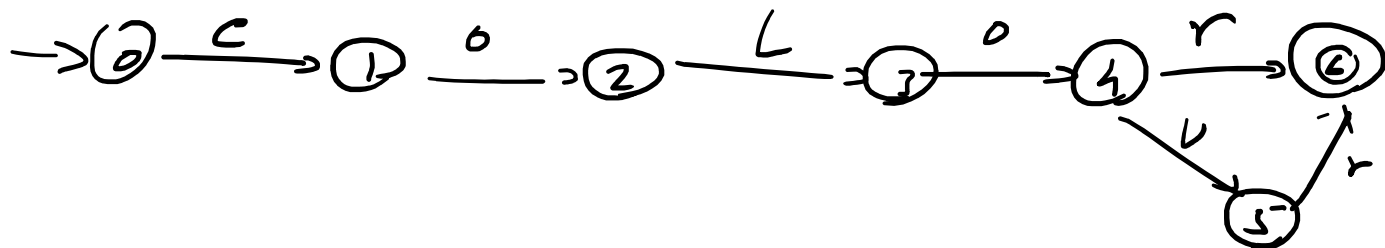
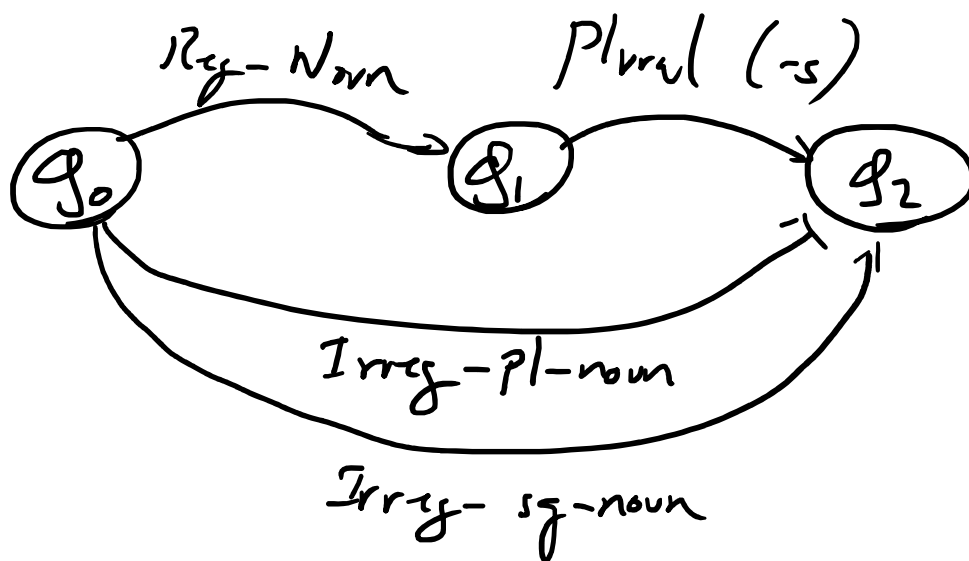


→ Finite State Machines:

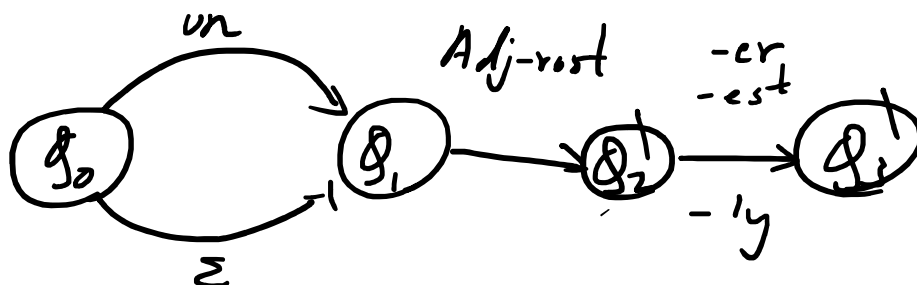
color → colour



→ Finite State Machine for Inflection:



→ FSA for English Adjectives:

