



# The Squeak Environment

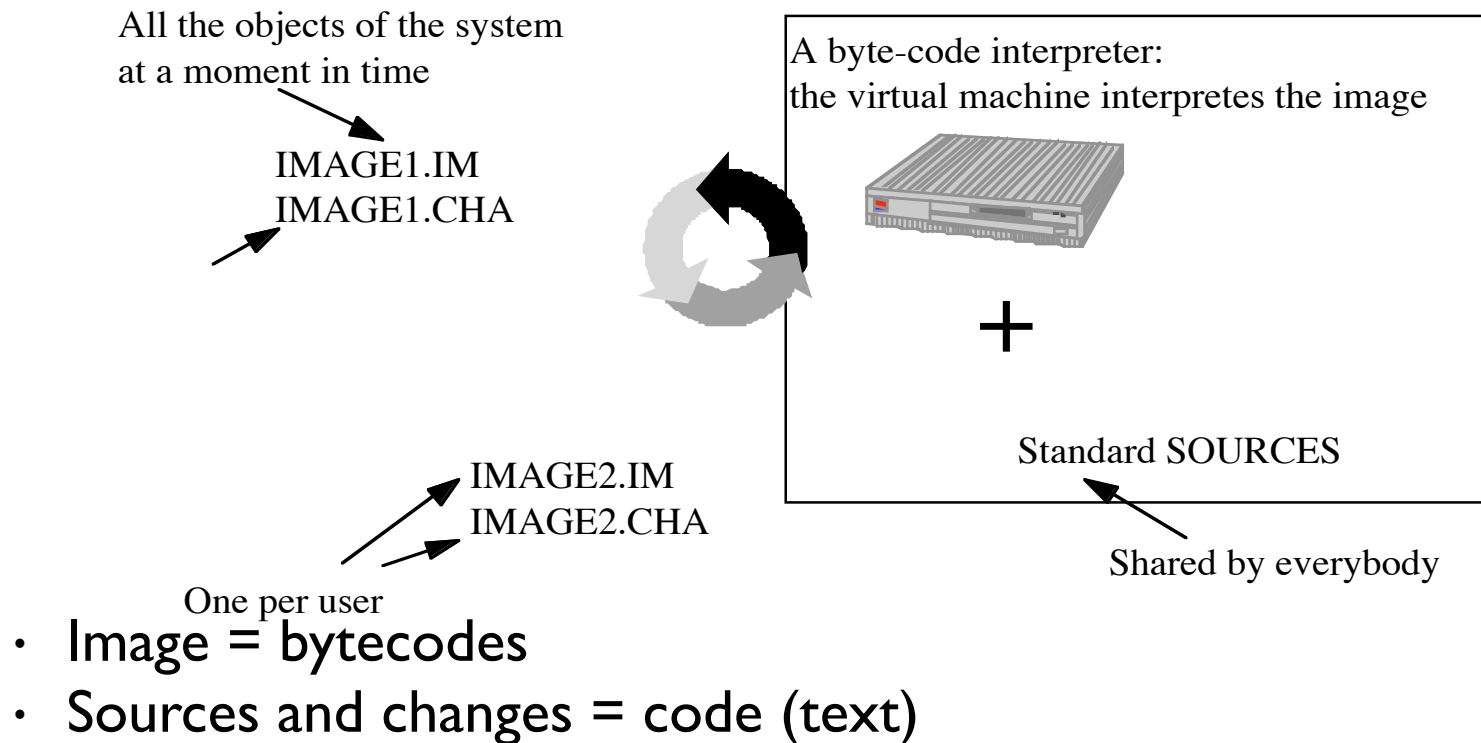
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<http://www.iam.unibe.ch/~ducasse/>

