Type	Language, Example	Machine	WP decidability	Grammar G = (V, Σ, P, S)
0	recursive enumerable $\{n^n\}$	Turing machine	undecidable	$\alpha A \beta \rightarrow \alpha \gamma \beta$ unrestricted
1	context-sensitive „natural languages“ $\{a^n b^n c^n\}$	linear bounded automaton		$\alpha A \beta \rightarrow \alpha \gamma \beta$ $A \in V$, $\alpha \in (V \cup \Sigma)^*$, $\beta \in (V \cup \Sigma)^*$, $\gamma \in (V \cup \Sigma)^+$
2	context-free $\{a^n b^n\}$	pushdown automaton	$O(n^3)$	$A \rightarrow \beta$ $A \in V$, $\beta \in (V \cup \Sigma)^*$
3	regular $\{a^n bc\}$	deterministic finite automaton	$O(n)$	$A \rightarrow a$ $A \rightarrow aB$ $A \rightarrow \varepsilon$ $a \in \Sigma$, $A \in V$, $B \in V$