



PROCESS BOOK 3
MAKING + FABRICATION



INTRO DUCTION TION

MAKING + FABRICATION

This booklet, 3 of 4, focuses on the fabrication of the physical components and props that I use in my workshop.

In here, I outline major points in my physical design process: using lo-fidelity prototypes for testing, designing my workshop tools, sourcing materials, planning fabrication methods and making my final workshop baskets.



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1.0 WORKING PROTOTYPES

In early iterations of my workshop, I had used many different tools and props to prototype the interactions of my workshop.

They were primarily made of cardboard and other accessible, low-fidelity materials I could recycle from studio bins and stashes. These pieces were inspired by existing objects that serve some function related to food: Lazy Susans, bento boxes, steamer baskets, tiffins, lunch tins and serving trays. I chose these objects and to replicate their functions, as I wanted to strongly evoke a sense of restaurant or mealtime culture in my workshops.

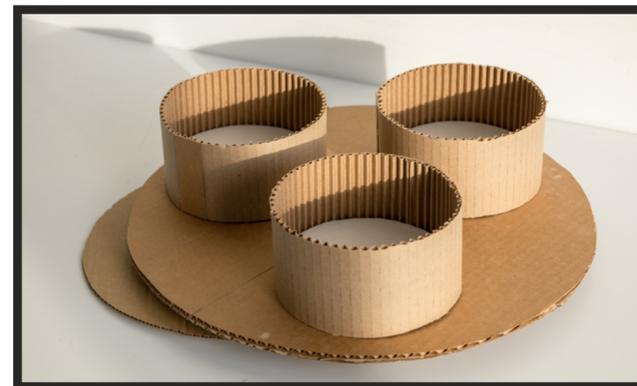


1.1 WORKING PROTOTYPES → Iterations

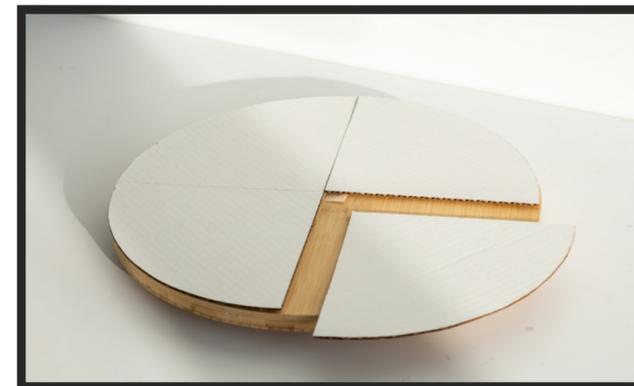
Going through several iterations, I found that these objects played a key role of keeping the workshop around a centre point. These form factors were attempts to try and merge that focus of a centre point, with being able to claim a piece of the "game board" for yourself. I wanted these props to serve as individual surfaces that participants could claim, work their clay on top of, use to display, and to return to the centre.



