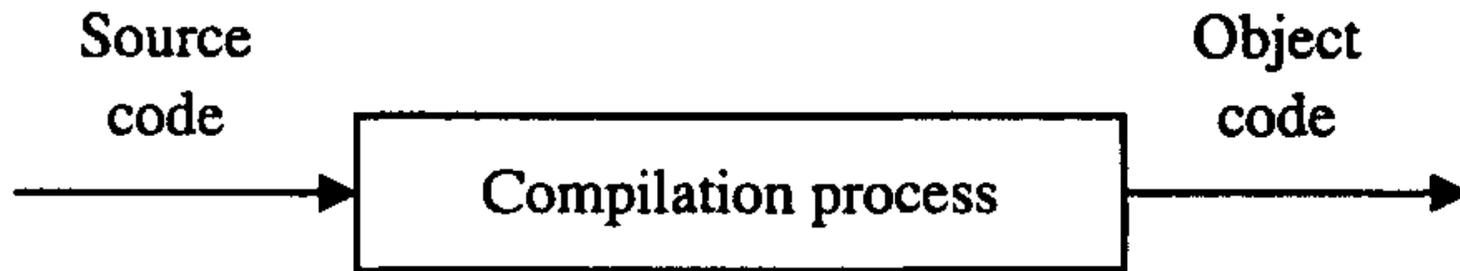


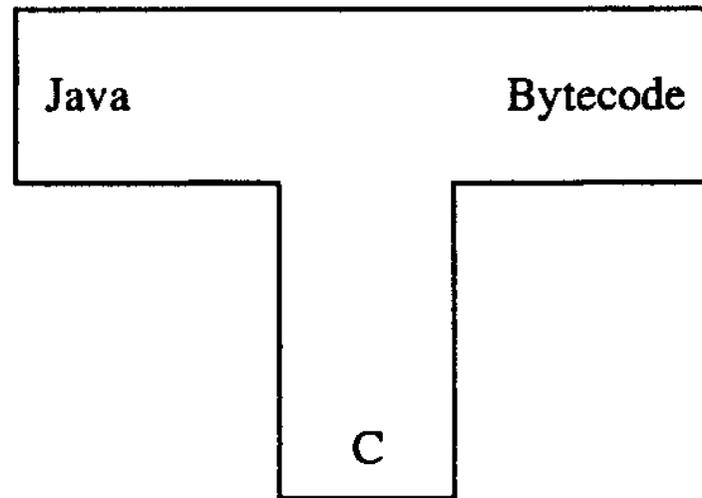
Introduction to Compilers

A.G. - Material from
The Essence of Compilers by Robin Hunter (Prentice
Hall)

Compiler



T-diagram



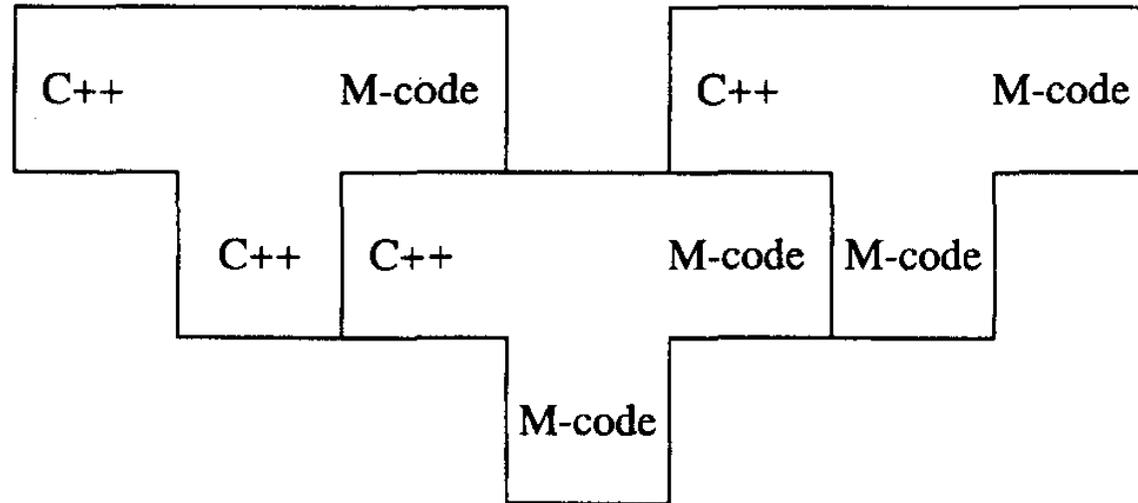
A compiler that is written in C and translates Java into Bytecode (the language interpreted by the Java Virtual Machine).

Building compilers

- How do we write the first compiler?
- How do we port one compiler from a machine to another?

Building compilers

- How do we write the first compiler?



