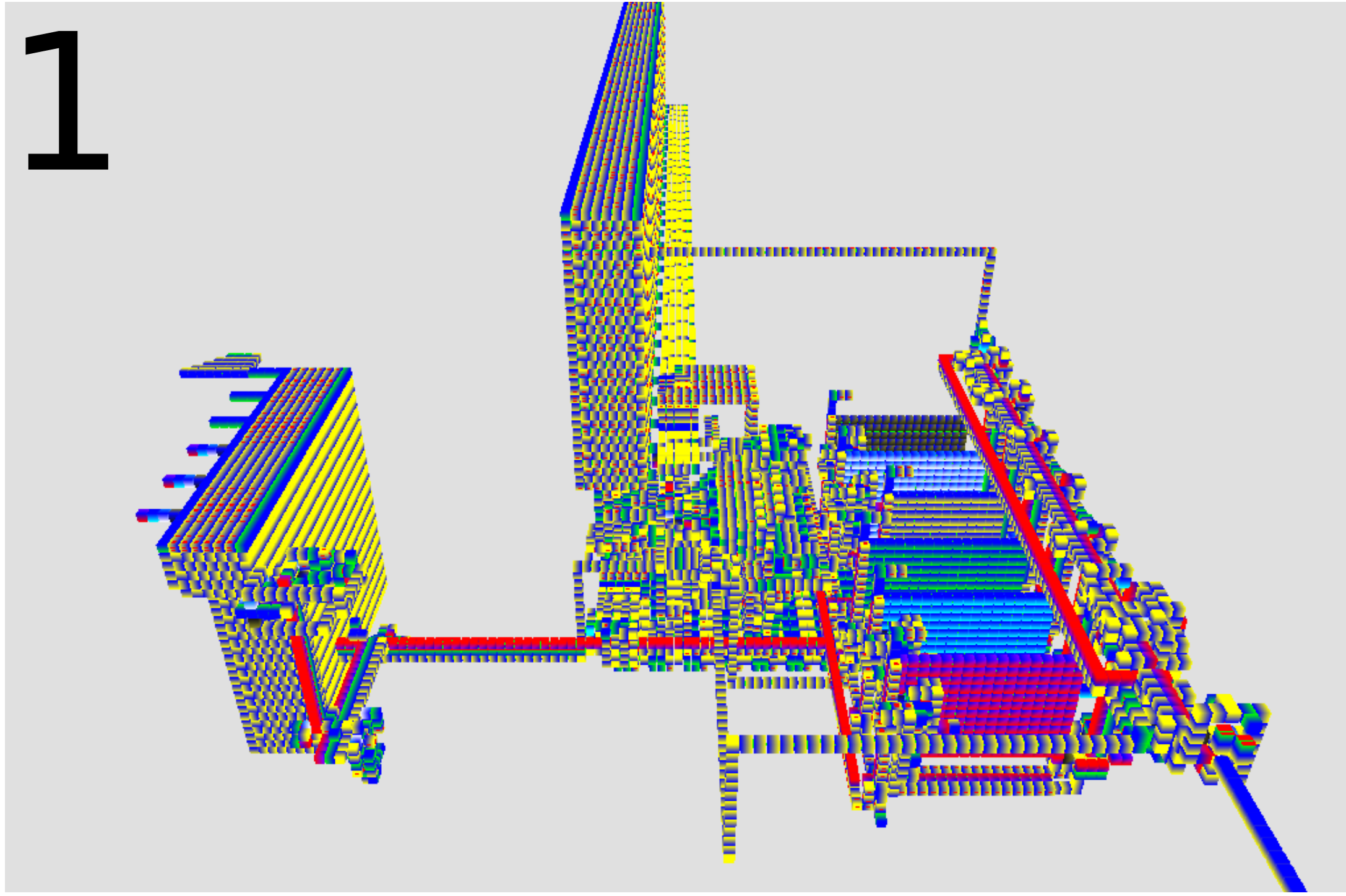


A Kinematic Model of a Self-Replicating Programmable Constructing Machine