Serving tray



Lazy susan



Seperating lazy susan



+ steamer baskets

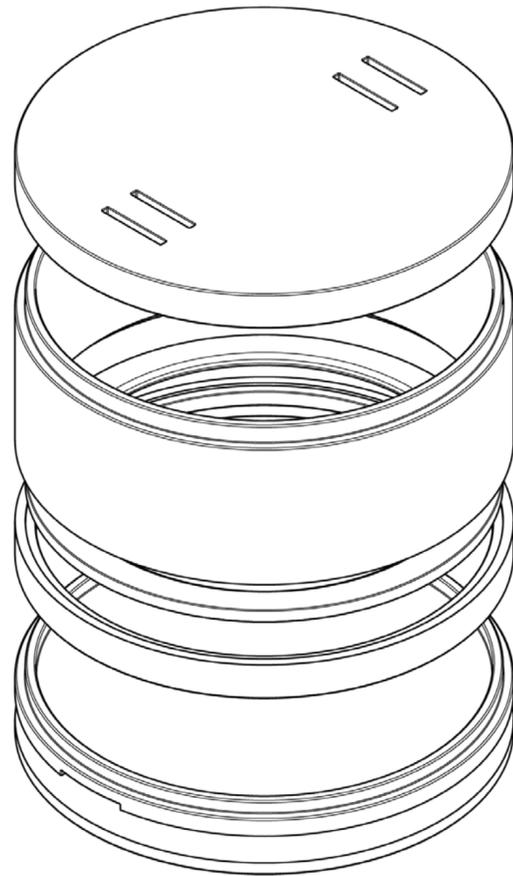


1.2 WORKING PROTOTYPES → Testing versions

The final working prototype that I chose, and used for several early iterations of my workshops was one based on stackable Dim Sum steamer baskets and the convenient mobility of a lunch tiffin.

I found that this version was the most simple in form and function, and also captured that sense of togetherness, playfulness and board-game-ness that I wanted. These baskets, to me, symbolise a vessel that carry edible gifts inside of them, and have an element of theatrics to them; choreography and presentation will be important to the ritual of my workshops.





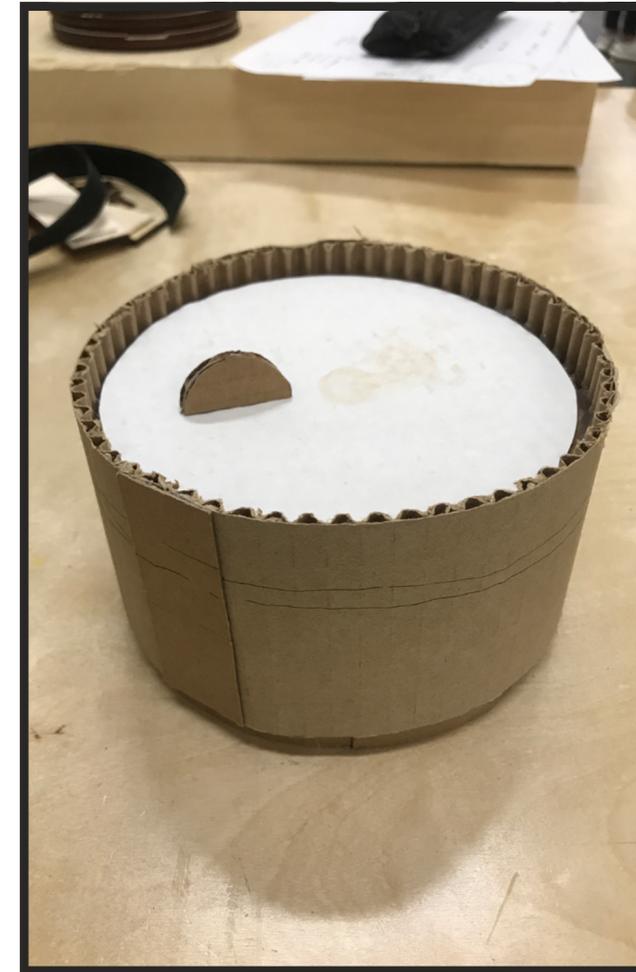
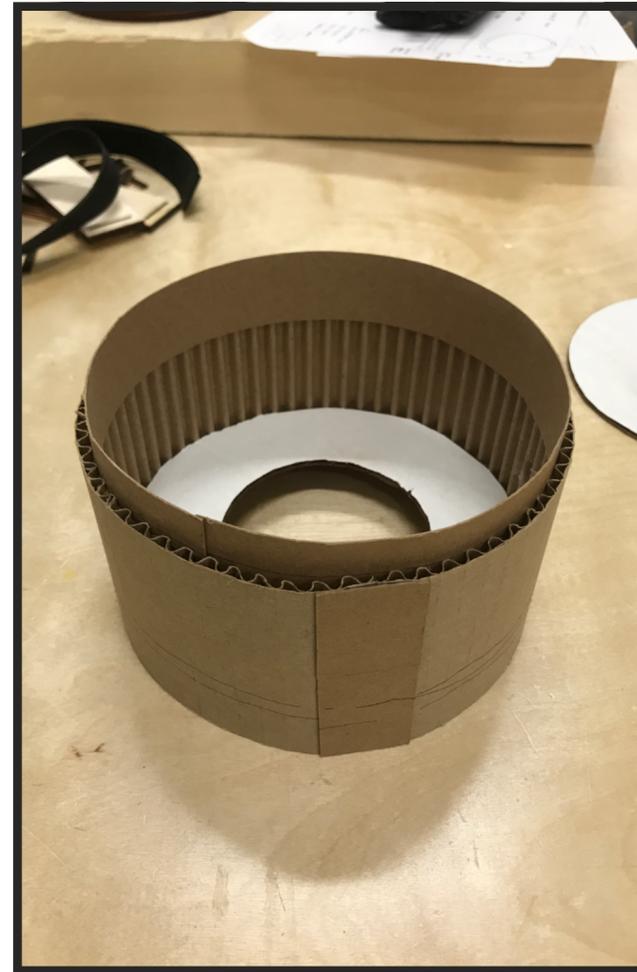
2.0 PLANNING → Functionality

