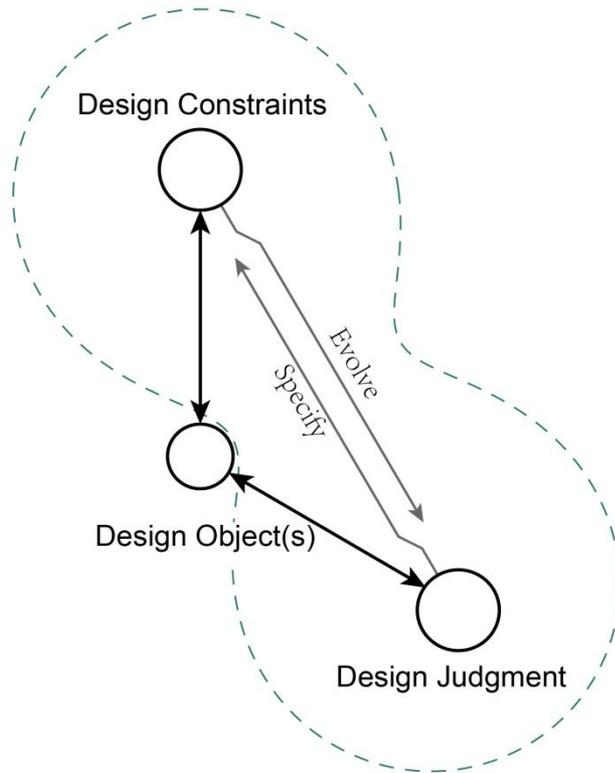


Design object(s) refers to the virtual seed of design solution that may be transformed in-between different forms of design representations along its way of evolution. It is not only the target, but also the driver of design problem solving by means of its iterative feedback loops with design judgment, design constraints and design computation process.

The **three loop structures** represent different segments of the proposed ecosystem of design computation, which have been applied for problem solving of different kind. While combined together, a new structure emerges that activates all players of the ecosystem, for which multiple feedback loops are enabled to realize a complex network that drives the co-evolution of all the players.

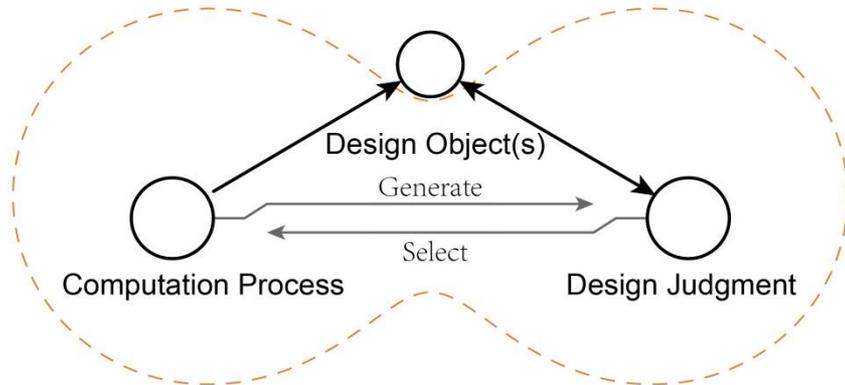
Ecology of computational architecture design



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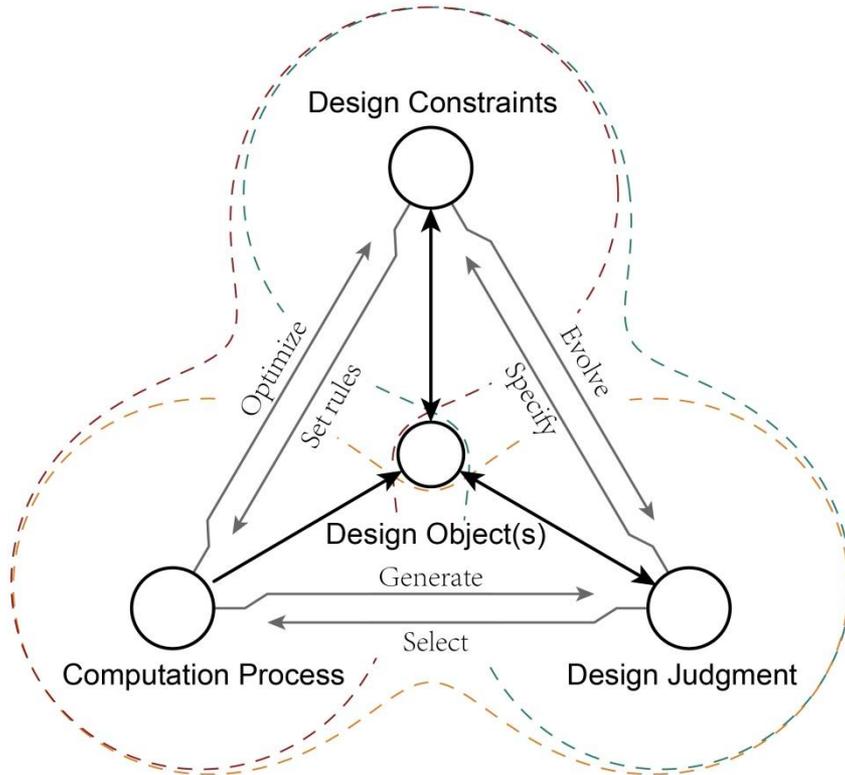
Ecology of computational architecture design



