BLOCKS WORLD, BOUNDARY REPRESENTATION

An appropriate change in representation can make a problem trivial.

New notation: The **stack**   [...]

A stack contains ordered labels, the right most is OnT.

     [ ] is the empty Table

       [ ][ ] = [ ]   Infinite Table Space Axiom

        ][=   minimal form of axiom

     [a] = (a On T)

     [a b] = {(a On b)
            (b On T)}

     [a][ ] = [a]

Representation of example problem: [a b][c] ==> [a b c]

Move(a Onto b): [a . X][b . Y] = [. X] [a b . Y]

     Dot means "the rest of the stack".

Level(stack):   [a b] ==> [a][b]

                  ==>   ][minimal form of Level

PutInOrder(level   stack   to pattern   stack):

     term: [b][a]   pattern: [a b]   order: [a][b]

     To PutInOrder,
         match the sequence of labels in level term to pattern term.

Convert(old   to new):   new = Move(PutInOrder(Level(old)))