I needed my design to do several things:

- act as mobile vessels of transport
- hold materials for participants to interact with
- have enough vessels to serve between 8-10 participants
- be both a work surface, and a display space
- allow for interaction and participants to swap baskets
- Evoke the feeling of heirloom objects or items of tradition

My design is thus made from two components: a tray that inserts into a circular ring to form a basket. This would be stackable to make an easily transportable column of baskets.

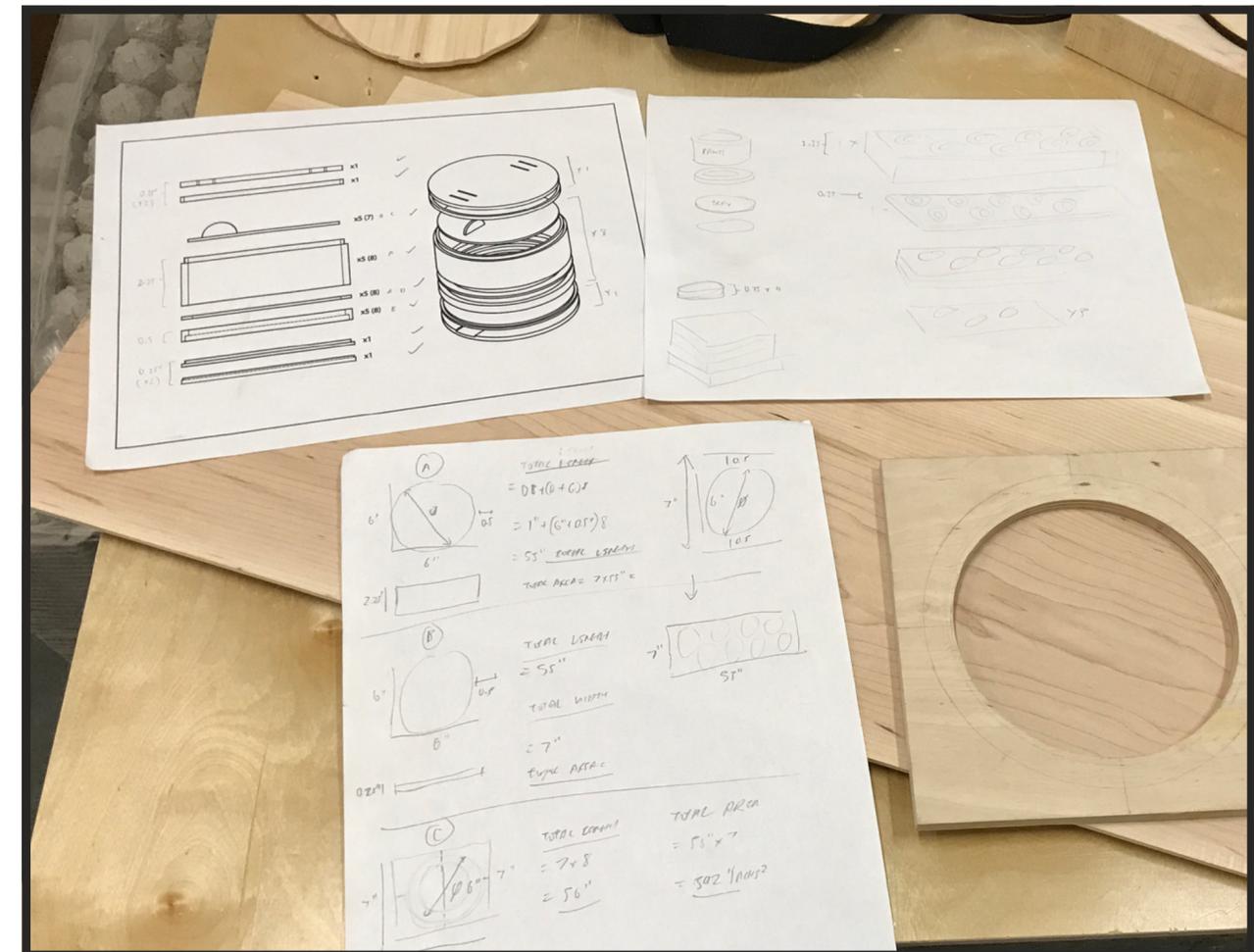




2.2 PLANNING → Fabrication methods

