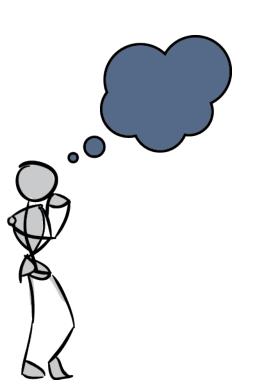
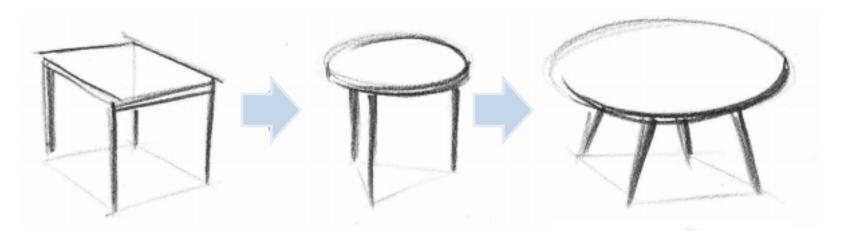
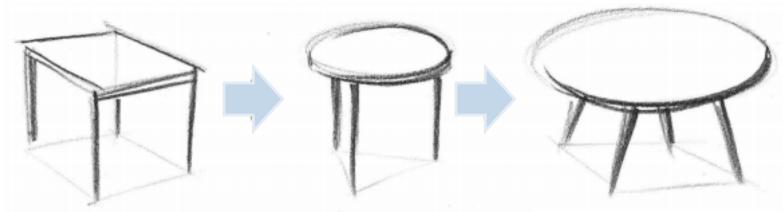
Idea Development: Revisiting Design Heuristics



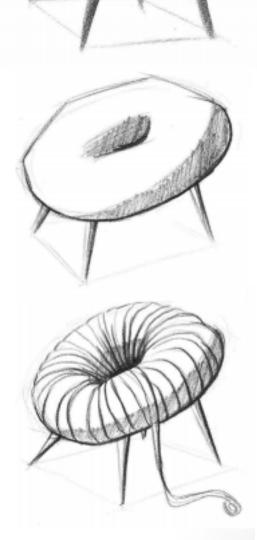




- Lateral Transformations
 - Incremental changes
 - Build on a previous idea



- Lateral Transformations
 - Incremental changes
 - Build on a previous idea
- Vertical Transformations
 - More detailed versions of an earlier idea



TWIST SUNLIGHT **DESIGN TASK** Design products that utilize sunlight for heating METAL SHEET and cooking food. TWISTED INTO A SPIRAL CONVERT 2-D MATERIAL TO 3-D OBJECT FOOD SUNLIGHT **CONVERT FOR SECOND FUNCTION** SUNLIGHT SIMPLE BOX W REFLECTIVE FLAPS MIRRORS opens like A UTILIZE OPPOSITE SURFACE SOLAR FLOWER TO CAPTURE SUNLIGHT PANELS MIMIC NATURAL **MECHANISMS FOLD** LEGS FOLD TOGETHER SUNLIGHT SUNLIGHT FLAT REFLECTIVE SHEET SMALL PIECES **BEND**