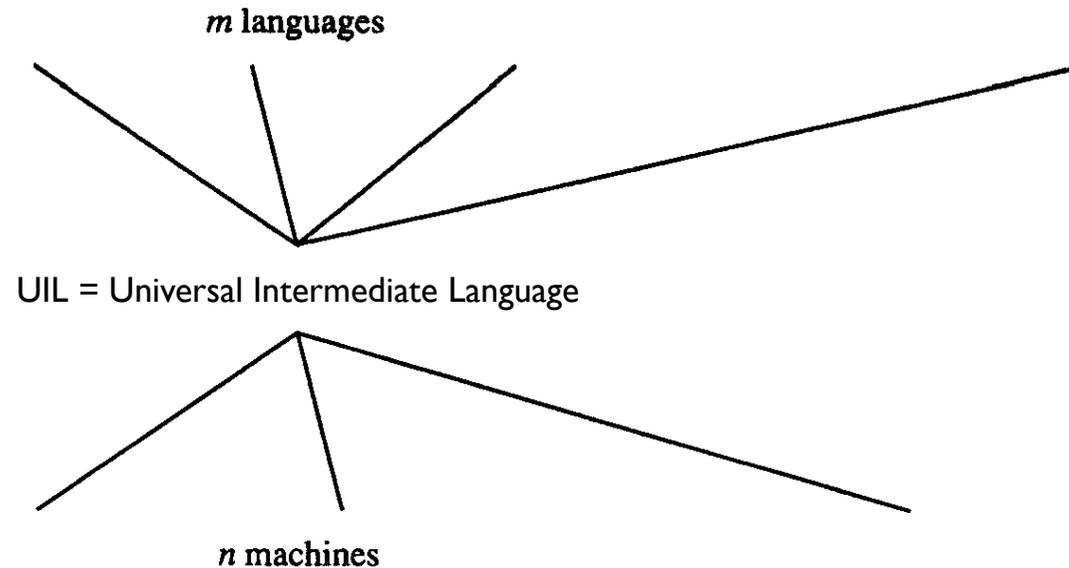
Example of a compiler having compilers both as its input and its output.

A more sophisticated compiler for the full language can be built on top of a simple compiler for a subset of the language.

This can be repeated as necessary.

