Stack Decoding Algorithm

```
1: place empty hypothesis into stack 0
2: for all stacks 0...n-1 do
     for all hypotheses in stack do
3:
        for all translation options do
4:
           if applicable then
5:
             create new hypothesis
6:
             place in stack
7:
             recombine with existing hypothesis if possible
8:
             prune stack if too big
9:
          end if
10:
        end for
11:
     end for
12:
13: end for
```