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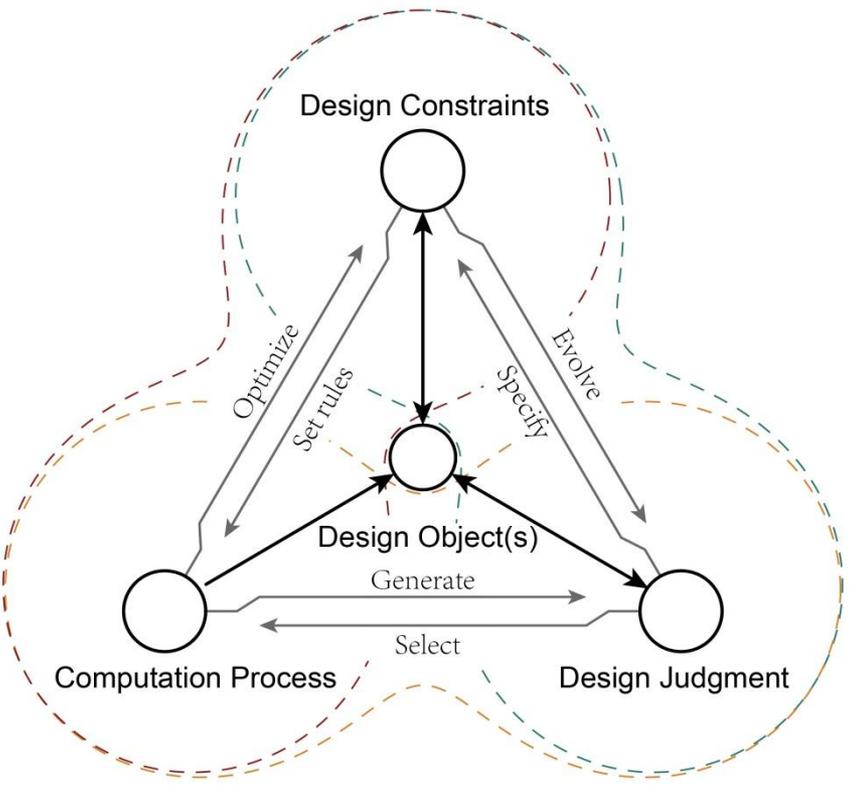
Ecology of computational architecture design