# Smalltalk Run-Time Architecture

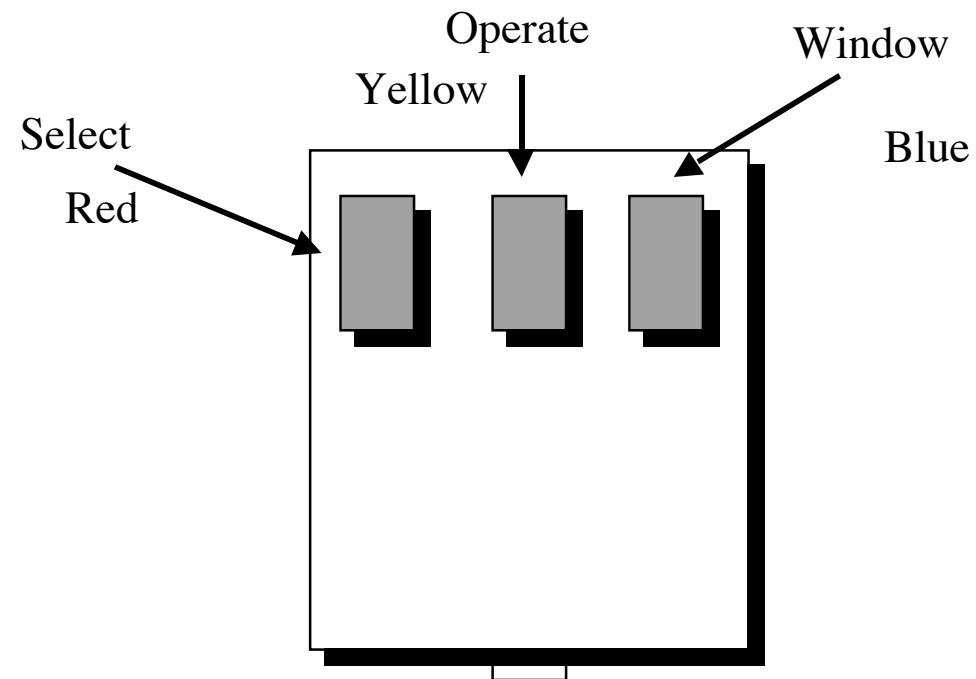
- Virtual Machine + Image + Changes and Sources



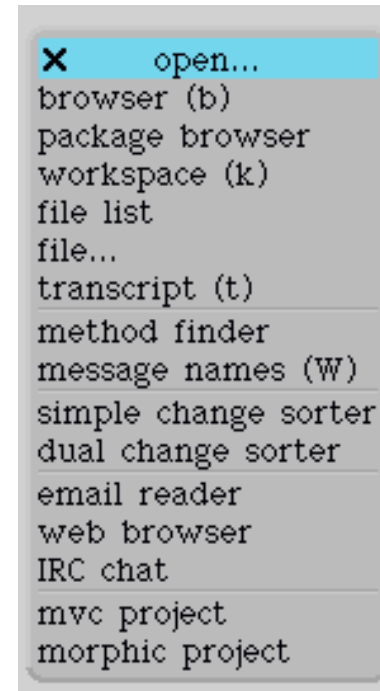
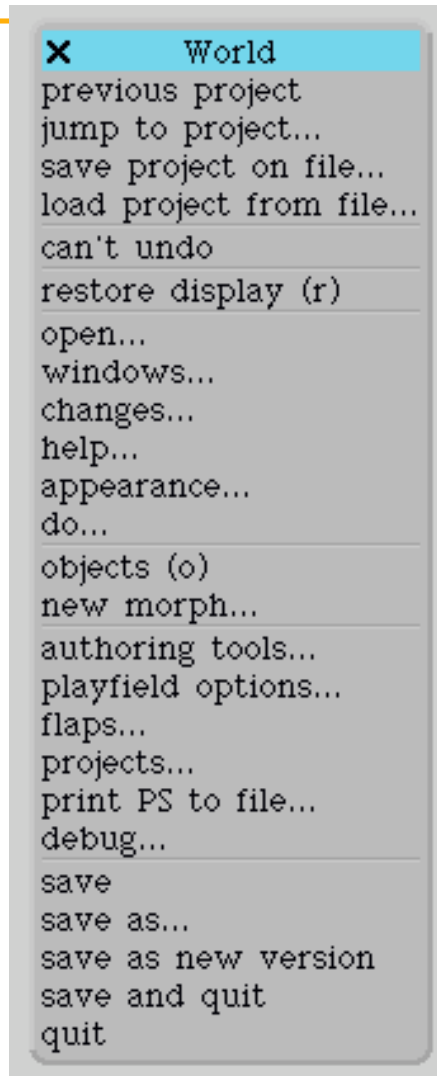
# Runtime Architecture

- The byte-code is in fact translated into native code by a just-in-time compiler.
- The source and the changes are not necessary for interpreting the byte-code, this is just for the development. Normally they are removed for deployment.
- An application can be delivered as some byte-code files that will be executed with a VM. The development image is stripped to remove the unnecessary development components.

