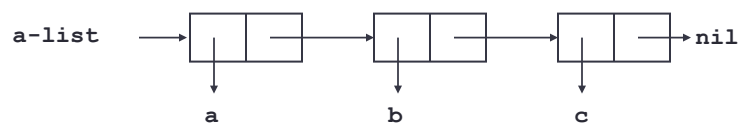# LISTS

Scores are made of lists, so let's learn about lists.

     1

Lists in Nyquist

- Standard singly-linked list
- Dynamic typing
  - arbitrary nesting,
  - you can make any binary tree structure

     2

Notation

- In SAL: `{a b c}`
- These are *literals*
  - No evaluation
  - a, b, and c are *symbols*, not *variables*
- To *construct* list from variables:
  - `list(a, b, c)`

Literals, Variables, Quoting, Cons

```
set a = 1, b = 2,
    c = 3
print {a b c}
{a b c}
print list(a, b, c)
{1 2 3}
print list(1, 2, 3)
{1 2 3}
```

```
print list(quote(a),
           quote(b),
           quote(c))
{a b c}
print list(a, {b})
{1 {b}}
print cons(a, {b})
{1 b}
```