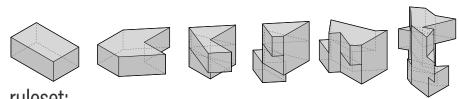
Making Computationally: Rules and Design

Lisa Chun, Kai Shaw, Bleona Velic Fundamentals of Computational Design, Spring 2024 | MP1

PREVIOUS ITERATIONS

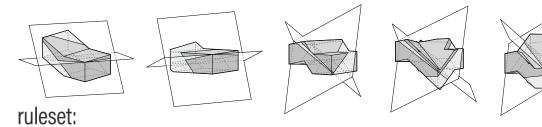
iteration 1



ruleset:

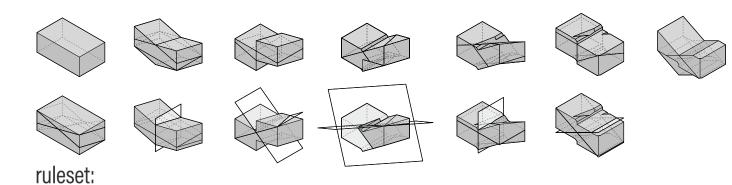
- 1. split either diagonally or corner to corner.
- 2. stack vertically.

iteration 2



1. split either diagonally or corner to corner. 2. stack vertically.

iteration 3



- 1. split either orthogonally, diagonally, or corner to corner.
- 2. if orthogonally split: shift vertically
- if diagonally split: stack vertically if corners are split: stack vertically

iteration 4: physical model



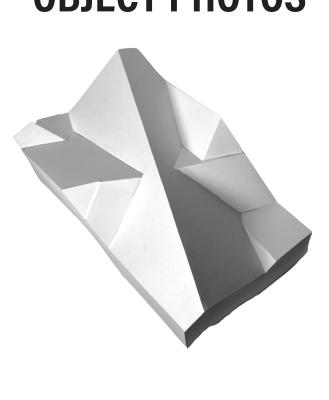


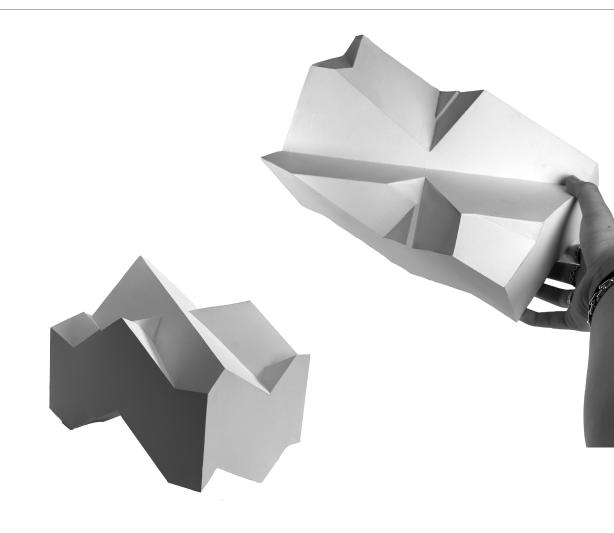
PROCESS DIAGRAM 3A -> 3B -> 2A -> 2B -> 1A -> 1B

TRANSLATING

- 1. the blocks are ordered from top to bottom (1-4) based on highest and lowest points.
 - 2. if the blocks exist on the same plane, then the blocks are ordered from left to right. 3. the numbered blocks are vertically stacked from highest to lowest numerical value.
 - 4. after each set of splits, the number of translated blocks decrease by 1.
 - the diagram shows the 1st block as RED, 2nd as BLUE, 3rd as YELLOW, and 4th as GREY.

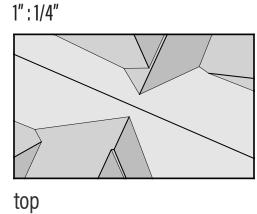
OBJECT PHOTOS

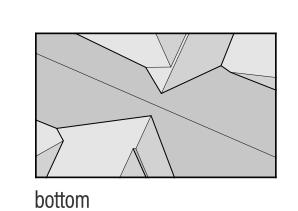


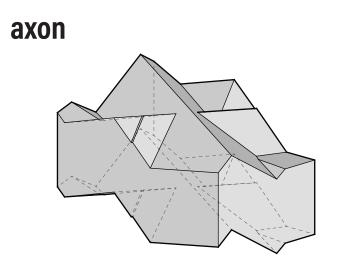


OBJECT DRAWINGS

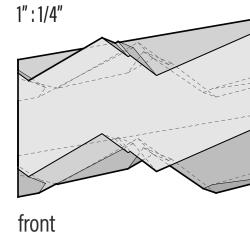


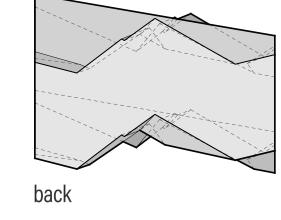




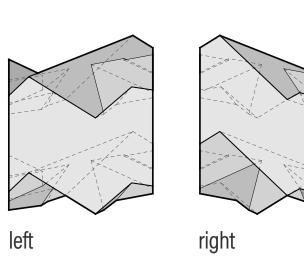


elevations





split results



SPLITTING

split from bounding box

1A

cut plane sections

taking the object's bounding box, a set of 2 splits are made: split A cuts from upper left corners to lower right corners. split B cuts upper right corners to lower left corners.

