

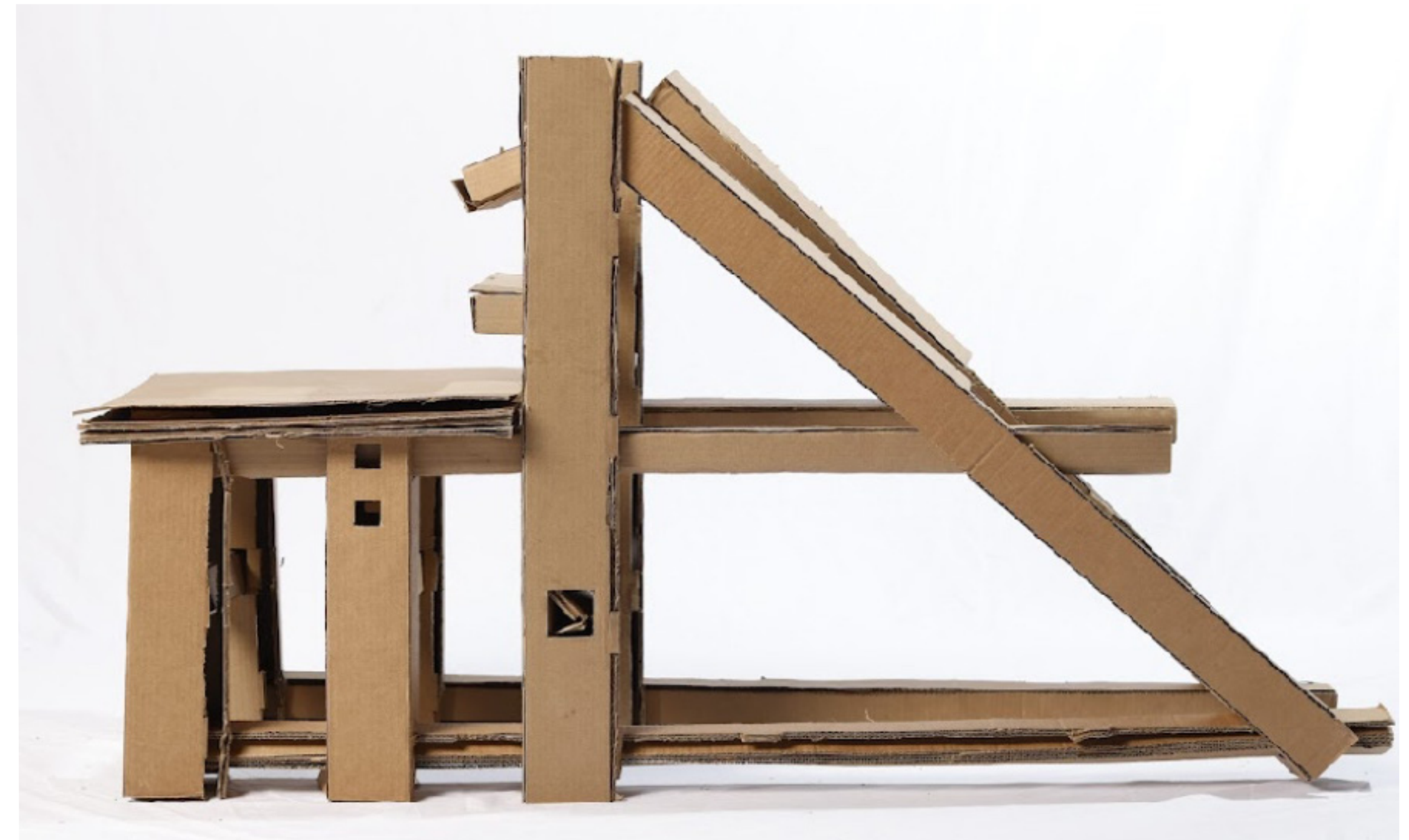
# “Interlock” - A Friction-Fit Cardboard Experience

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### Project Brief:

This design is intended to be a load-bearing chair constructed entirely from cardboard without the use of glue or tape, challenging me to rely solely on joinery and structural logic. Using a hole-and-dowel system, each component locks into the next, creating a continuous interdependent framework. The dowels act as structural pins, engaging with precisely measured notches that allow the joint to open or close while still maintaining stability. The angled “buttress” supports introduce a clear focus on structural systems and force interaction. By incorporating diagonal bracing, the design directs weight through controlled paths, redistributing forces across multiple dowels to prevent lateral failure. Rather than concealing structure, the chair makes force distribution visible — highlighting how compression, friction, and mechanical interlocking work together to ensure stability.

The final prototype successfully supported over 300 pounds, demonstrating how joinery and compression-based design can transform a fragile material into a rigid structural system.