SHEET BENDS INTO

PARABOLIC REFLECTOR

TELESCOPE

ADJUSTABLE LEGS

USE REPURPOSED OR RECYCLED MATERIALS

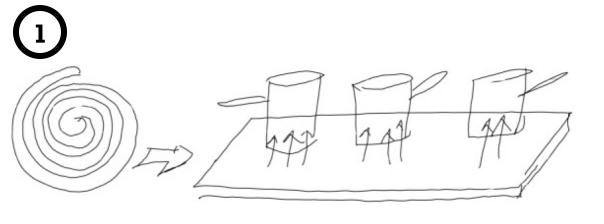
OF RECYCLED

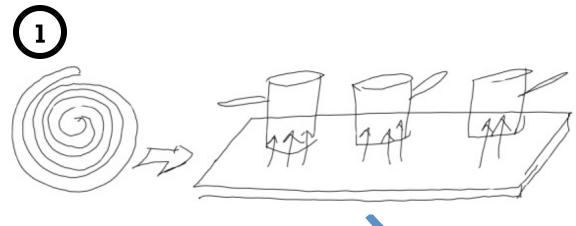
GLASS MIRROR

TO MAKE PARABOLA

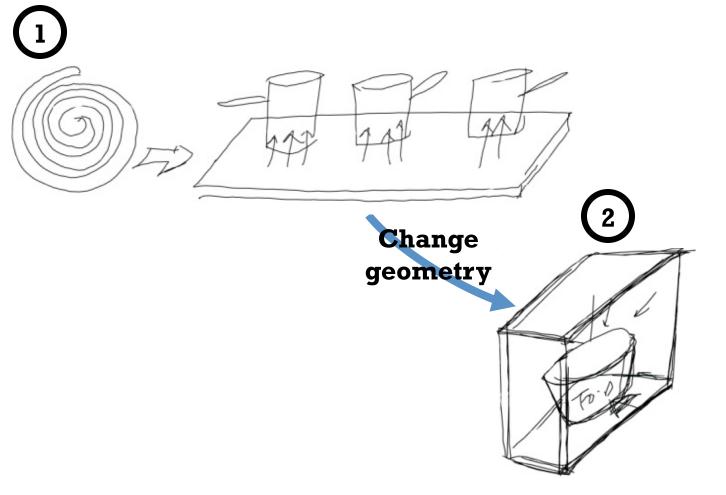
Daly, Yilmaz, Seifert, Christian, Gonzalez

