CSc 520 — Principles of Programming Languages

21 : Names, Scope, Bindings — Introduction

Christian Collberg
Department of Computer Science
University of Arizona
`collberg+520@gmail.com`

March 12, 2008

1 Names

- A *name* is something we use to refer to something else. In real life, a person, place, or thing.

- Names in programming languages usually consist of letters and digits.

- Sometimes, we also think of + as a name, particularly in languages where you can declare user-defined operators.

- Names can refer to: types, procedures, modules, constants, variables, exceptions, classes,...

- Names are also used to *abstract* away from details: by writing a stack module, naming it `Stack`, the programmer can forget about the details of the implementation, and just use the name from now on.

2 Binding

- By *binding* we mean the act of associating a name with that thing which it names.

- For example, you can say: "From now on, I will call this chair Chairy." Then, whenever you talk about Chairy, everyone knows which chair you refer to:
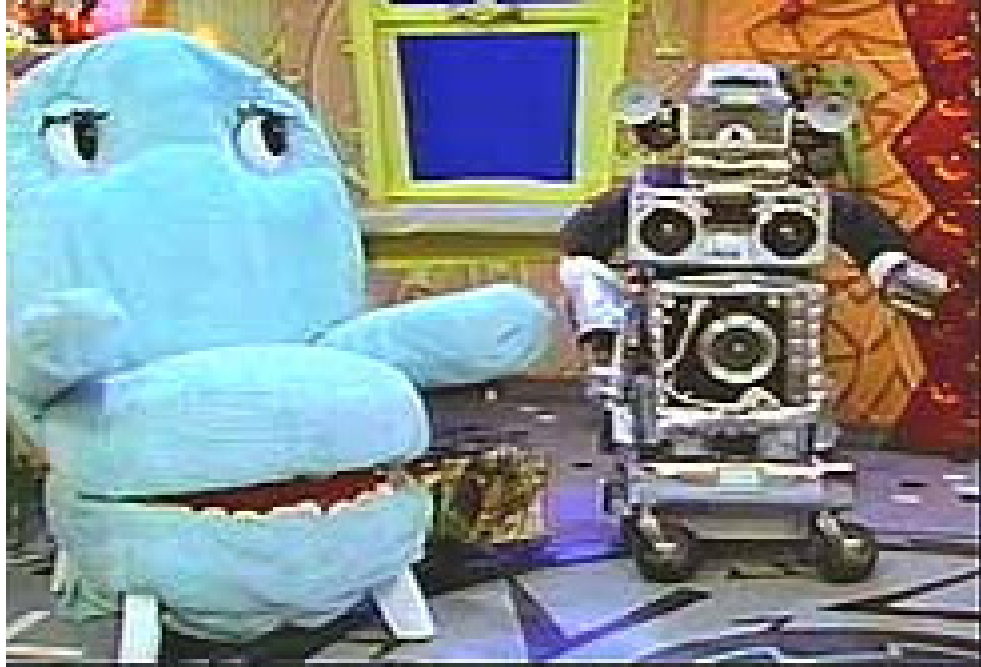
3 Readings and References

- Read Scott, pp. 103–