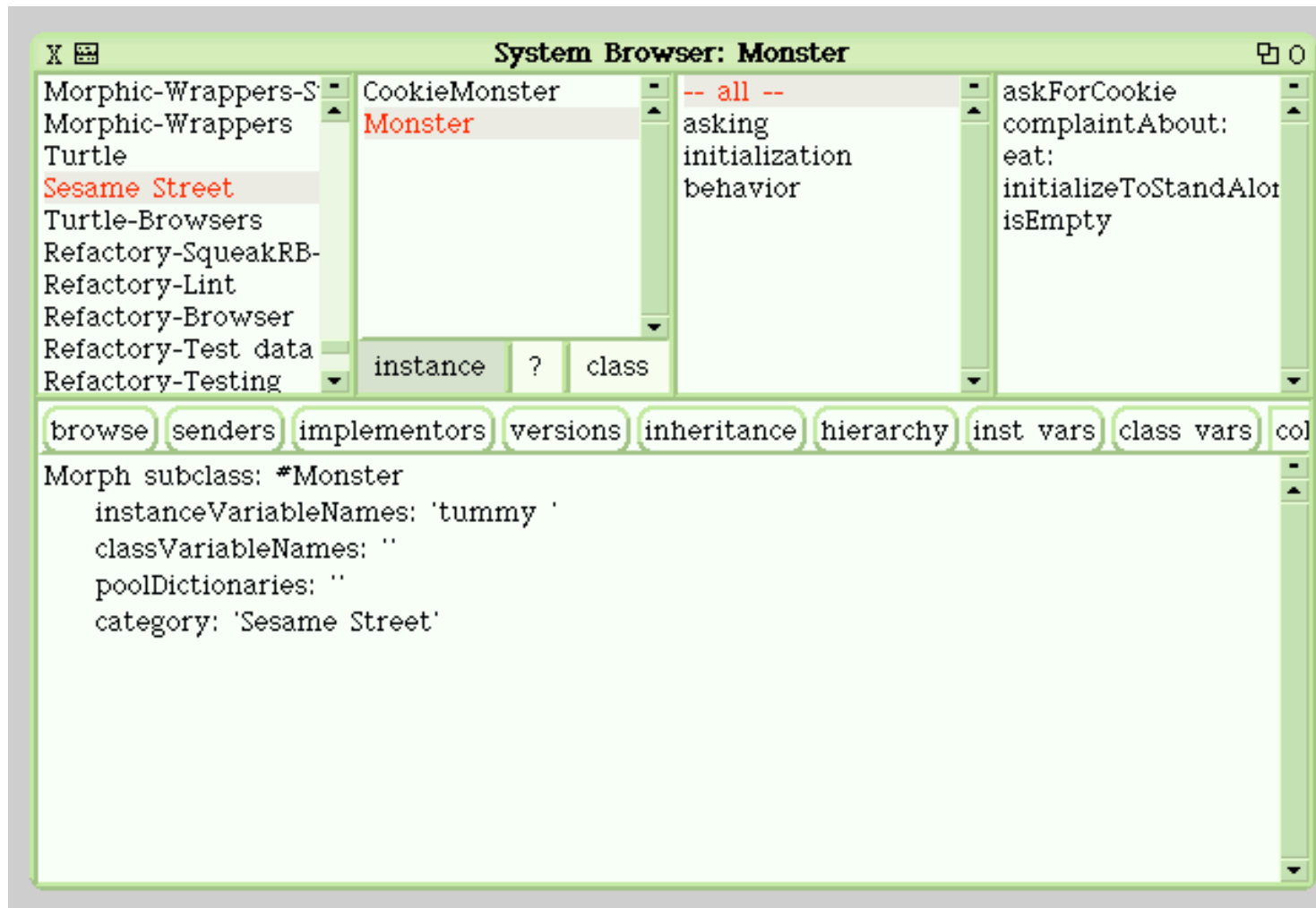
# Mouse Semantics



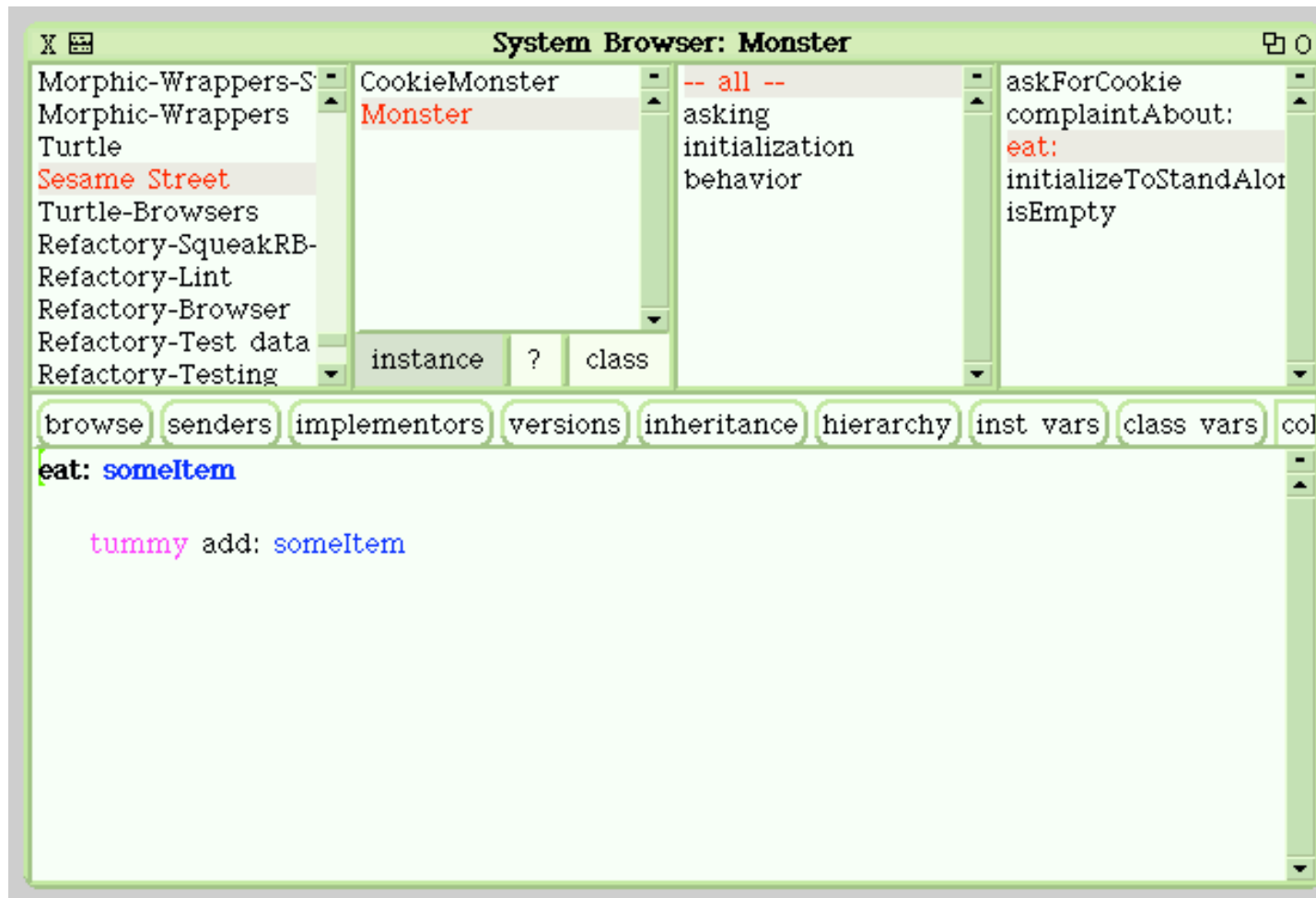