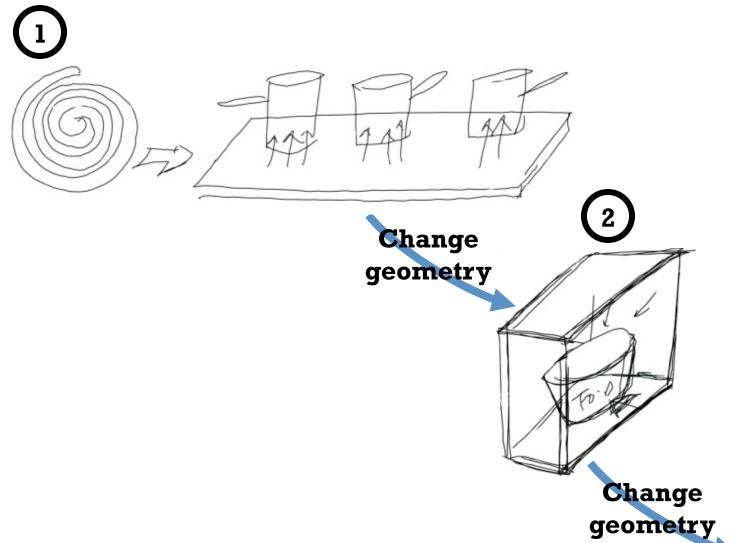
REPEAT

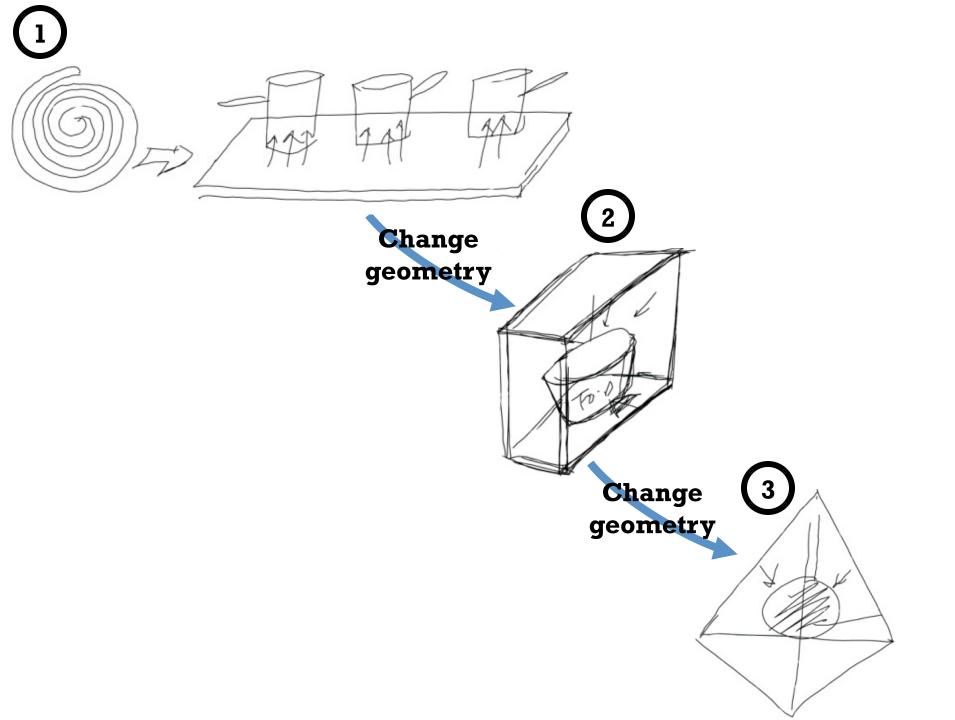




Change geometry

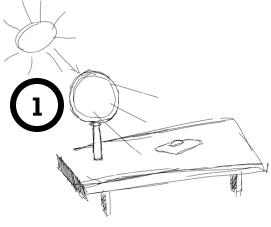




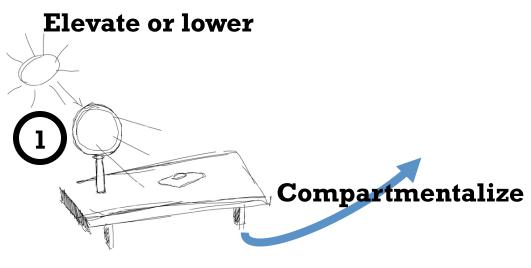


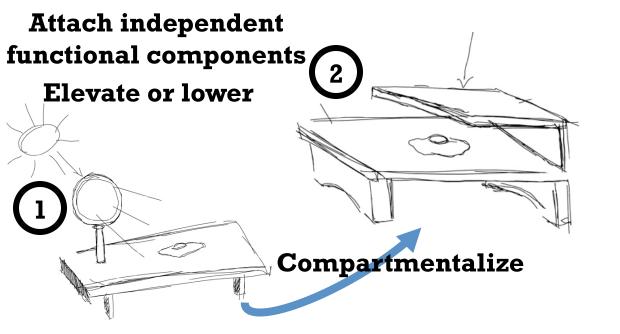
Attach independent functional components

