Programming Language Concepts

Languages

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Contents

Morris 1946, "Writings on the general theory of signs"

Three levels of description:

- grammar   │   which sentences are correct?
- semantics   │   what do correct sentences mean?
- pragmatics   │ how do we use meaningful sentences?

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- *Sweet love you me.*   incorrect grammar-wise
- *It's sweet that you love me.*   correct
- *Your person loving myself is a fact that I would qualify as being sweet.*

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Examples:

- *Sweet love you me.* | incorrect grammar-wise
- *It's sweet that you love me.* | correct
- *Your person loving myself is a fact* | correct but not very
  that I would qualify as being sweet. | idiomatic

For programming languages

- grammar: *static*
- semantics: *dynamic*
- pragmatics: *human*

For programming languages

- grammar: *static*   compile time
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For programming languages

- grammar: *static*   compile time
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For programming languages

- grammar: *static*   compile time
- semantics: *dynamic*   compile / runtime
- pragmatics: *human*   code-writing time