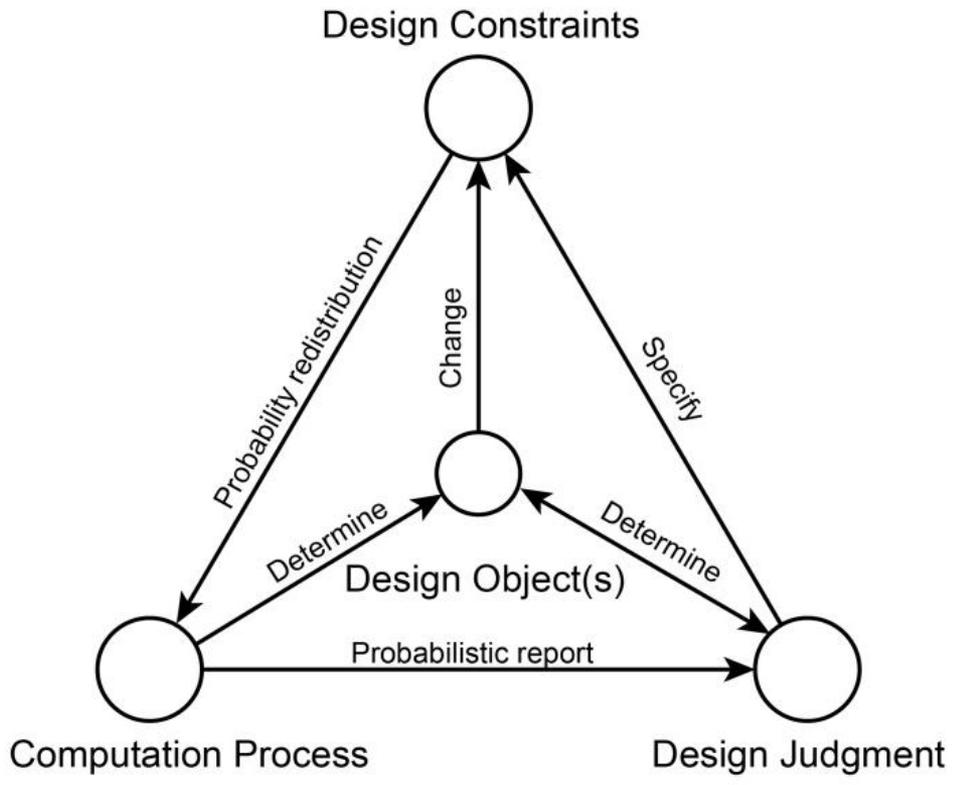
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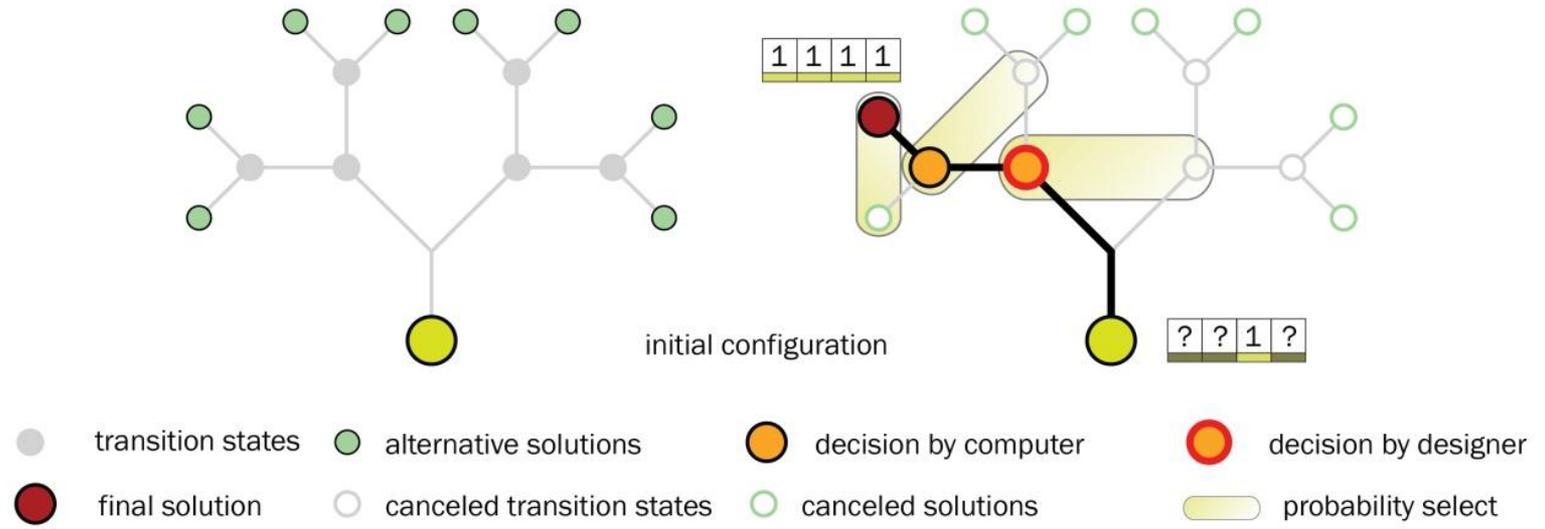
Ecology of computational architecture design