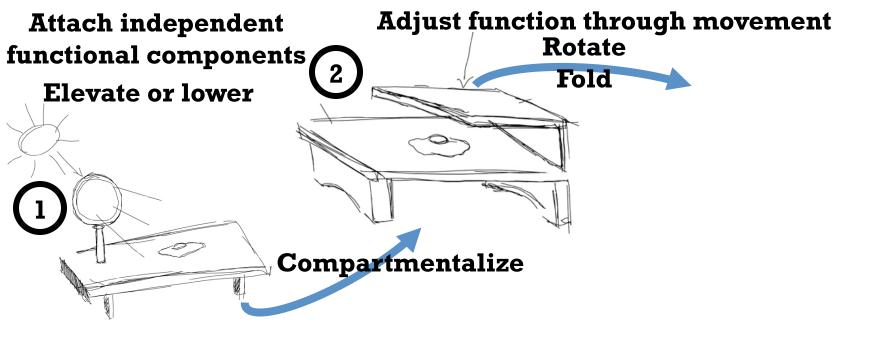
Elevate or lower

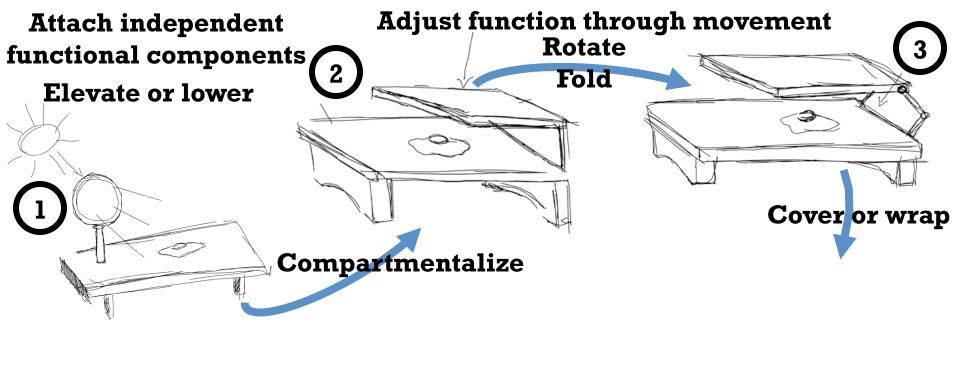


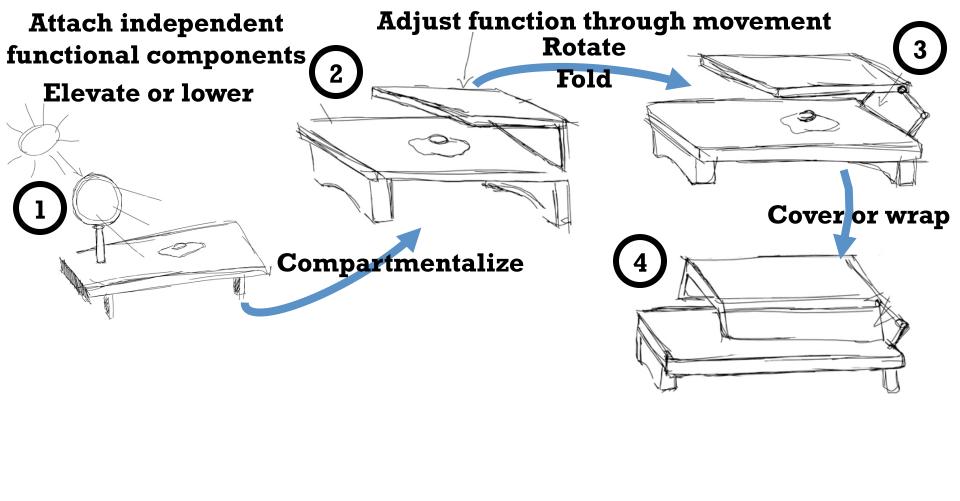
Attach independent functional components

