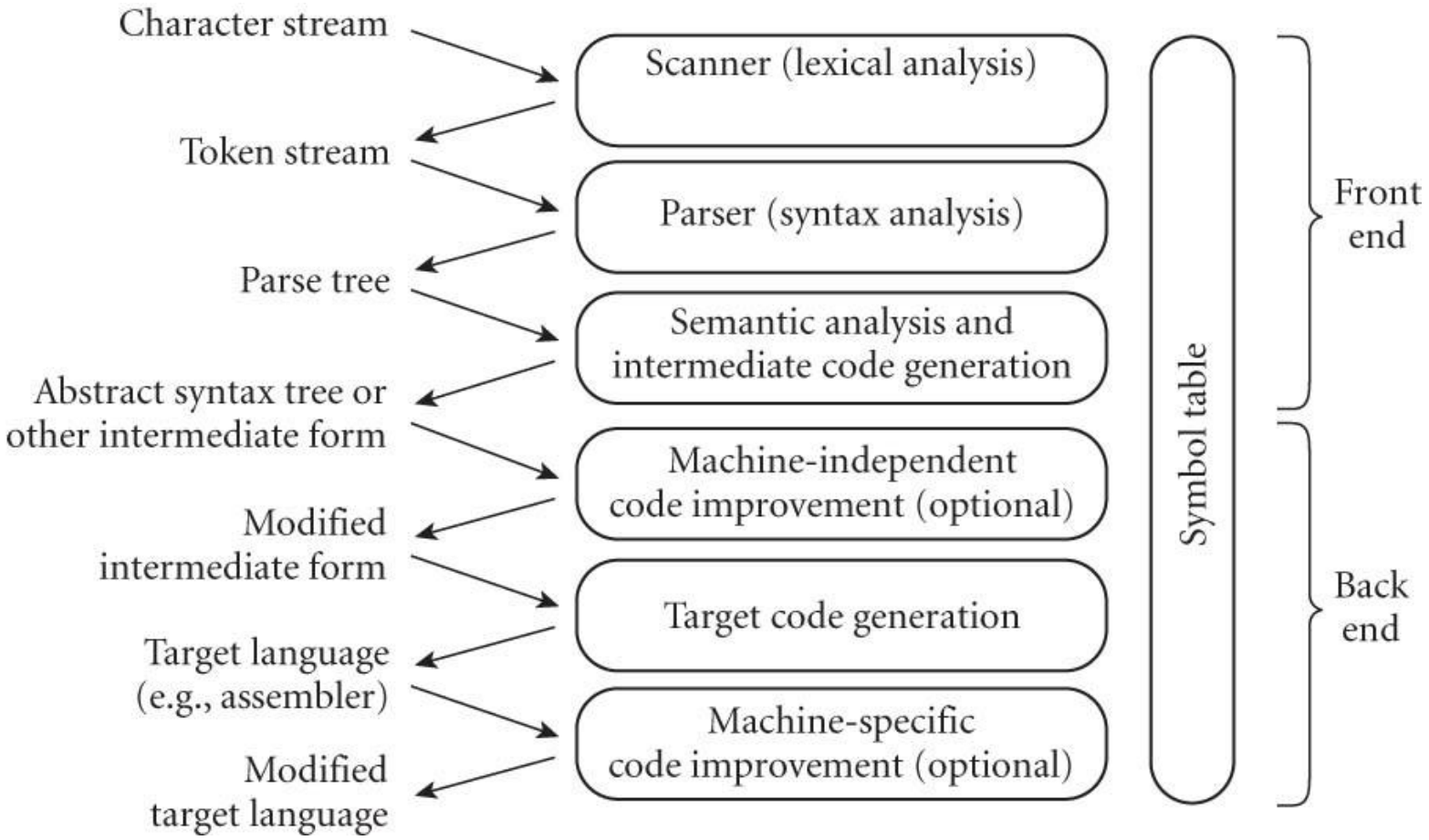
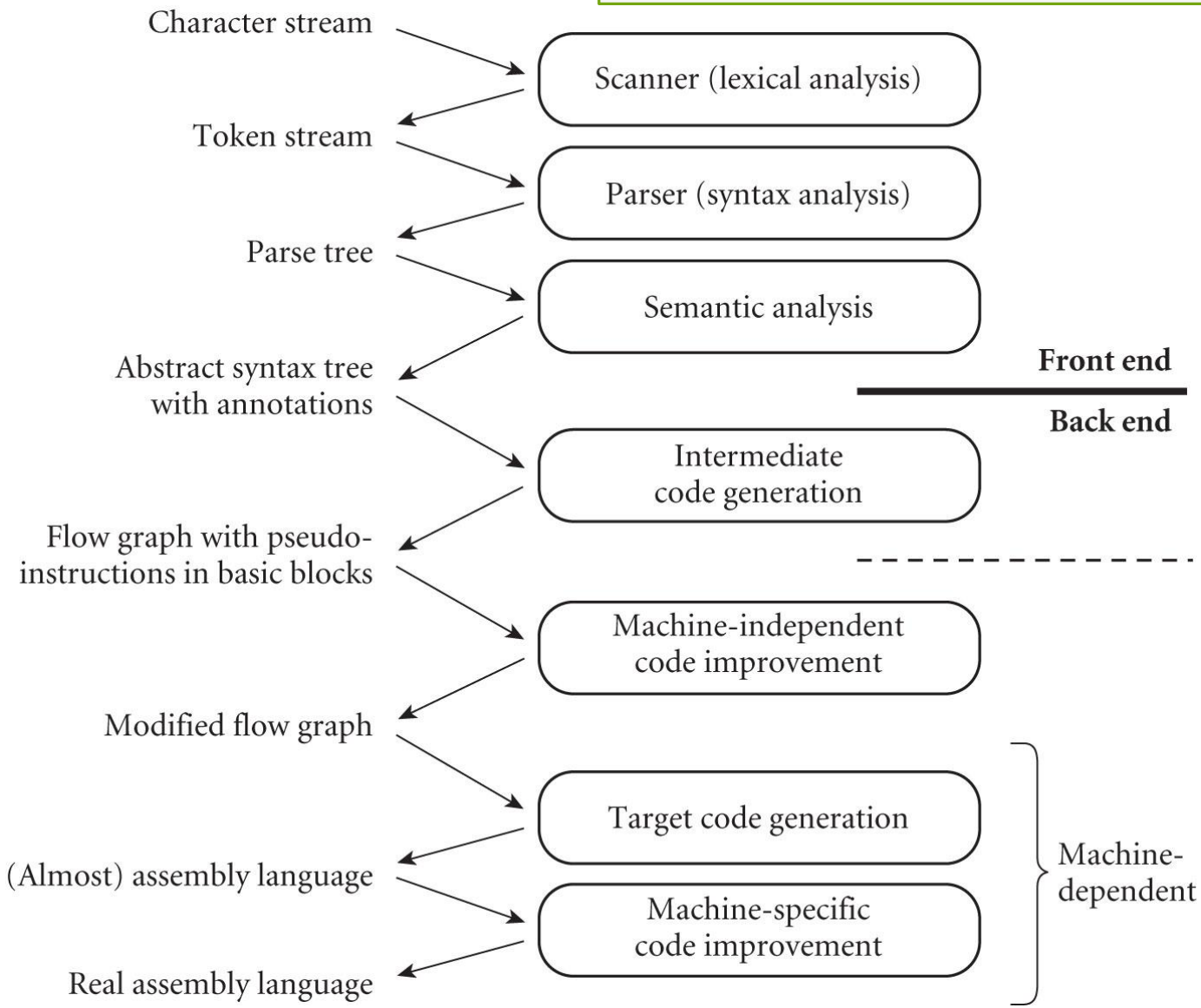
Phases of Compilation




Character stream
Scanner (lexical analysis)
Token stream
Parser (syntax analysis)
Parse tree
Semantic analysis
Abstract syntax tree with annotations
Front end
Back end
Intermediate code generation
Flow graph with pseudo-instructions in basic blocks
Machine-independent code improvement
Modified flow graph
Target code generation
(Almost) assembly language
Machine-specific code improvement
Machine-dependent
Real assembly language

Phases of Compilation

The parser is the "boss" of the process of compilation:

Compiler				
Scanner	Parser	Semantic analysis	Code generator	Code optimizer
	← Requests token from scanner → Sends syntax tree to the semantic analyzer			