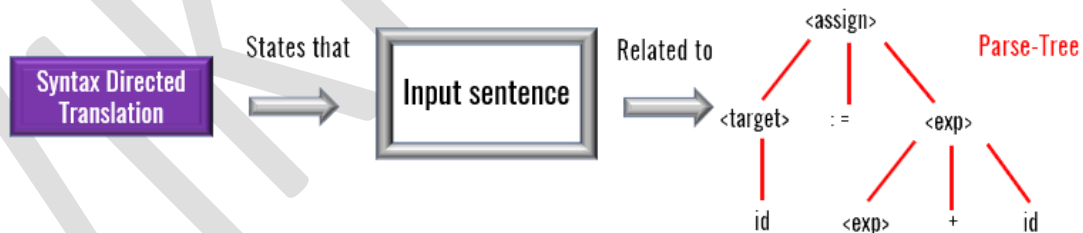


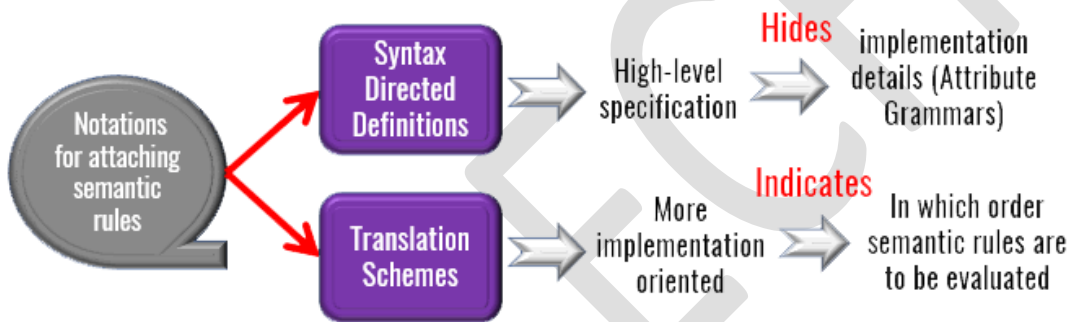
Syntax Directed Translation

- The Principle of Syntax Directed Translation states that the meaning of an input sentence is related to its syntactic structure, i.e., to its Parse-Tree.
- By Syntax Directed Translations we indicate those formalisms for specifying translations for programming language constructs guided by context-free grammars.
 - We associate attributes to the grammar symbols representing the language constructs.
 - Values for attributes are computed by semantic rules associated with grammar productions.
 - In the semantic rule, attribute is VAL and an attribute may hold anything like a string, a number, a memory location and a complex record.



- Evaluation of Semantic Rules may:
 - Generate code ,
 - Insert information into the symbol table ,
 - Perform semantic check ,
 - Issue error messages.

- There are two notations for attaching semantic rules:
 - Syntax Directed Definitions - High-level specification hiding many implementation details (also called Attribute Grammars).
 - Translation Schemes - More implementation oriented: Indicate the order in which semantic rules are to be evaluated.



For More Details Click Here:

<https://www.wikitechy.com/tutorials/compiler-design/syntax-directed-translation>