Ecology of computational architecture design

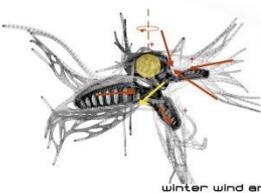
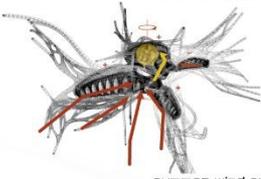
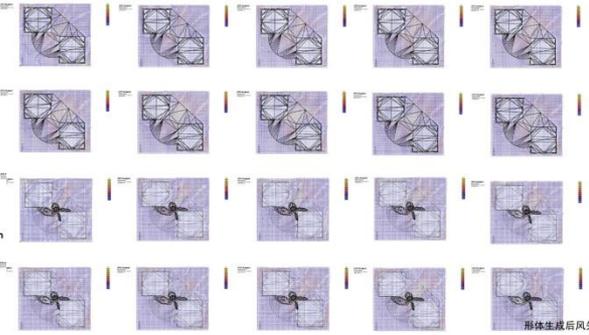
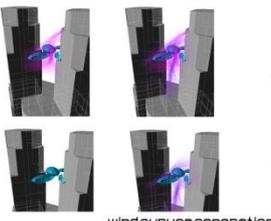
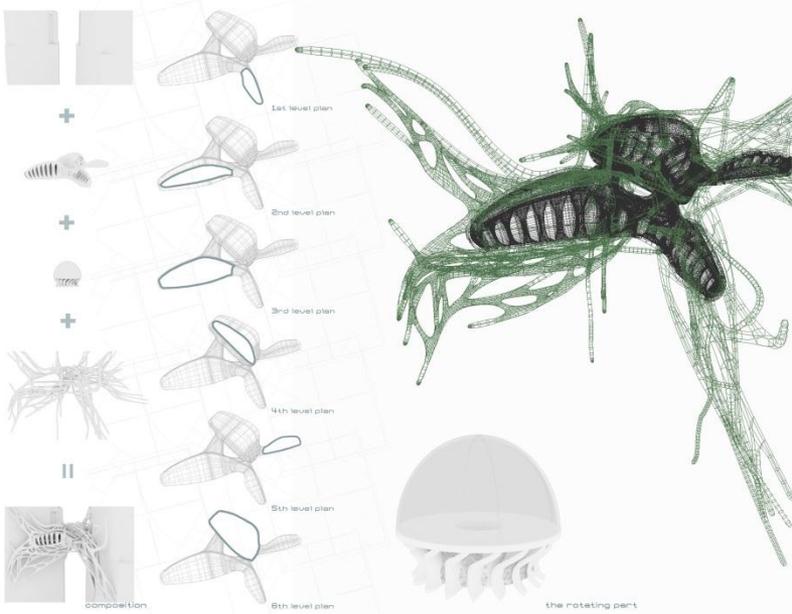
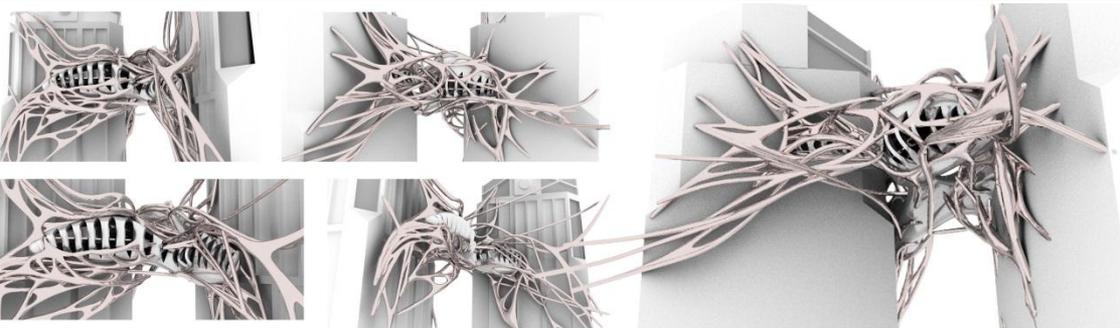


Quantum version



Interactive state transition method

This thesis presents an **interactive state transition** (IST) method as an alternative solution for modeling **non-deterministic** and **interactive** combinatorial design problem solvers. IST sees the evolution of design objects as a process of continuously branching through a solution tree, it is a process of state transition from the most ambiguous configuration at the root to a definite one at the leaf. Such process is driven by the interaction between design computation process and designer’s judgment, while the former one provides probabilistic ranking on the alternative states to choose, the later one makes informed decision directly on the state of design objects.

