# THINKING ABOUT MULTI AXIS SPINDLES

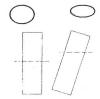
## BARBARA DILL

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#### TYPES OF RESULTS OR OUTCOMES:



CROSS SECTION OF TWO CYLINDERS
THE NEW AXES HAVE BEEN FULLY TURNED
TO CREATE A ROUND SHAPE

CIRCULAR TYPE

50

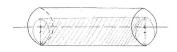
Cross section of three cylinders
The New Axes have been partially
Turned creating a lens or Arc
ARC TYPE

# VARRIABLES:

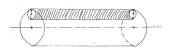
- I PLACEMENT OF AXES
- 2 PROFILES OR SHAPES TURNED

# VARRIATIONS OF VARRIABLES:

PARALLEL AXES:



NEW AXIS CLOSER TO CENTER OF SPINDLE



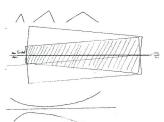
NEW AXIS CLOSER TO OUTSIDE OF SPINDLE

TWISTED AXES: TWISTED AXIS: RED=CENTER AXIS

BLUE=NEW AXIS

TWISTED AXIS, ONE END MOVED

SYMMETRY OF LINES AND CURVES:



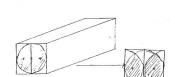
SIZE AND ORIENTATION OF THE WOOD

SUPERIMPOSING ONE IDEA ON ANOTHER

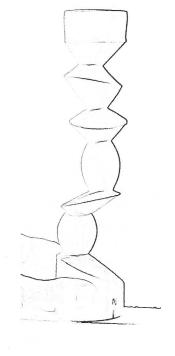
COMBINING BOTH TYPES OF OUTCOMES ON ONE SPINDLE

PUTTING WOOD TOGETHER TO MAKE SPLIT TURNINGS:

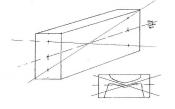
SPLIT TURNINGS USING FOUR SQUARES



SPLIT TURNINGS USING TWO RECTANGLES



Mounting A RECTANGULAR SPINDLE TO CREATE ANGLES



EXTENDED

## HELPFUL HINTS:

TURN SPINDLE ROUND
PRESS HOLES IN WOOD BETWEEN CENTERS
NUMBER CONSISTENTLY AND CLEARLY
USE CHALK TO FIND AXIS IF CONFUSED
HIGH SPEED AND SHARP TOOLS
ABOUT TOOLS (TYPE, SHARPENING ANGLE
SAFE DRIVER VS. FOUR PRONG DRIVE CENTER
SANDING
DEPTH OF CUT
MAKE SAMPLE PIECES AND TAKE NOTES