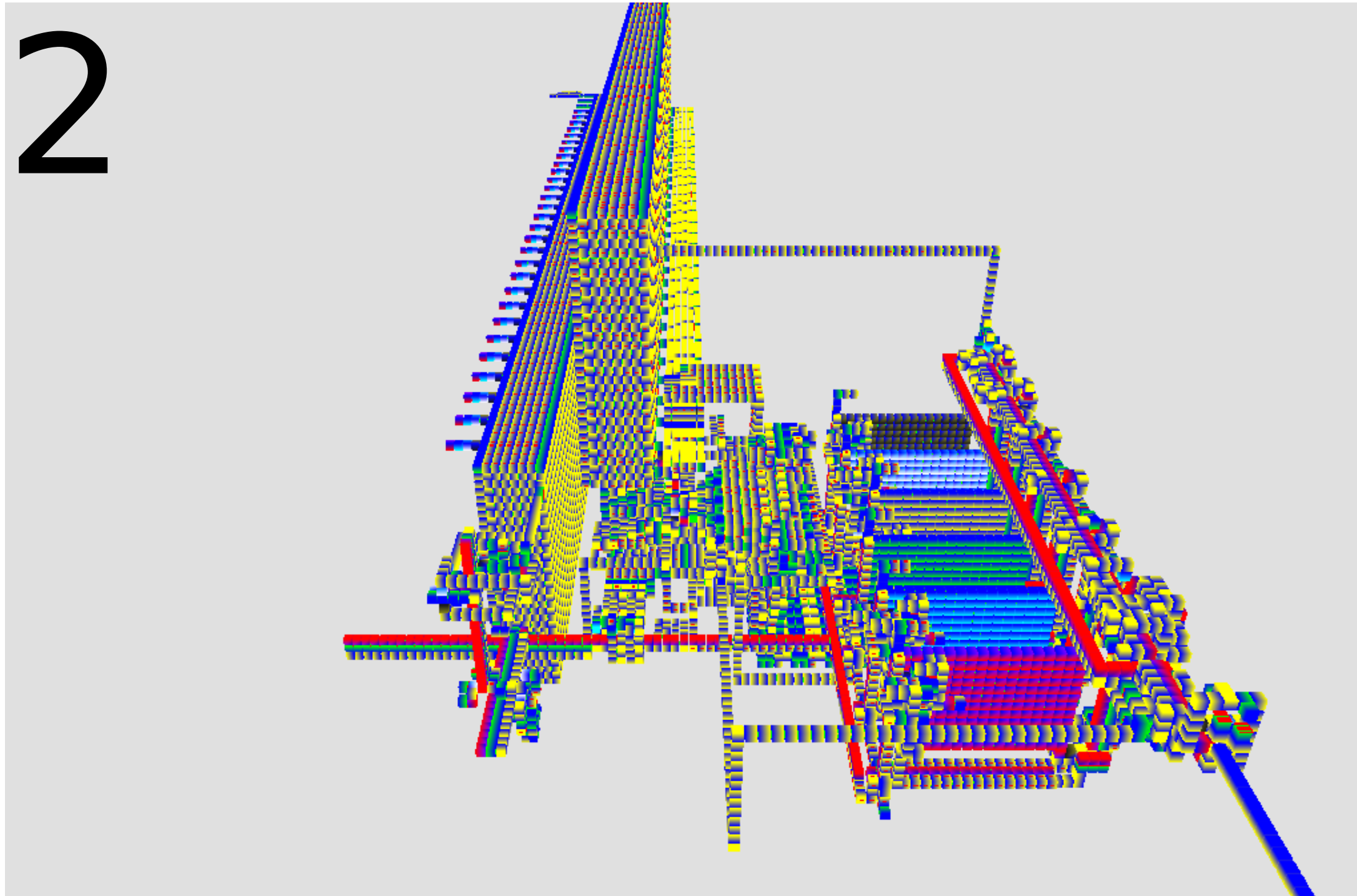


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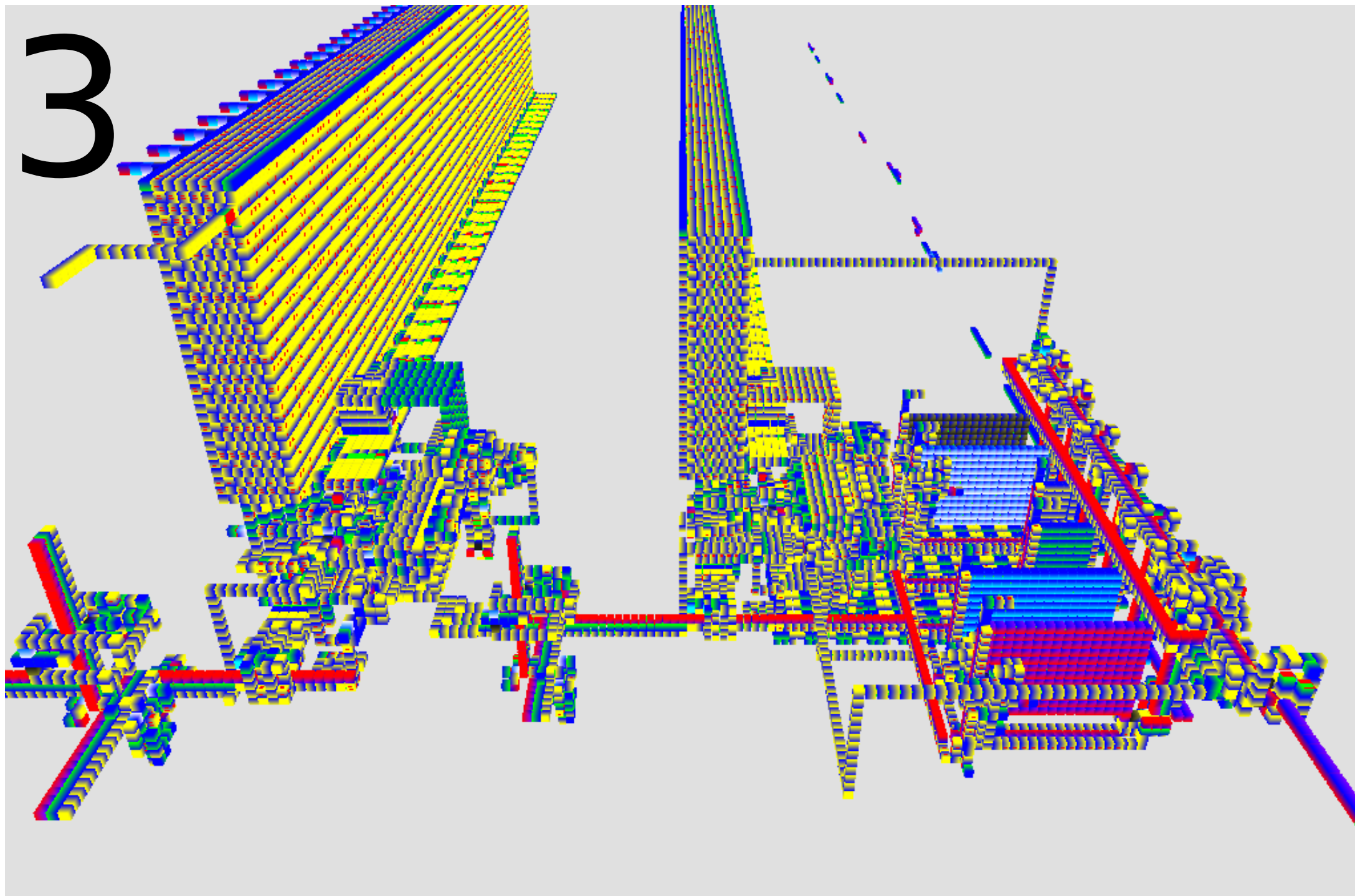


