Programmers always want better languages than we can write compilers for.

Therefore, we need new compiler writing techniques to focus on the essence of the compiler instead of boring details.

Syntax tree traversals

- Parsing: already solved
- Analysis & transformation: focus of my research
- Code generation: outside scope

implemented by

- '60: pointers, stacks & queues
  - generates focus on essence
  - makes possible big languages

- '70: recursive functions
  - generates focus on essence
  - makes possible syntax extensions

- '80: generalized folds/algebras
  - generates focus on essence
  - makes possible many features

- our work: attribute grammars
  - generates focus on essence
  - makes possible feature interaction

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