material characteristic for furniture, easy to work with). These types of wood also have fast grow cycle (between 5-20 years), and serve secondary function after their main functions are harvested (latex, mango fruit). Thus it is clear why these woods are branded as sustainable woods, compare to other types which take much longer to grow. However, these woods are relatively pale in color, susceptible to fungus, thus finishing is a “make-up” solution to make the wood not less pretty than the others.
7. Furniture is a labor intensive industry, thus to keep furniture prices competitive, US finds supplies from emerging countries such as Vietnam with competitive wages (Drayse, 2008). Vietnam is located on the southern border of China, thus it is the first option for factory relocation due to US-China trading wars. Vietnam is also ideal for having large acacia, mango, rubber wood plantations, with cheap prices.
8. Relatively stable demand for timeless furniture pieces, such as chesterfield, parsons, mission, cross-back, and many other style. What people are seeing are classic forms with a little different flavor than what they expected. Finishing is one of the best way to do that.
9. Advancement of finishing technology such as wire-brushed machine, paper laminate, and many others, allowing finishing to be the main determinant for buying decision.

10. Online retailing and ecommerce allow consumers to easily browse and buy unlimited options, thus retailers must always have new variants in no time. Finishing again, is certainly one of the fastest option.
11. Nature is out of wood resource, thus whatever lower quality wood available outside of forests, are maximized through finishing.

REFERENCE

- Ahmed, P., 2008, '*Trees outside forests (TOF): a case study of wood production and consumption in Haryana*', *International Forestry Review*, 10(2), 165-172.
- Becksvort, C., 2000, '*The Shaker legacy: perspectives on an enduring furniture style*', Taunton Press.
- Bozick, R., & Estacion, A., 2014, '*Do student loans delay marriage? Debt repayment and family formation in young adulthood*', *Demographic Research*, 30, 1865-1891.
- Chaponnière, J. R., Cling, J. P., & Zhou, B., 2010, '*Vietnam following in China's footsteps: The third wave of emerging Asian economies*', *Southern Engines of Global Growth*, 114.
- Drayse, M. H., 2008, '*Globalization and regional change in the US furniture industry*', *Growth and Change*, 39(2), 252-282.
- EK Sadanandan Nambiar, Christopher E Harwood & Nguyen Duc Kien, 2015, '*Acacia plantations in Vietnam: research and knowledge application to secure a sustainable future*', *Southern Forests: a Journal of Forest Science*, 77:1, 1-10, DOI: 10.2989/20702620.2014.999301
- Fisher, J. D., & Gervais, M., 2011, '*Why has home ownership fallen among the young?*', *International Economic Review*, 52(3), 883-912.
- Krishnankutty, C. & Thampi, K. & Chundamannil, M., 2008, '*Trees Outside Forests (TOF): A Case Study of the Wood Production—Consumption Situation in Kerala*', *International Forestry Review - INT FOR REV.* 10. 156-164. 10.1505/ifer.10.2.156.
- Leslie, D., & Reimer, S., 2003, '*Fashioning furniture: restructuring the furniture commodity chain*', *Area*, 35(4), 427-437.
- Pakarinen, T., 1999, '*Success Factors of Wood as a Furniture Material*', *Forest Products Journal*, 49(9).
- Puspita, A. A., & Sriwarno, A. B., 2016, '*Design Process & Product Development Challenges in Furniture Based on Reclaimed Wood in Central Java*', *Bandung Creative Movement (BCM) Journal*, 3(1).
- Safford, F. G., 2007, '*American Furniture in the Metropolitan Museum of Art*', (Vol. 1). Metropolitan Museum of Art.
- Walcott, S., 2015, 13. '*Finding a future for the US furniture industry*', *Handbook of Manufacturing Industries in the World Economy*, 206.
- <https://www.architecturaldigest.com/story/heres-how-tariffs-are-affecting-five-different-businesses-in-the-furnishings-industry>, accessed per Januari 2020
- <https://www.forbes.com/sites/warrenshoulberg/2019/10/16/us-finally-succeeds-in-vietnam-as-more-companies-move-sourcing-there/#194edf4d4a4e>, accessed per Januari 2020
- <https://www.furnituretoday.com/business-news/akzonobel-presents-2018-color-style-trends-2/>, accessed per November 2019
- <https://www.furnituretoday.com/business-news/casual-styles-continue-be-best-selling-case-goods/>, accessed per November 2019
- <https://www.furnituretoday.com/business-news/design-finish-function-tell-case-goods-story/>, accessed per November 2019
- <https://www.furnituretoday.com/business-news/dining-sets-celebrate/>, accessed per November 2019
- <https://www.furnituretoday.com/business-news/manufacturers-make-most-veneers-2/>, accessed per November 2019

<https://www.furnituretoday.com/business-news/millennials-are-no-1-buyer-furniture/>, accessed per November 2019

<https://www.furnituretoday.com/business-news/style-veneer-finish-dictate-consumer-purchase-decisions/>, accessed per November 2019

<https://www.livingspaces.com/pdp-finley-full-3-piece-bedroom-set-253603>, accessed per Januari 2020

<https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/meeting-millennials-where-they-shop-shaping-the-future-of-shopping-malls>, accessed per November 2019

<https://www.reuters.com/article/us-usa-trade-china-furniture-focus/how-tariff-hikes-are-squeezing-the-u-s-furniture-business-idUSKCN1T118W>, accessed per Januari 2020