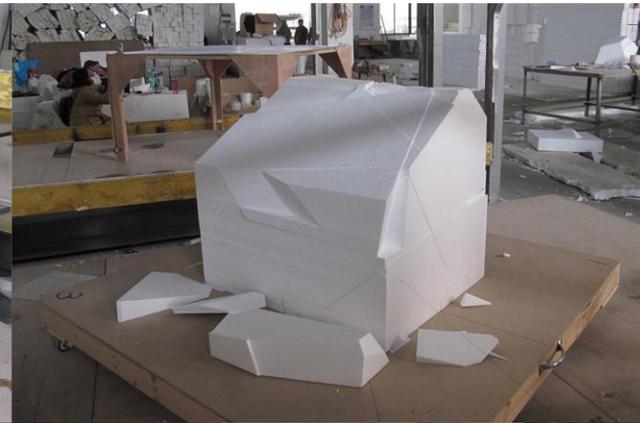


DANCING WITH THE WIND

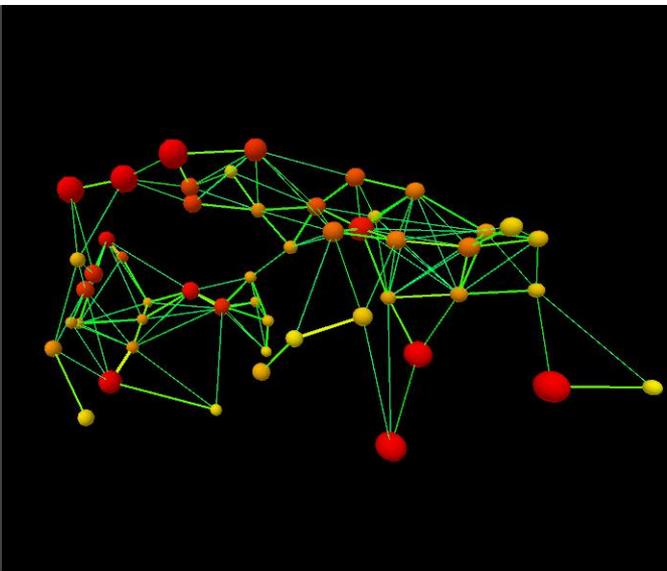
DANCING WITH THE WIND



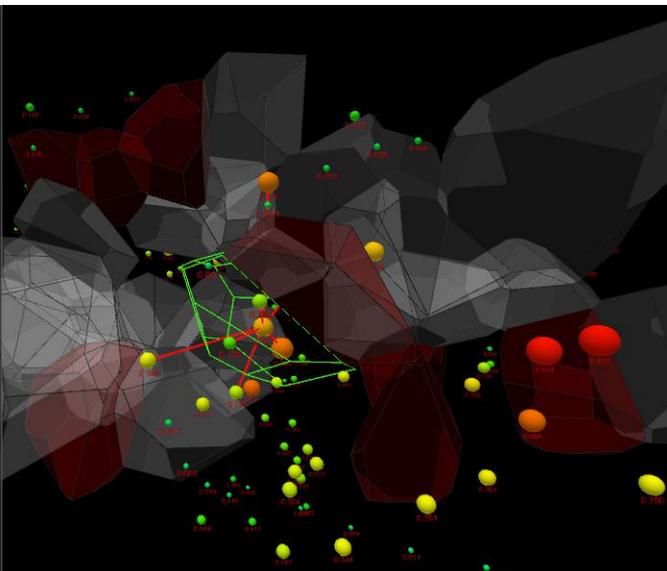




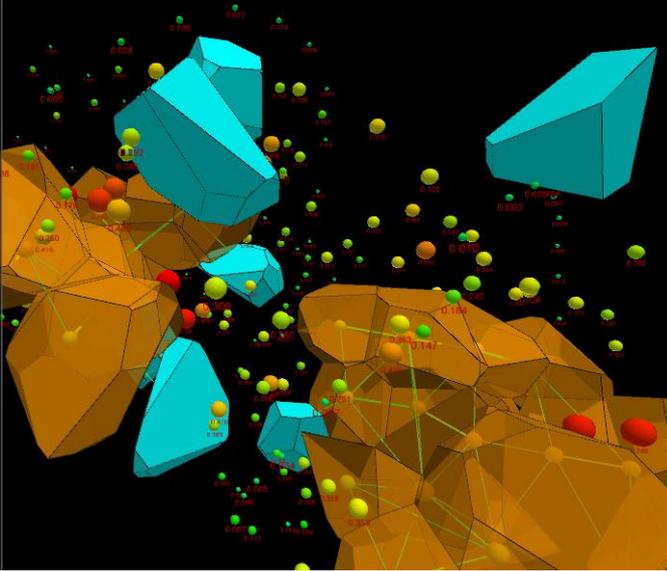
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0.40	PTHRESHOLD
0.50	CONWEIGHT
1.00	DISWEIGHT
0.15	OPACITY
WIREFRAME	CONNECTION
SHOWBALL	SHOWTEXT
DRAWREF	DRAWLINK
DRAWCELL	CHECKCELL
IRREVERSABLE	REVERSABLE
REDUCESOLID	ADDSOLID
-300.00	ZHEIGHT
SUGGESTALLGS	SHOWGROUND
OPEN_VERSION	SAVE_VERSION



75	NUMOFSOLIDS
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26.435 m2	
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0.40	PTHRESHOLD
0.50	CONWEIGHT
1.00	DISWEIGHT
0.15	OPACITY
WIREFRAME	CONNECTION
SHOWBALL	SHOWTEXT
DRAWREF	DRAWLINK
DRAWCELL	CHECKCELL
IRREVERSABLE	REVERSABLE
REDUCESOLID	ADDSOLID
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SUGGESTALLGS	SHOWGROUND
OPEN_VERSION	SAVE_VERSION



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0.00	ZHEIGHT
SUGGESTALLGS	SHOWGROUND
OPEN_VERSION	SAVE_VERSION



75	NUMOFSOLIDS
30.00	SURFACEAREA
0.10	CTHRESHOLD
0.30	PTHRESHOLD
0.55	CONWEIGHT
0.75	DISWEIGHT
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WIREFRAME	CONNECTION
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DRAWCELL	CHECKCELL