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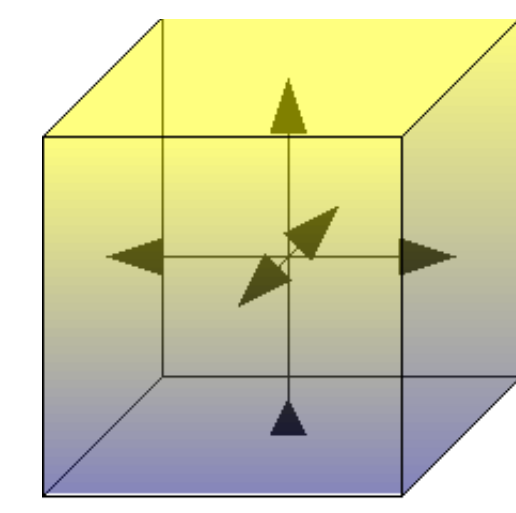
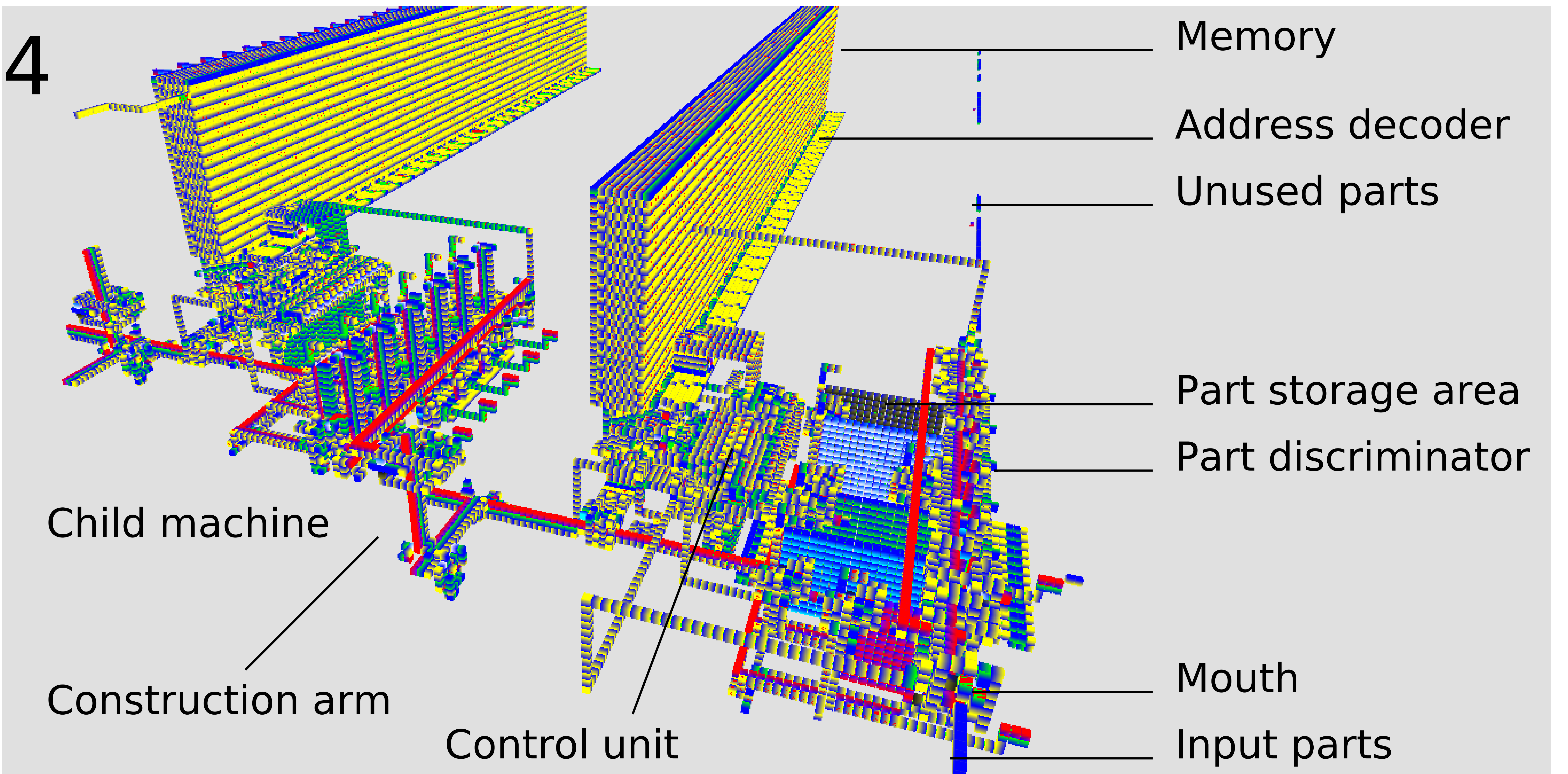
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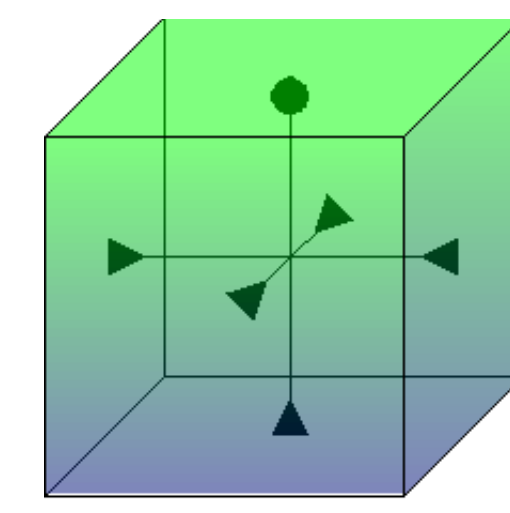
