

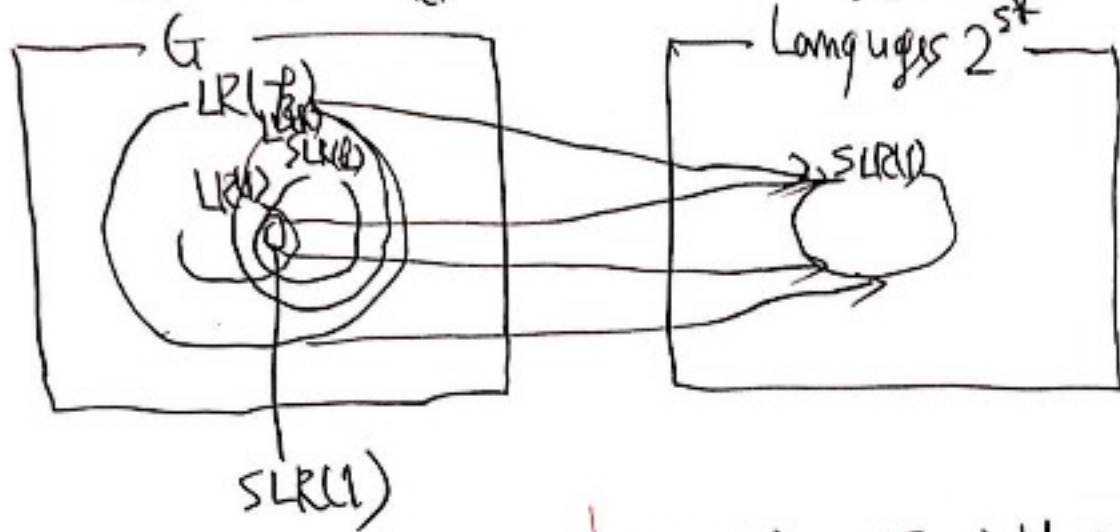
6/1 (*) Chap 8 LR(k) Parsing

↓

Review.

$G \rightarrow T_k(G)$ $T_k(G)$ is SLR(k) iff G is LR(k) - P66 of TP 6.6

$G \rightarrow T_{k,1}(G)$ $T_{k,1}(G)$ is LR(1) iff G is LR(k) - P98 of TP 6.7



Right Parser
Left Parser

Det. →

LR(k) R-right parse
 SLR(k), LALR(k) rightmost der. in reversed order
 LL(k) L-Left Parse (Bottom-Up)
 leftmost der. in normal order (Top-Down)

SLR(k) parser

$A \rightarrow \alpha \epsilon P$ SLR(k) parser

vs $A \rightarrow \alpha^R | \alpha$ $\alpha \in \text{Firs}_k(\alpha) \cup \text{Follow}_k(A)$

Refinement of Grammar symbol (NO ϵ)

Left Parser $A \rightarrow \alpha^R$

~~no lookahead~~

Left Parser vs Right Parser

Top down parsing
 stack
 Future (viable suffix)
 $\alpha \cdot A \gamma$

Bottom-Up
 History (viable prefix)
 $\alpha \beta \cdot z$