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REDUCESOLID	ADDSOLID
0.00	ZHEIGHT
SUGGESTALLGS	SHOWGROUND
OPEN_VERSION	SAVE_VERSION



Mid-term Review Presentation

Han Feng HyperBODY

150	NUMOFSOLIDS
124.00	SURFACEAREA
0.10	CTHRESHOLD
0.40	PTHRESHOLD
0.60	CONWEIGHT
0.55	DISWEIGHT
0.50	OPACITY
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SHOWBALL	SHOWTEXT
DRAWREF	DRAWLINK
DRAWCELL	CHECKCELL
IRREVERSABLE	REVERSABLE
REDUCESOLID	ADDSOLID
0.00	ZHEIGHT
SUGGESTALLGS	SHOWGROUND
OPEN_VERSION	SAVE_VERSION

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0.50	OPACITY
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DRAWREF	DRAWLINK
DRAWCELL	CHECKCELL
IRREVERSABLE	REVERSABLE
REDUCESOLID	ADDSOLID
0.00	ZHEIGHT
SUGGESTALLGS	SHOWGROUND
OPEN_VERSION	SAVE_VERSION

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0.60	DISWEIGHT
0.50	OPACITY
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DRAWREF	DRAWLINK
DRAWCELL	CHECKCELL
IRREVERSABLE	REVERSABLE
REDUCESOLID	ADDSOLID
0.00	ZHEIGHT
SUGGESTALLGS	SHOWGROUND
OPEN_VERSION	SAVE_VERSION

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0.13	CTHRESHOLD
0.40	PTHRESHOLD
0.60	CONWEIGHT
0.35	DISWEIGHT
0.50	OPACITY
WIREFRAME	CONNECTION
SHOWBALL	SHOWTEXT
DRAWREF	DRAWLINK
DRAWCELL	CHECKCELL
IRREVERSABLE	REVERSABLE
REDUCESOLID	ADDSOLID
0.00	ZHEIGHT
SUGGESTALLGS	SHOWGROUND
OPEN_VERSION	SAVE_VERSION