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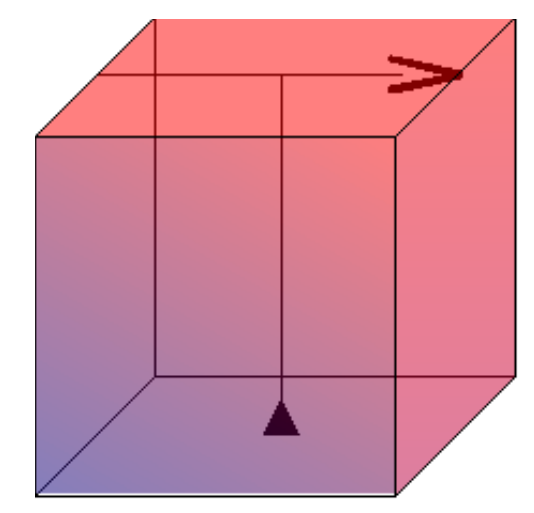
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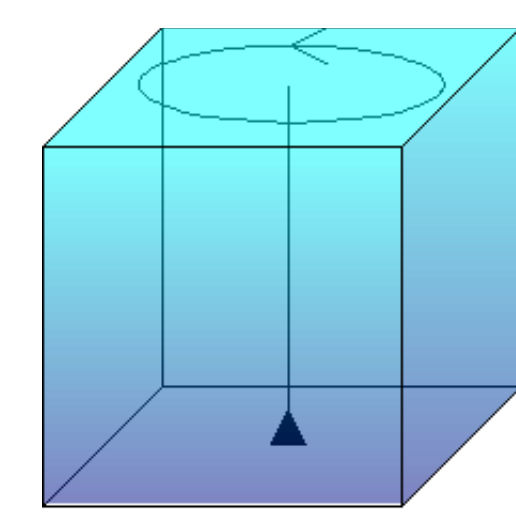
Wire



