

THIS DIAGRAM SHOWS THE PROCESS IN WHICH THE PRISMS ROTATE IN HARMONY. CONNECTING EACH PRISM TO ITS PARTNER EDGE IS CRUCIAL. THE EDGES MUST BE CONNECTED IN OPPOSITION IN ORDER FOR THE ROTATE TO OCCUR. THIS CONNECTION ALLOWS FOR ONE TO MOVE ONLY A SINGLE PRISM TO ALLOW ALL THE PRISMS TO MOVE. THE COLOR FILL IN "STEP 2" REPRESENTS THE VOIDS THAT LIGHT SHINES. THE SHAPE OF THE VOIDS DEPENDS ON THE ANGLE OF THE ROTATION IN THE SYSTEM.

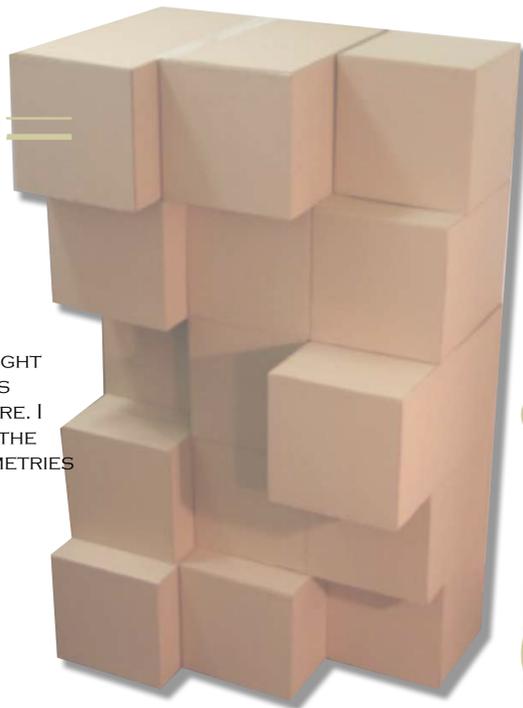
FOLDING ARCHITECTURE

AND ITS APPLICATIONS

THE LOGIC

THE RESEARCH FOR THIS PROJECT IS FUELED BY A PREEXISTING CONCEPT EXISTING IN THE ARCHITECTURE WORLD. FOLDING HAS BEEN A TRENDY TOPIC FOR OVER A DECADE. THE IDEA OF CREATING A GEOMETRY BASED ON THE PROCESS OF FOLD-CREASE-CUT-SCORE-HINGE (IN VARIOUS ARRANGEMENTS) CAN LEAD TO REVOLUTIONARY WAYS OF THINKING ABOUT ARCHITECTURE. ALTHOUGH THE FOLD-CREASE-SCORE ETC. METHOD IS INFLUENTIAL, MY RESEARCH TAKES IT ONE STEP FURTHER AND USES FOLDING AS AN APPLICATION OF MOTION. GAINING INSPIRATION FROM THE ORIGAMI MAGIC CUBE, I WAS ABLE TO PUSH THE LIMITS OF THE PROCESS IN ORDER TO CONCOCT DIFFERENT WAYS OF USING FOLDING FOR ARCHITECTURAL SYSTEMS AND FURNITURE.

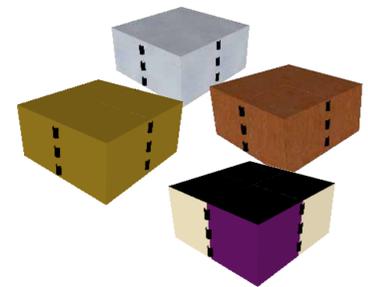
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MATERIALS

THESE MATERIALS ARE CAPABLE OF SATISFYING THE DESIGN AESTHETIC. EACH MATERIAL EMBODIES A UNIQUE FEEL, WHICH CAN CONTRIBUTE TO AN ATMOSPHERE SUITED FOR ONES NEEDS.

CARDBOARD-PLASTIC-METAL-WOOD

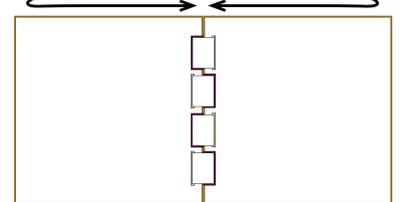


CONNECTOR

EACH CONNECTOR IS MADE SO THE "PRISMS" CAN ROTATE AND BECOME FLUSHED WITH EACH OTHER. ALTERNATING THE POSITION OF THE CONNECTOR WITH THE VOIDS ALLOWS FOR THE CONNECTOR ON THE OPPOSITE SIDE TO FIT INTO THE VOIDS.

FOLD - HINGE

■ = Void
■ = SLOT



LIGHT

WORLD RENOWNED ARCHITECT LOUIS KAHN, DWELLED ON NATURAL LIGHT PLAYING A KEY ROLE IN ARCHITECTURE. HE CREATED GEOMETRIES IN HIS BUILDING IN A WAY THAT LIGHT CAN ENTER AND EFFECT THE ATMOSPHERE. I CONTINUED WITH KAHN'S THEORIES AND PRACTICES IN ORDER TO USE THE FOLDING OF THESE PRISMS TO ADD AND SUBTRACT LIGHT. THESE GEOMETRIES ARE USED AS WALL OR WINDOW SYSTEMS.

APPLICATIONS OF PRISMS



COFFEE TABLE



LIGHT IMPLEMENTER



SCHOOL DESKS