# World Menu and Open Menu



# Browsing a class

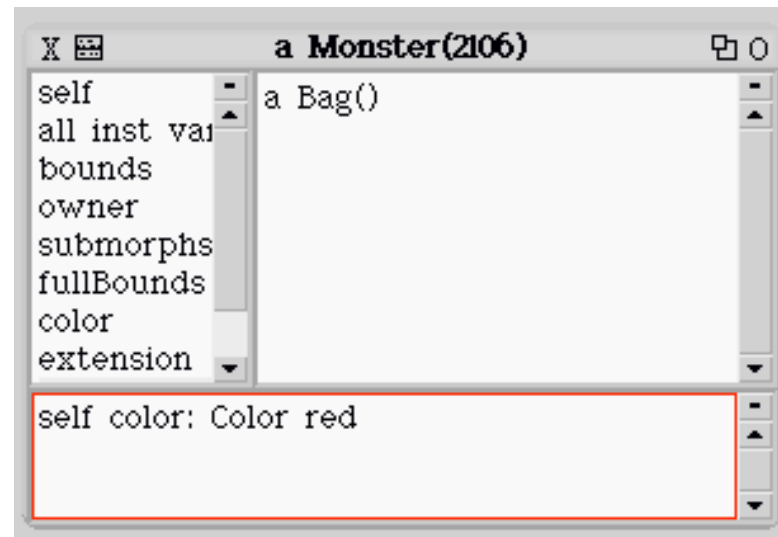


# Browsing methods



# Inspector