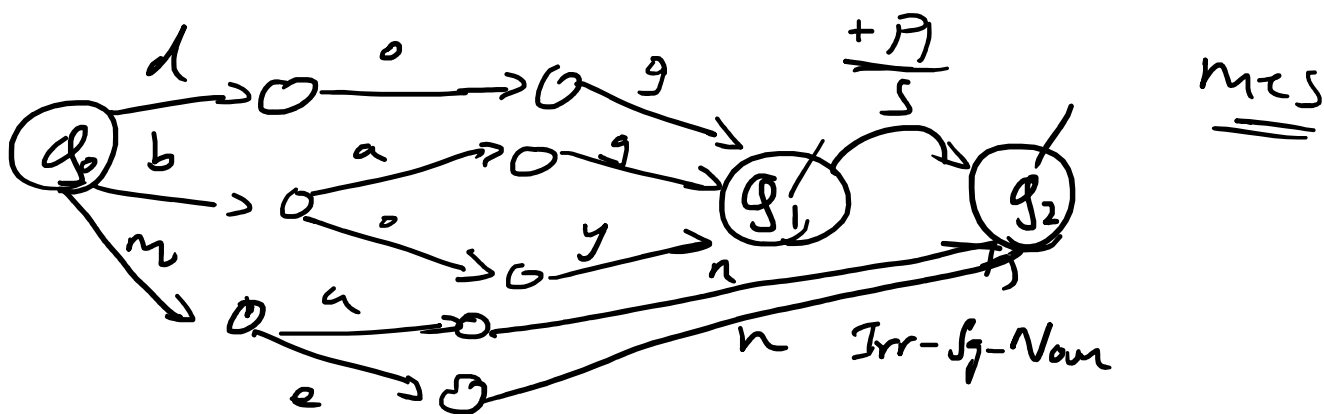


Happy, Happier, Happiest

Happy, Happier, Happiest

Real, Unreal

→ Lexicon in FSA: dog, dogs, boy, boys, man, men



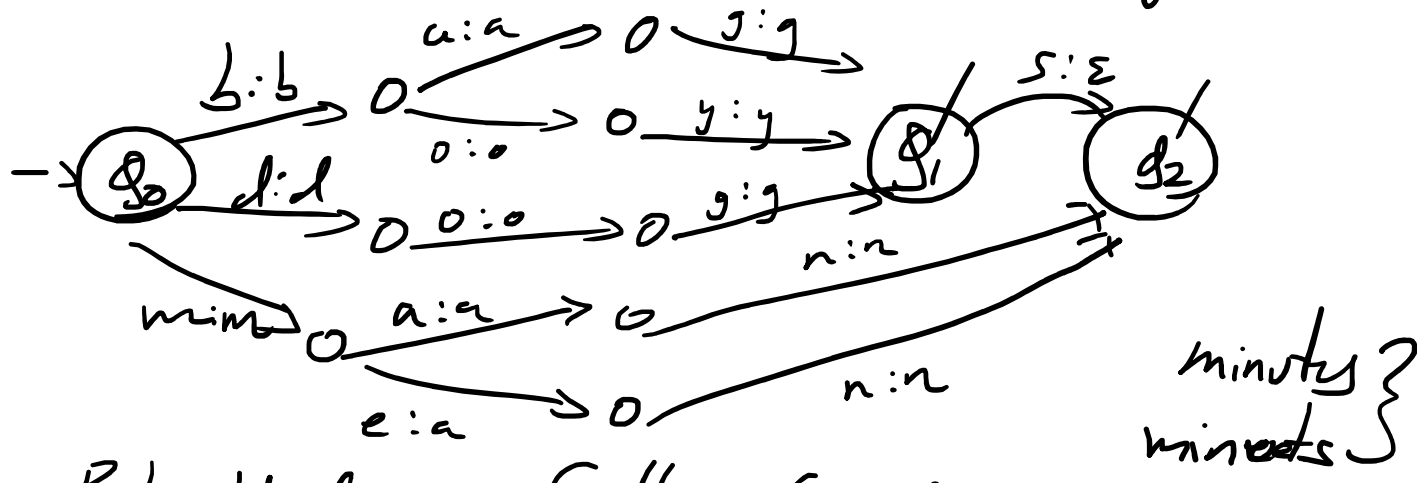
→ FSA is language recognizer/generator.

→ Transducer: Used to perform Morphological Analysis.

→ Finite State Transducer:

→ Machine Translation

→ Each edge is associated with 2 strings.



e: a → o / n...

minutes

→ Rule Handling: Spelling Correction

a → b | c - d

eg: c a d → c b d

Lexical
Intermediate
Surface

Σ ||||| ||||| ||||| Σ

{ f | o | x | + N | + PL | } Lexical

fox
foxes

{ f | o | x | ^ | s | # | } Intermediate

(Context Free
Grammar)

{ f | o | x | c | s | } Surface

→ Rewriting a as b when it occurs b/w c & d

a → b | c - d

eg: c a b | c b d