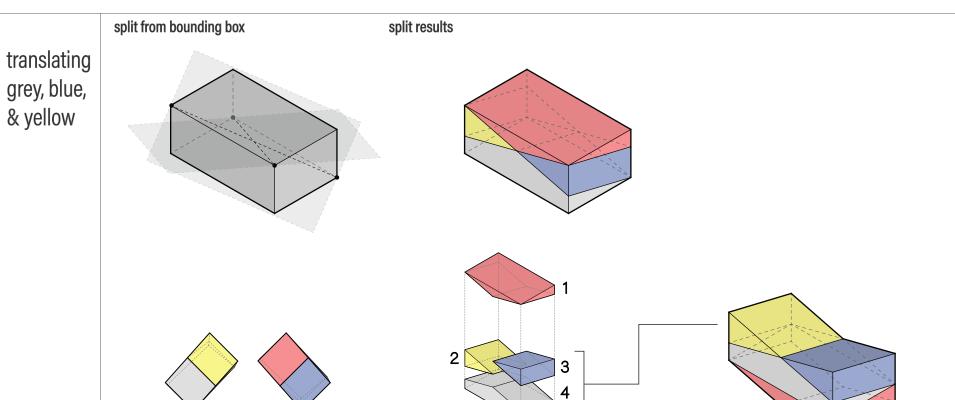
END RULE

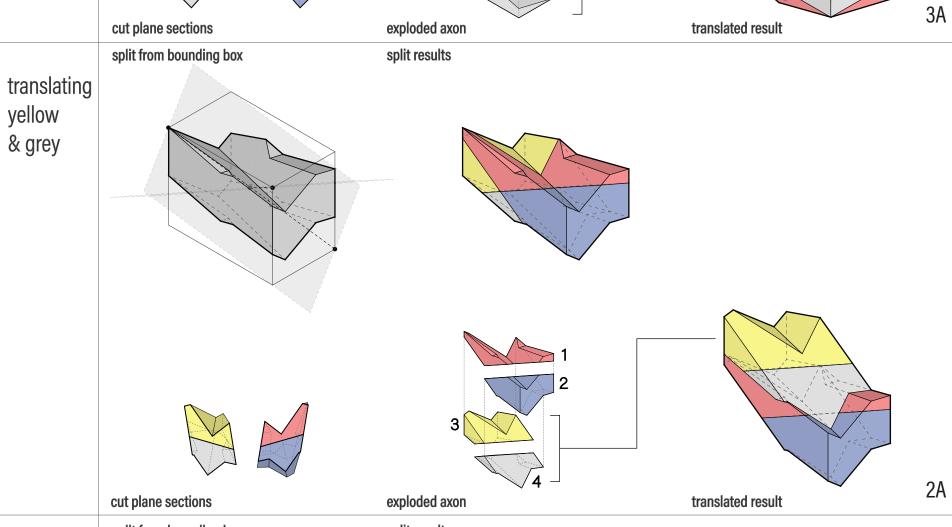
3B

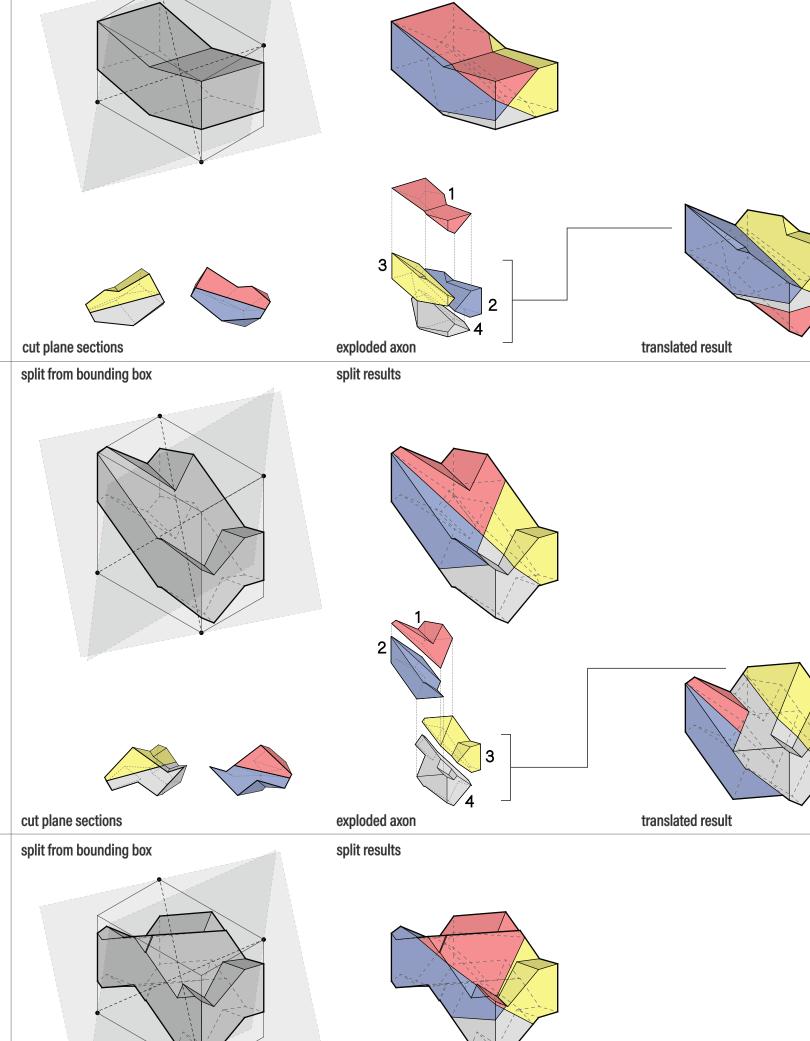
1B

final result

when there are no more blocks to stack, the computation ends.







exploded axon

translating grey