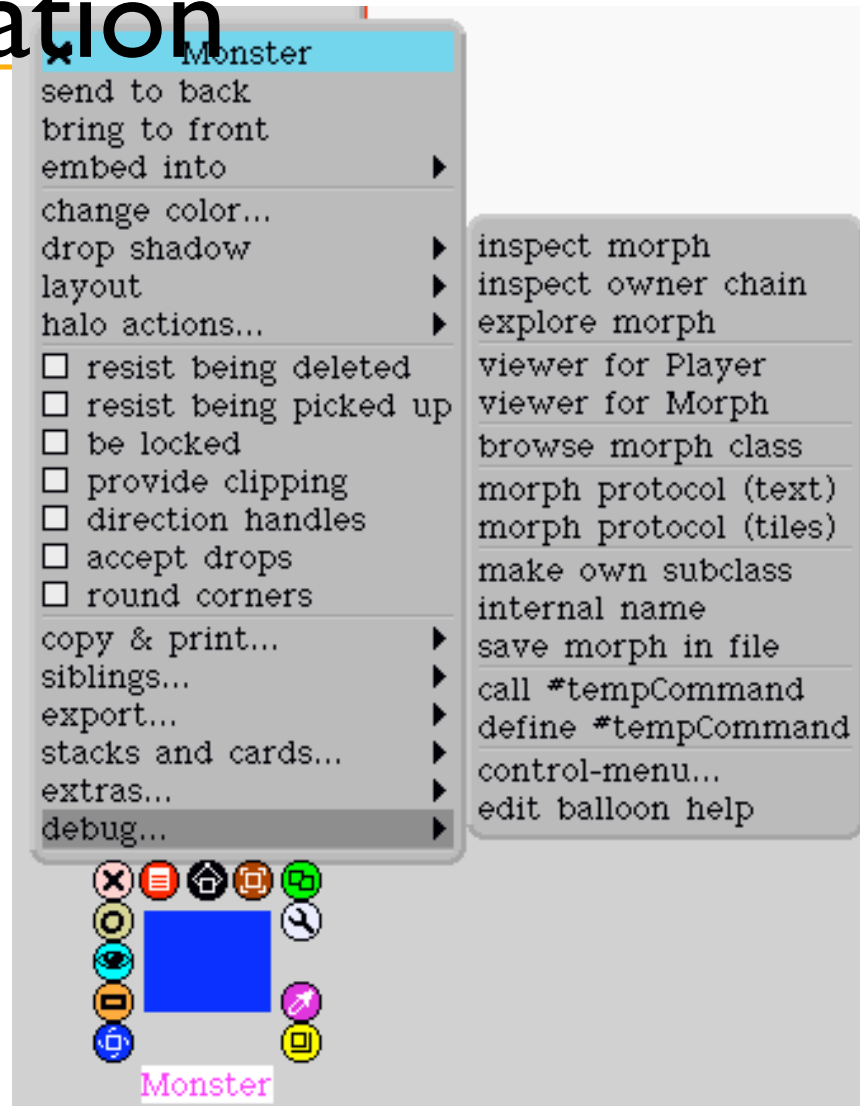
- To look inside objects
- Violates encapsulation!!!
- Monster new inspect