Consulting with technicians from the Industrial Design Woodshop and the digital fabrication lab, I considered and compared different fabrication methods to use for make my workshop baskets.

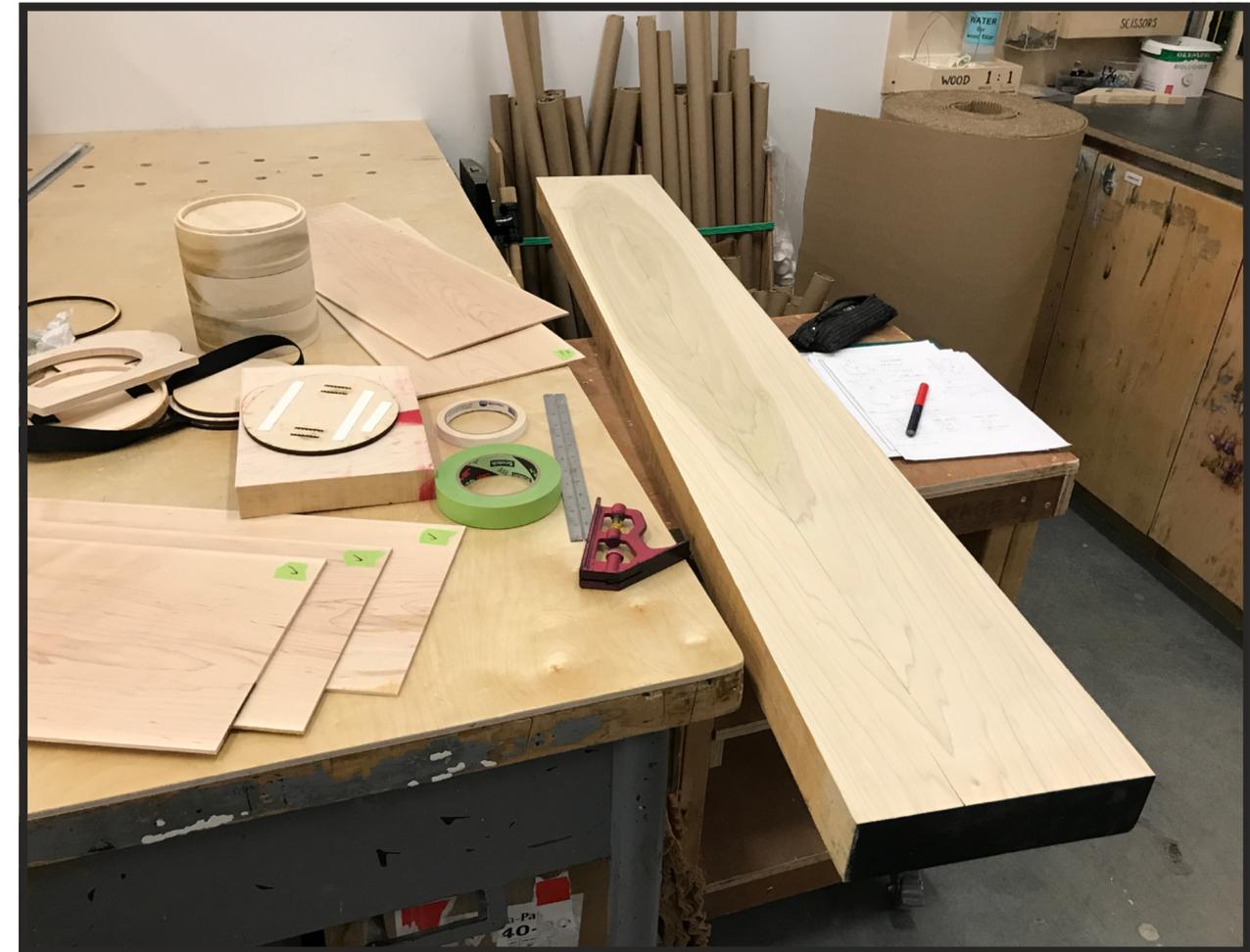
Ultimately, I decided that I wanted to maintain a bespoke, handmade feel to my baskets, but would still minimally use computer aided machinery like a CNC to expedite repetitive processes and to reduce material wastage. It was important to me that I could enjoy and indulge in the fabrication process, but still make it economical and time-sensitive to the rest of my workload; these baskets are only meant to be supports for the workshop itself, which is the real focus.



