LOGICAL STOP TIME

Decoupling the “logical” end of a sound (its duration) from the “physical” end of a sound (its articulation)

Overlap With Logical Stop Times

```
play seq(set-logical-stop(osc(c4), 0.1),
        set-logical-stop(osc(e4), 0.1),
        set-logical-stop(osc(g4), 0.1),
        set-logical-stop(osc(b4), 0.1),
        set-logical-stop(osc(d5), 0.1))
```
Scores

- We’ve seen scores already
- To evaluate a score, evaluate each sound expression with the start time and stretch factor:
  - \{\{\text{start dur instr parameters}\}\} \Rightarrow \text{instr(parameters) \sim dur @ start}

- Note: \text{instr() \sim dur @ start} \Leftrightarrow \text{instr() @ (start / dur) \sim dur}

Summary

- SOUNDS
  - Start time
  - Logical stop time
  - Physical stop time
- Functions evaluated in an \textit{environment}
  - Dynamically scoped – inherited across calls
  - Modified by transformations
    - Stretch (\sim)
    - Shift (@)
- Results of functions (SOUNDS) are immutable
- Sim and Seq control constructs