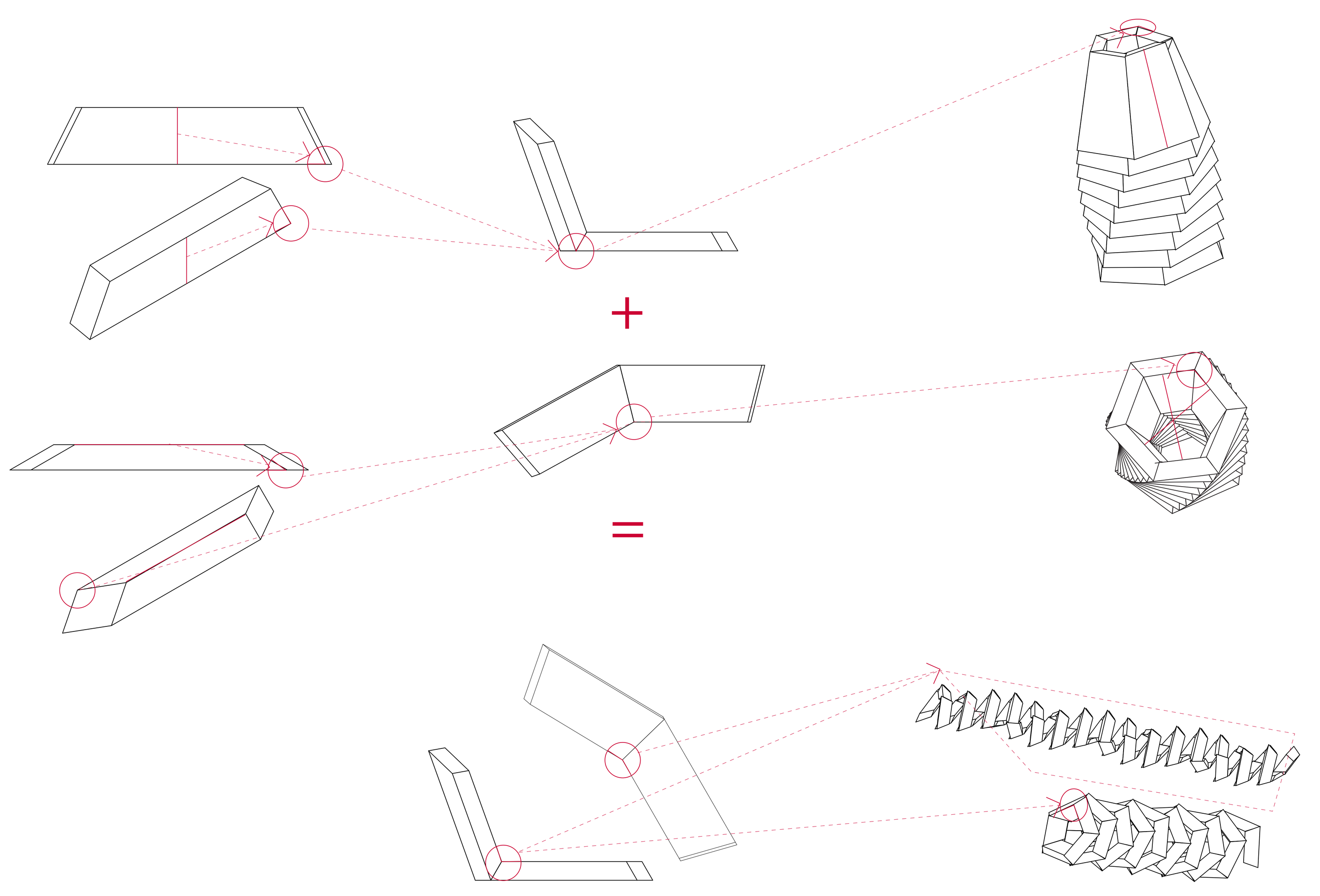
BEYOND THE SIMPLICITY



An assembly model in Digital Project has a great feature - it does not have any frame work, but has only a part. Because of this, assembling parts has some freedom to be any sort of forms. Furthermore, along with a little changes in parameters, its shape becomes dynamic. We carefully observed its unpredictable behaviors. And we analyzed relationships between parameters, parts, and assembly model - the impact of parameters on parts, the respond of parts to the change of parameters, and the generation of assembly models. Based on this study, we focused on playing with a simple part and how it can self-generate dynamic forms under a logic of assembly.

The part has only one parameter - the interior angle of trapezoid. But this parameter controls basic elements of the part causing the starting point of alteration - height and width. First, it causes the alteration of part: as the angle gets bigger, the height of part becomes taller under a formula (angle/10deg*0.125in), and the affected width gets longer. Second, this alteration impacts the assembly: it creates a reverse relationship in a range of angle from 1deg to 90deg and from 90deg to 179deg. In the former range, the shape of assembly model gets shrunk, while it gets stretched in the latter range.

Beyond the Simplicity

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HEIGHT

ANGLE

HEIGHT+ANGLE