2.3 PLANNING → Materials

For my basket materials, I decided to use Poplar wood and Maple wood. These species have beautifully contrasting colours, grains, hardnesses and textures, especially when finished with an oil. They are also readily available to buy from our in-house woodshop, which I thought could help me keep my overall footprint minimal in sourcing resources.

I spent quite some time trying to figure out how to most efficiently and unwastefully extract the pieces and shapes that I needed - circles aren't usually the best use of dimensional surface area. This would include my CNC machining, jointing and planing, and routing processes.



3.0 FABRICATION

Once I had purchased my final materials, it was time to begin fabricating my workshop baskets.

Different components required different processes. I had to prepare the poplar and maple wood by jointing and planing them into workable dimensional pieces. I created custom jigs for routing and milling my parts. The maple pieces I would use shop tools and manual methods to make into trays, whilst the poplar would be sent to our CNC machine to cut out the rounds that form the baskets.





Resawing the wood



1/8th inch maple slices



Routing slices into rings



Sanding the rings





Finished maple rings



Rings and trays



Milling the tray handles



Milled maple trays





CNC'd poplar rings



Extracted poplar rings



Assembling basket pieces



Glueing basket pieces



4.0 FINAL BASKETS

After several weeks of consultation, research, prototyping, testing and fabrication, I had my final baskets.

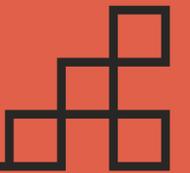
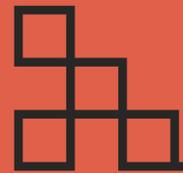
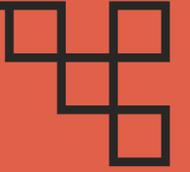
With a few final touches; making the strapping system to carry the baskets and finishing the wood with beeswax, I could begin using them to carry out the refined iterations of my workshops.

These baskets are key components of the choreography and ritual in my workshop activities and interactions, which I elaborate in the *fourth* process booklet in this series.









[END OF BOOKLET 3]