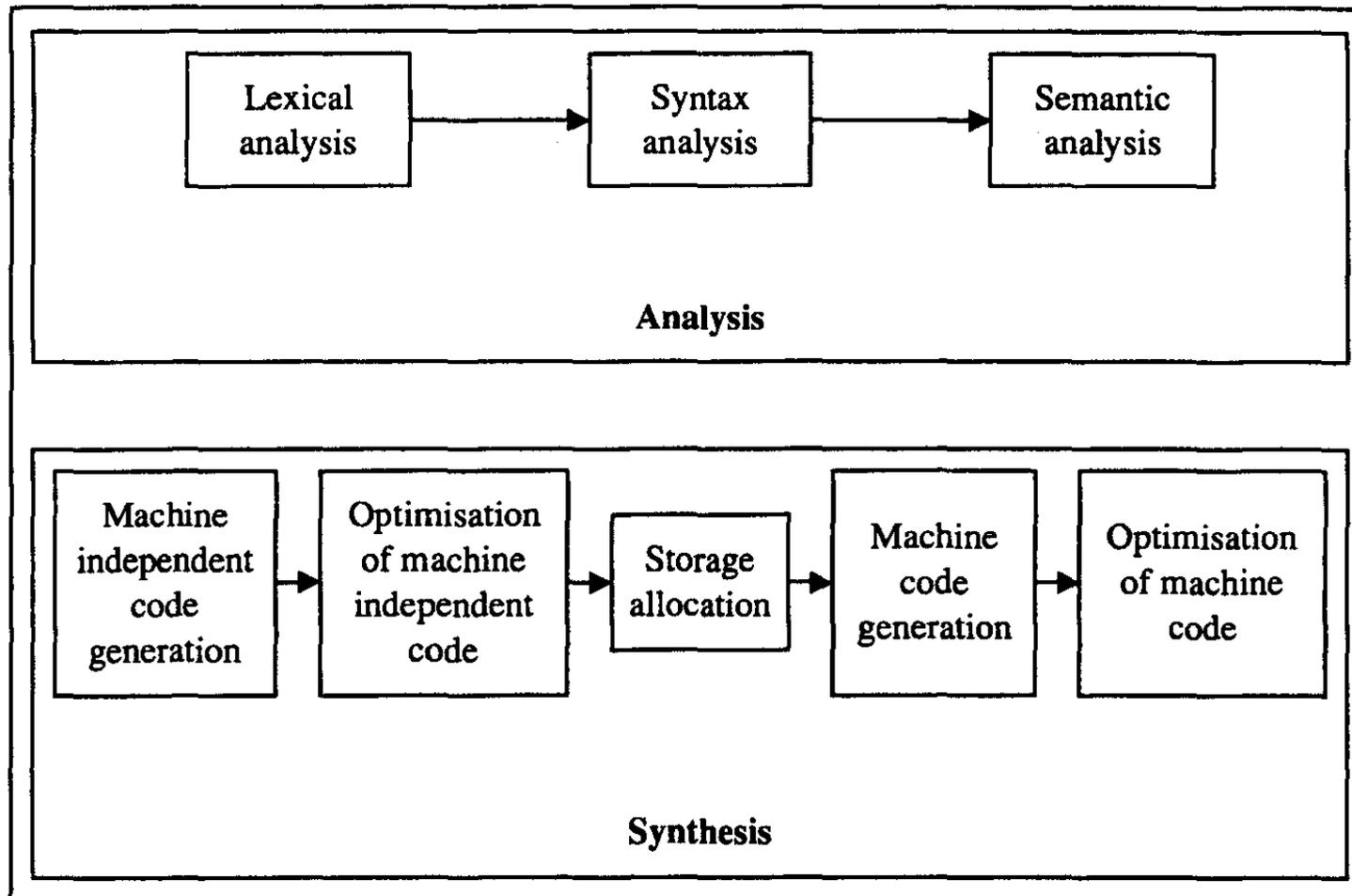
Building compilers

- How do we port one compiler from one machine to another?

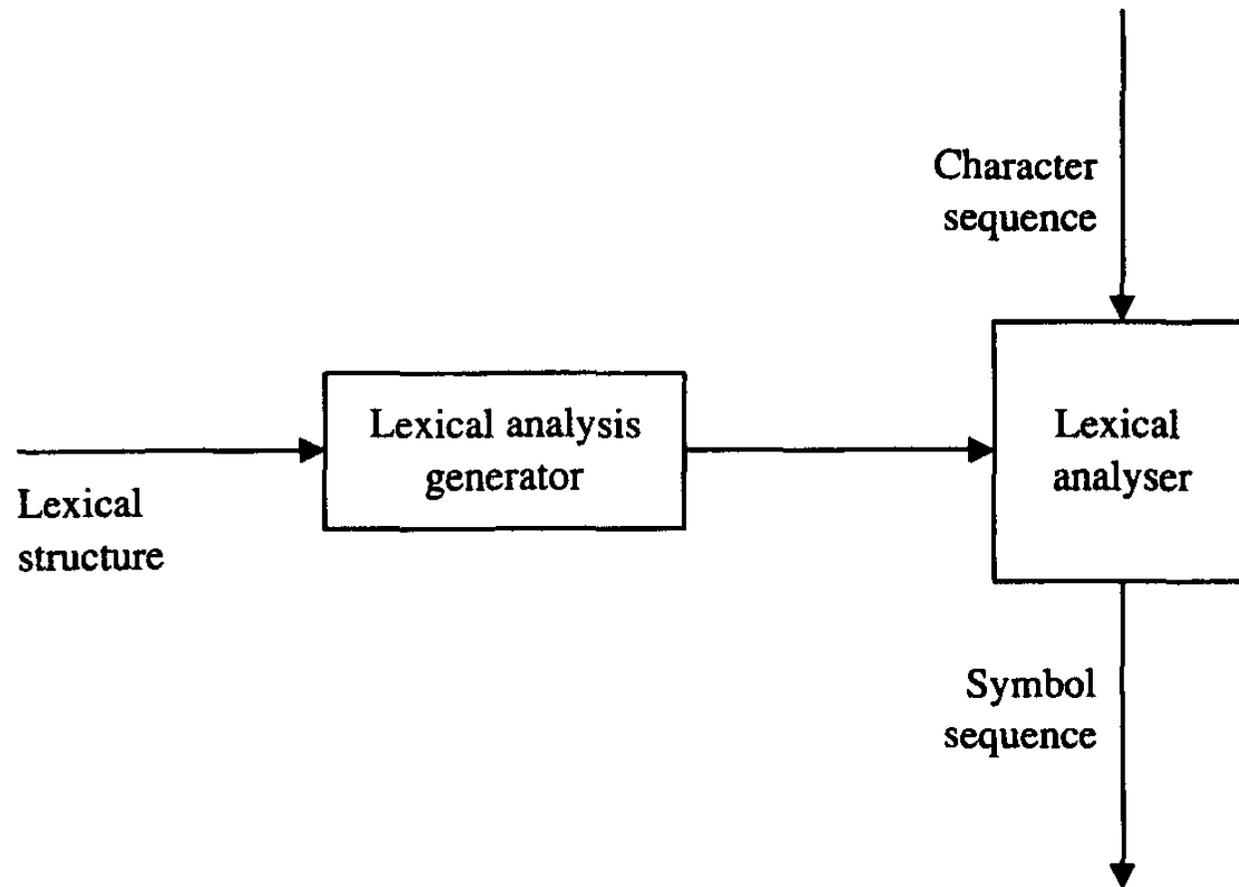


A UIL would considerably simplify the problem, but defining it proved to be elusive. We can try though ...

Structure of a compiler



Lexical analysis



Syntax analysis

