Woodturning Design

WBAW Presentation: 10 February 2009

by Laura and Barry Uden
Grouping Photos of Pieces According to Design Quality
Presentation Contents

◆ What is good design?
  • Aesthetics
  • Theory

◆ How do you create a good design?
  • Before turning
  • While turning
  • After turning

◆ What not to do

◆ Discussion
What is Good Design?

Aesthetics

- Looks “correct” - we know it when we see it
- Grouped photos
- Outlines of pieces
What is Good Design?

**Aesthetics**

- Non-wood items: the same principles apply as for wood
What is Good Design?

**Theory**

- **Design elements**
  - Color/value
  - Texture
  - Shape/form/movement
  - Scale/proportion

- **Design principles**
  - Center of interest
  - Balance
  - Harmony
  - Contrast
  - Rhythm
Design Elements

◆ The design elements are aspects of the piece that can be manipulated or modified by the artist to create the design.

◆ The design elements include:
  • Color/value
  • Texture
  • Shape/form/movement
  • Scale/proportion
Design Elements

Color/Value

- The color of the wood should suit the purpose and shape of the piece to make it interesting. If multiple colors are used in a piece, they should be complementary or similar in the warmth or coolness of the tones. Value is the degree of light and dark in any part of the design.
Design Elements

Texture

- This is the degree of roughness or smoothness in objects. It is about surface quality, either tactile or visual. Texture can be real (tactile), or can be implied by burning or painting the surface, or by using patterns, such as with segmented pieces.
Design Elements (Cont’d.)

**Shape/Form/Movement**

- Shape / form is a characteristic of an object that makes it appear to vary when viewed from different angles.

- Movement has to do with the visual flow through the composition.

- Attention should be paid to the point at which the flow changes shape or direction. Shape changes should be either smooth and gradual or distinct and sharp: an in-between approach can look like a mistake.
Form, Movement, and Curves

◆ Ogee curve:
  • Ogee is a shape consisting of a concave arc flowing into a convex arc, so forming an S-shaped curve with vertical ends
  • Ogee windows and arches were introduced to European cities from the Middle East
Design Elements (Cont’d.)

Scale/Proportion

◆ Scale refers to variations in overall size. The size should be fit for use unless designing miniatures. Proportion refers to the relative comparison of sizes of objects, lines or shapes within the piece.

◆ Avoid placing any design feature or shape change (e.g., bead, ridge, edge of a lid, etc.) close to the halfway point vertically up a piece. This is also true for the location of the center of gravity or widest point on the piece – a 1/3 to 2/3 proportion usually looks good, and often (not always), above center is best.
Design Elements (Cont’d.)

Scale/Proportion

- For bowls and platters, the rule of thumb is that the base should be about 1/3 of the diameter of the piece.

- For closed forms, a good rule of thumb is that the size of the top opening should be 1/3 of the diameter of the piece or less.
Two Proportion Guides: Rule of Thirds and Golden Mean

- These are rules that have been developed to guide the use of proportion in design.
- In woodturning, these rules help guide proportions such as:
  - the height of a box lid related to the remainder of the box
  - how far down a piece the widest point is located
  - diameter of bowl related to height of bowl
The Rule of Thirds

- The Rule of Thirds is used in many art forms, especially photography.
- It suggests that what “feels good” to us aesthetically is often a proportion of 1/3 to 2/3.
- This equates to a ratio of 1 to 2.
- In photography, it often refers to the location of the horizon line.
The Golden Mean

- Both the Greeks and the ancient Egyptians used the Golden Mean when designing their temples and monuments.
- It suggests that what “feels good” to us is a proportion of 1 to 1.618.
- Rounding down, this could be seen as a ratio of 5 to 8.
Comparing the Two Rules

◆ Rule of Thirds:
  • Ratio of 1 to 2
  • Same as 4 to 8

◆ Golden Mean:
  • Ratio of 5 to 8

◆ Which one should you use?
  • For three-dimensional objects, the eye cannot always distinguish between them
  • Use whatever works for you
You be the judge:
What’s good and what isn’t, and why?