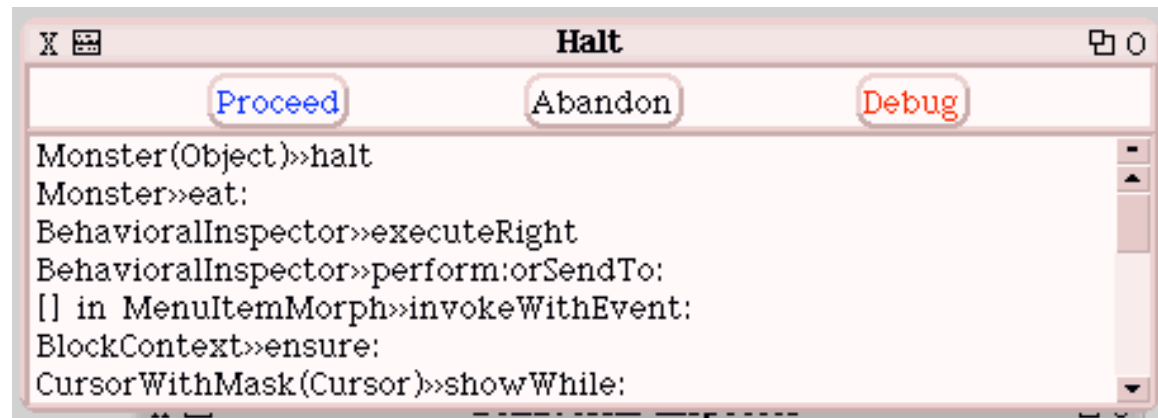


# Direct Manipulation

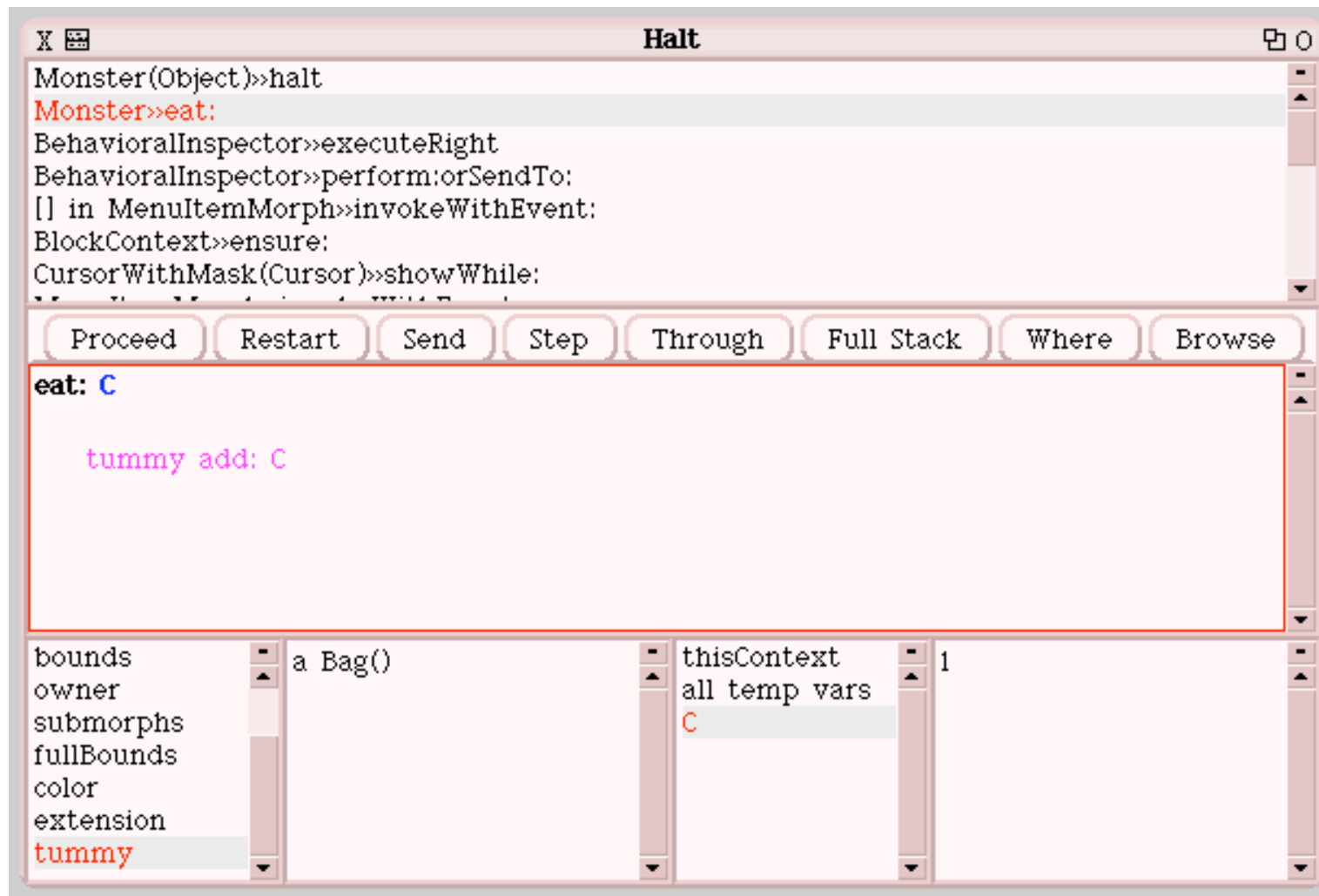