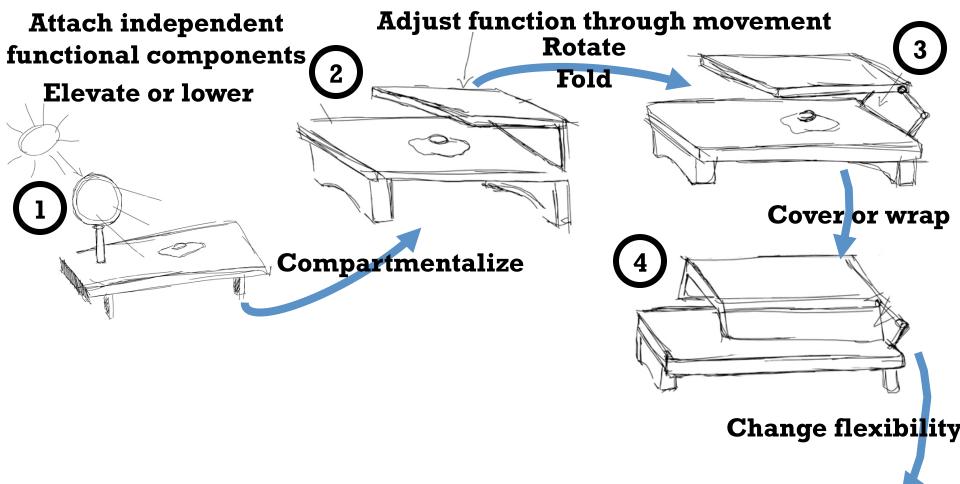


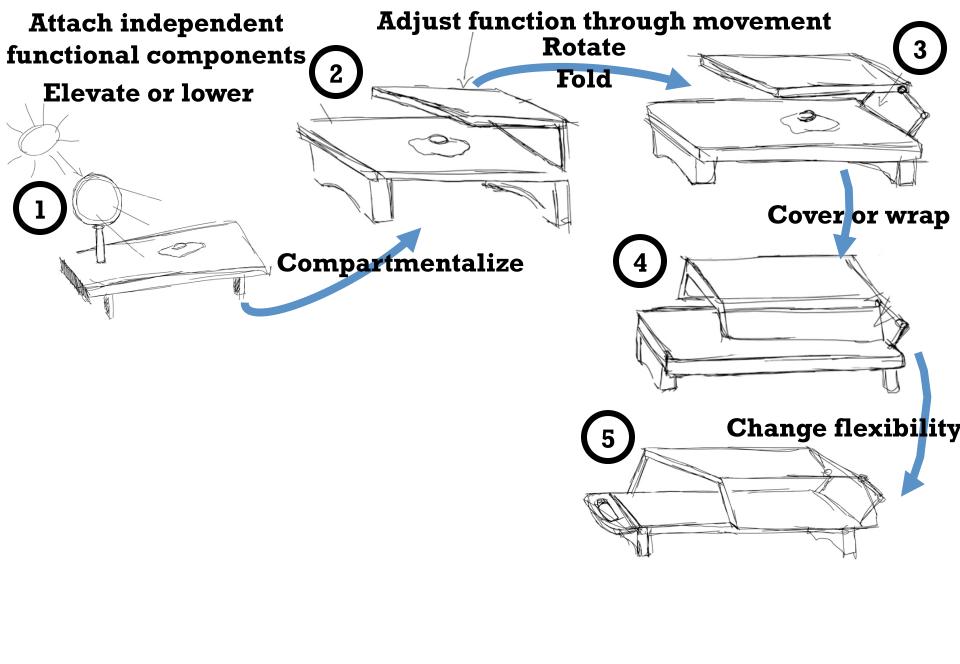


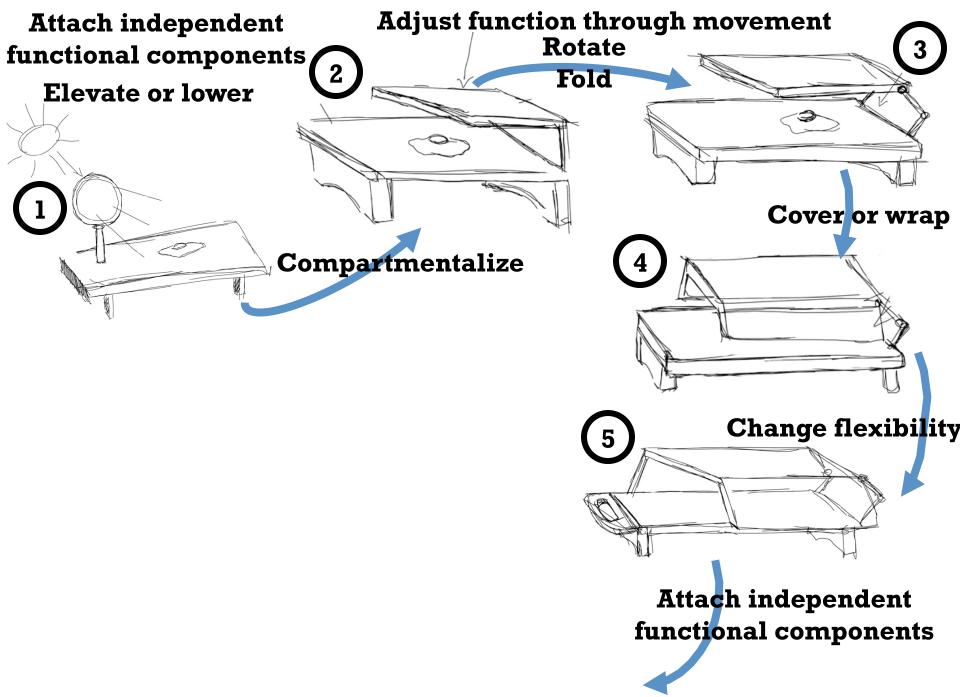


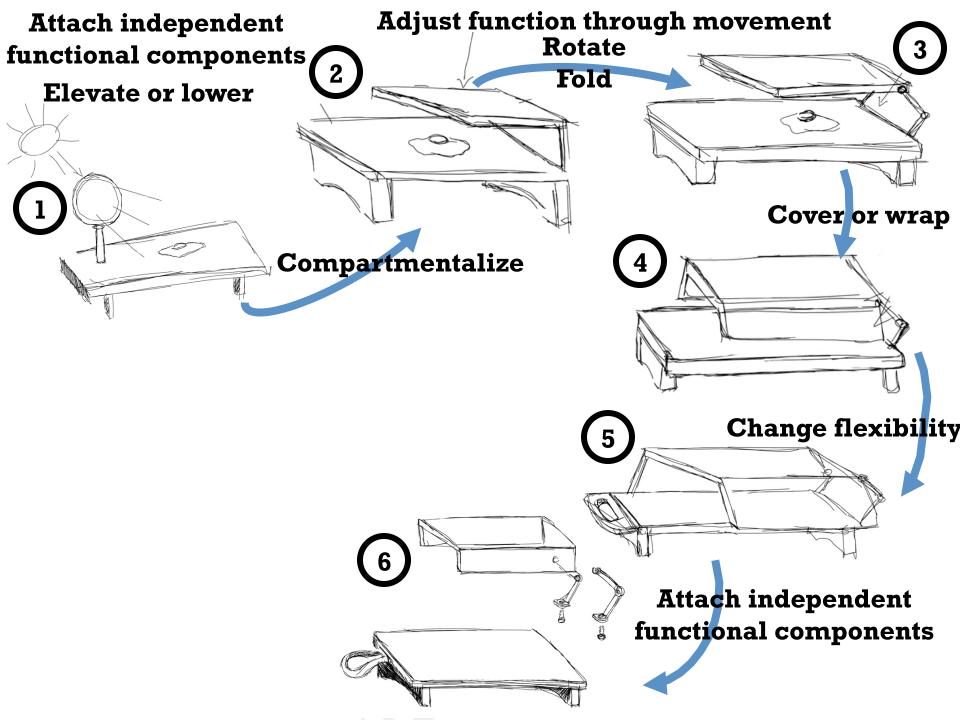


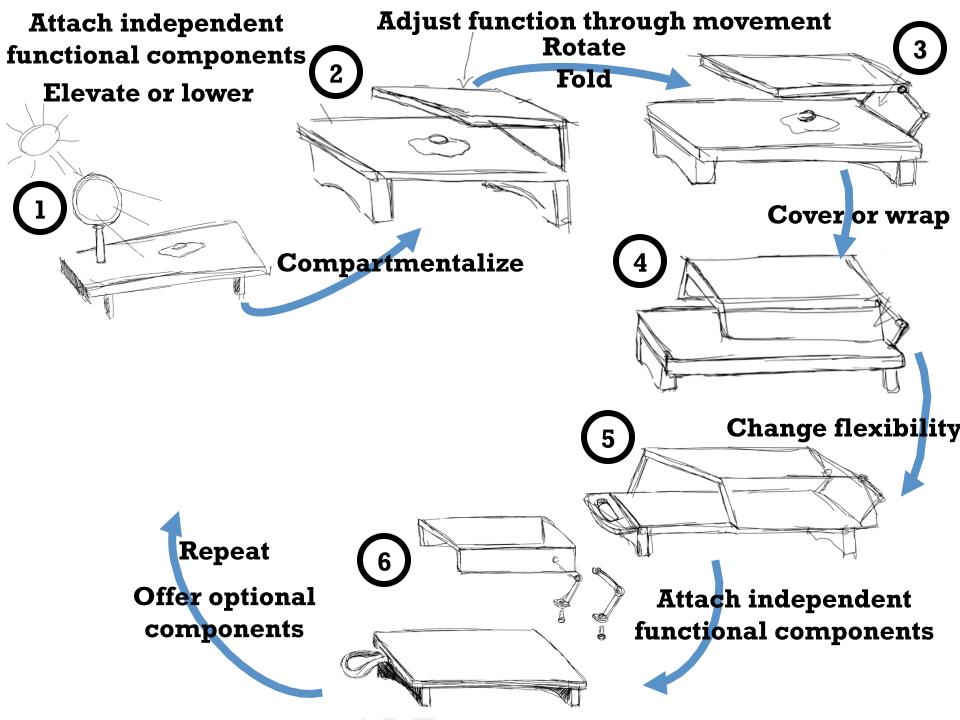


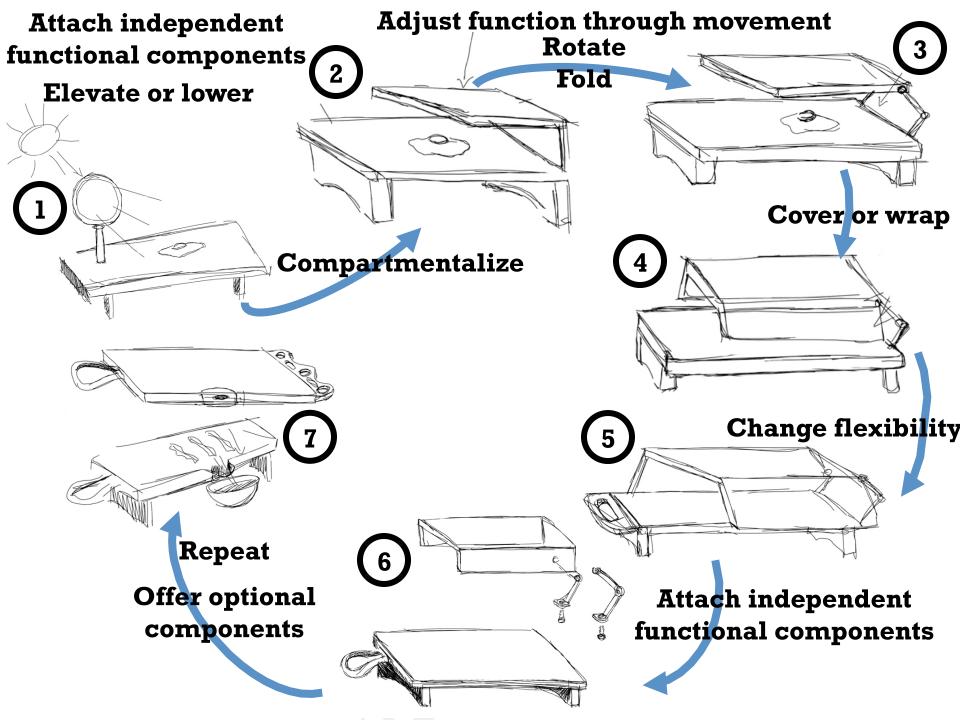












Take Away Points

- Concept development adds more opportunity for novelty and innovation
- As before, don't fixate
 - Look to take the best parts of your concepts and synthesize them together or transform them into something new
- Your goal: develop well-thought-out and articulated concepts

Practice Activity

- As a team, use Design Heuristics to transform the concept for a seating device that you have been given
- Use all three cards that your team is given to transform and develop the original concept

Brainwriting

- As a team, use your deck of Design Heuristics to transition and development your concepts.
 Write your modifications on the first concept sheet of the pack
 - Synthesize concepts together
 - Transition and develop existing concepts

Brainwriting

- As a team, use your deck of Design Heuristics to transition and development your concepts.
 Write your modifications on the first concept sheet of the pack
 - Synthesize concepts together
 - Transition and develop existing concepts
- Pass your concepts and concept sheet packet to the next team

Brainwriting

- As a team, use your deck of Design Heuristics to transition and development your concepts.
 Write your modifications on the first concept sheet of the pack
 - Synthesize concepts together
 - Transition and develop existing concepts
- Pass your concepts and concept sheet packet to the next team
- Look at the feedback your team received. Try to settle on **three** unique concepts