- Judging outlines of pieces
Design Principles

- The design principles can be seen in how the design applies the design elements
- These principles are described in the characteristics of the piece, and include:
  - Center of interest
  - Balance
  - Harmony
  - Rhythm
  - Contrast
Center of Interest

- This is an area that first attracts attention in a composition. This area is more important when compared to the other objects or elements in a composition. This can be by contrast of values, more colors, and placement in the format. Related to balance, it is usually good practice to NOT put a major design element at the exact middle of the piece. Instead, follow the golden mean or rule of thirds.
Design Principles (Cont’d.)

Balance

- This is a feeling of visual equality in shape, form, value, color, etc. Balance can be symmetrical and evenly balanced or asymmetrical. Colors, values, textures, shapes, etc., can be used in creating a balance in a composition. For closed forms, a good rule of thumb is that the size of the top opening should be relatively similar in size to the base.
Design Principles (Cont’d.)

Harmony

- Harmony brings together a composition with similar aspects. Too much harmony without variety is boring, while too much variation without harmony is chaotic.
Design Principles (Cont’d.)

**Rhythm**

- Rhythm is a movement in which some elements recur regularly, such as a bead or finial design. It enhances the feeling of harmony of the piece. Although the sizes of the repeated objects can vary, it is important to keep the proportions the same; otherwise, it can look like a mistake.
Design Principles (Cont’d.)

Contrast

ύ Contrast is the variation between shapes or tones in the piece. It offers a change in value creating a visual discord in a composition. Contrast shows the difference between shapes and can be used as a background to bring objects out and forward in a design. It can also be used to create an area of emphasis.
How do you create a good design?

**Before Turning**
- Plan the piece
- Align the design with the blank

**While Turning**
- Ensure continuity
- Maintain flexibility

**After Turning**
- Look for consistency
- Ensure harmony
Ensuring Good Design Before Turning: Planning the piece

- Design the piece
  - Outline the piece ahead of time
  - Use tools to help draw out smooth curves

- Ensure alignment
  - Style aligned with purpose
  - Shape and proportion aligned with wood figure
Ensuring Good Design Before Turning: Aligning the design with the blank

- Can start with design, then find wood blank with correct proportions

- Or start with the wood blank, then create design to fit the blank. Examine blank for possible shapes that fit the blank size and wood figure orientation
Aligning the design with the blank:
What can you make from these blanks?

◆ Discussion
Ensuring Good Design While Turning

◆ Ensure Continuity
  • Keep the line flowing throughout the piece
  • Check the shape on and off the lathe

◆ Maintain Flexibility
  • Adjust to what you find while turning the piece: worm holes, cracks, etc.
  • Be prepared for “design by oops” as Tom Howard calls it: accidents can lead to opportunities
Ensuring Good Design After Turning

- Look for Consistency Throughout the Piece
  - Of style
  - Of embellishment/treatment
  - Of finish
  - Of proportion
Ensuring Good Design After Turning

- Ensure Harmony of Design Characteristics
  - Finish aligned with purpose
  - Finish aligned with style
Ensuring Good Design After Turning

◆ Ensure Harmony of Design Characteristics

• Wood color and pattern aligned with embellishment/treatment
What Not to Do

- Striving for too much complexity – simple can be both beautiful and elegant
What Not to Do (Cont’d.)

◆ Trying to make something too big from the blank, resulting in poor form
◆ Instead, adjust the style or make two smaller items
What Not to Do (Cont’d.)

- Not planning the piece ahead of time
- Not visualizing or outlining the piece while in progress
Discussion / Q&A
Handouts and Resources

◆ Handouts (also available on club Yahoo site):
  • Woodturning Shapes (from Hunnex book on “Woodturning: A Source Book of Shapes”)
  • Article “Some Thoughts on Design” by Peninsula Guild of Turners in Victoria, Australia

◆ Resources:
  • This presentation will be on the club Yahoo Groups site, in a folder for this month’s presentation (http://groups.yahoo.com/group/wbaw/)
  • A listing of good reference materials on woodturning design will be placed in that same folder