

# CSCI 107 Homework

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## 1. A taxonomy of human-computer interaction:

- Symbolic
  - Lexical
    - \* Natural-language based
      - SQL
      - COBOL
    - \* Macro-based
      - Emacs
    - \* Contrived
      - Low-level (assembly)
      - High-level (C, Fortran)
      - Pedantic (Java, Perl, Bash)
  - Spatial
    - \* Window-based
      - Xerox Star
      - MacOS
      - Gnome
- Physical
  - Lexical
    - \* Keyboard
    - \* Voice recognition
  - Spatial
    - \* Mouse
    - \* Pen-input
    - \* Eye-movement

2. Visual and natural-language modes will become less important, as people realize how inefficient they are; and lose money over ambiguities which, while tolerated in person-to-person interaction, are unreliable person-to-machine (and *vice versa*). That is, *Bill Gates' Clippy® is always wrong.*

3. As people become more fluent in machine language, not the other way around, high-level contrived and macro-based communication will become intuitive; and receive general adoption.