- Bring the halo
- Experiment



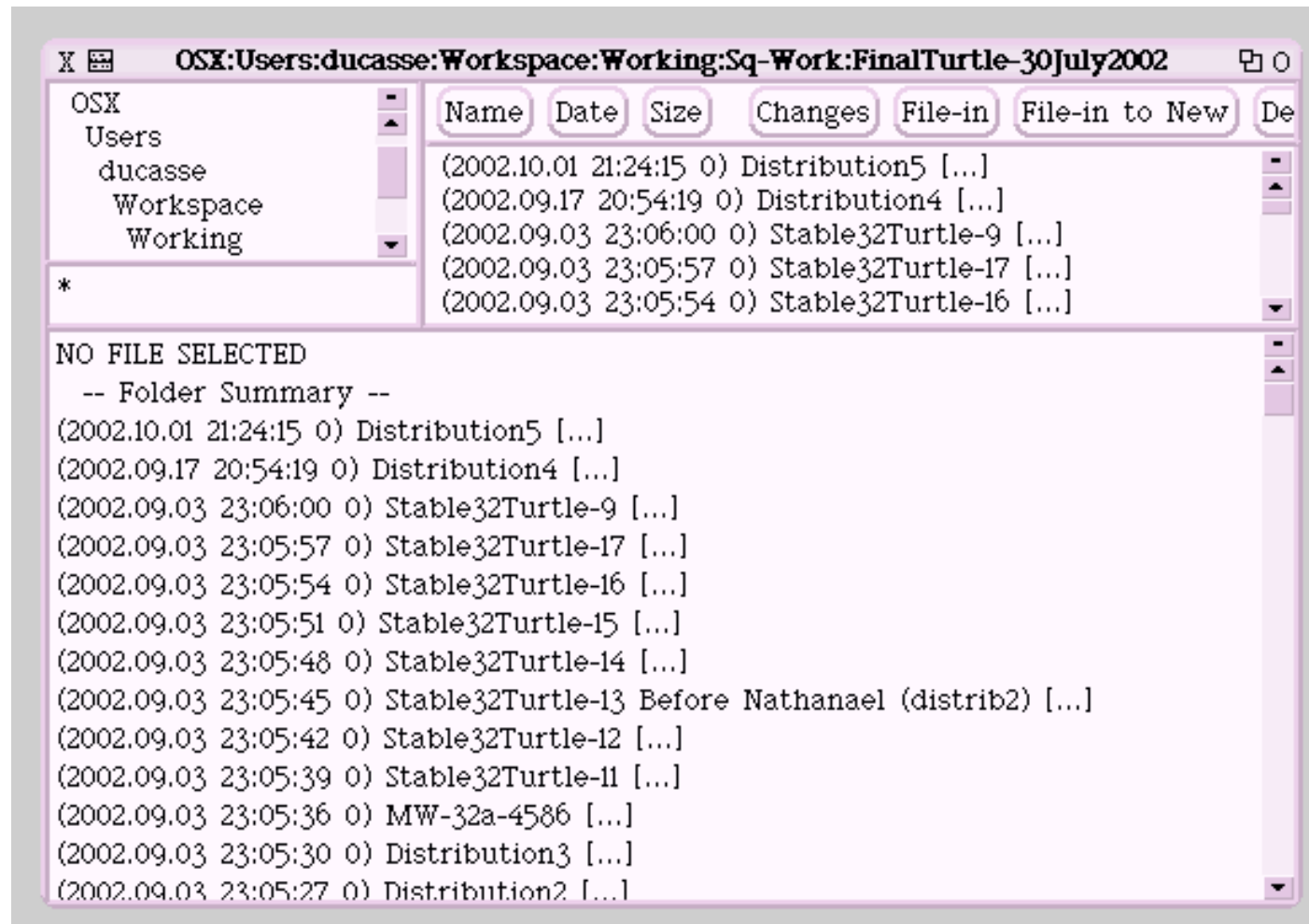
# Debugger?



