Synchronous CFG

- SYNCHRONOUS CFG capture the "double generation".
  - Nonterminals must map 1-1.

$$X \longrightarrow X_0 \text{ 的 } X_1 \mid X_1 \text{ in } X_0$$

- SYNCHRONOUS TREE SUBSTITUTION GRAMMARS (STSG)
  - Whole subtrees are attached $\Rightarrow$ structural changes ok.
  - In fact equivalent to SCFG.