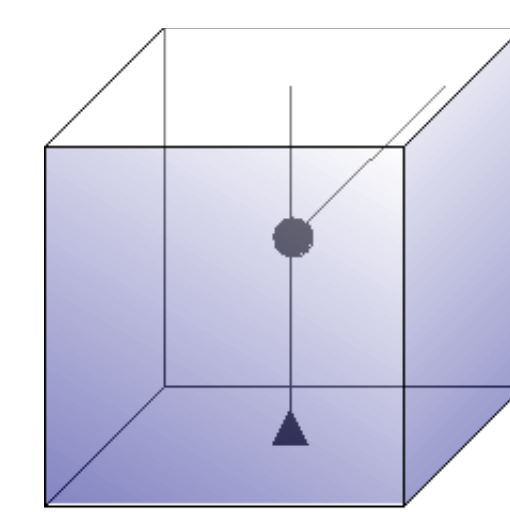
NOR gate



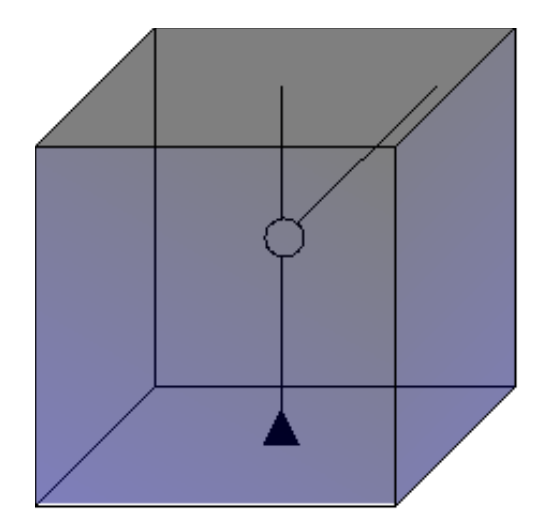
Slide



Rotate



Connect



Disconnect

The machine is based in a 3D discrete space simulation environment that supports six different types of cubic part. Parts can be in any orientation. Boolean signals are used to activate parts. When activated, the slide part can be used to move other parts. Connected collections of parts move together.