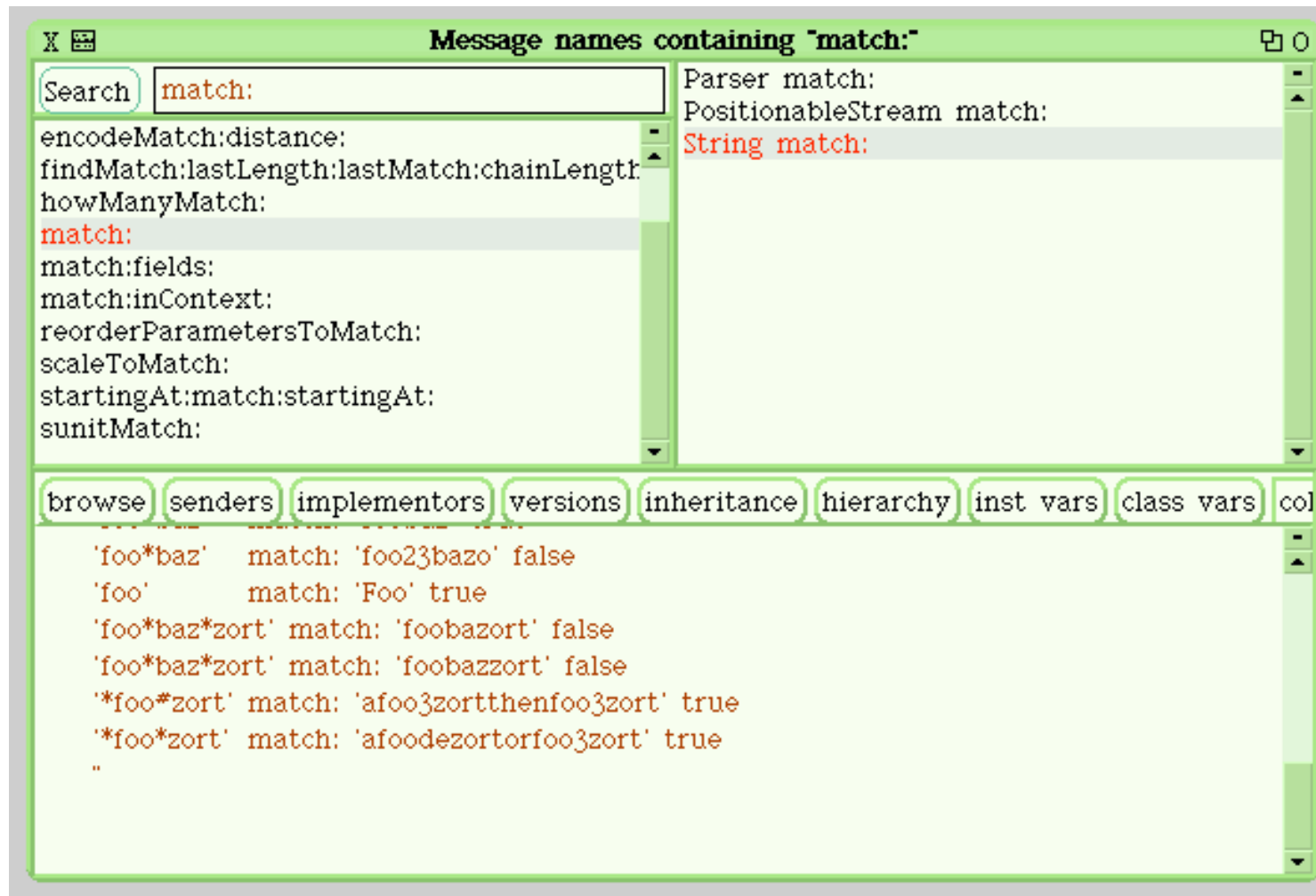
# Debugger !!!



# FileList



# Message Names Finder



The image shows a screenshot of the Smalltalk IDE. The 'Selector Browser' window is open, displaying a list of selectors. The selector `'ab'. '*b'. true` is selected. The right pane of the Selector Browser shows the following matches:

- Parser match:
- PositionableStream mat:
- \*String match:

The 'Collections-Text' browser is also open, showing a list of selectors. The selector `match: text` is selected. The right pane of the Collections-Text browser shows the following matches:

- With:
- WithAnyOf:
- MappedBy:
- ManyMatch:
- h:
- As:
- startingAt:match:sta

The bottom pane of the Collections-Text browser shows the following code:

```

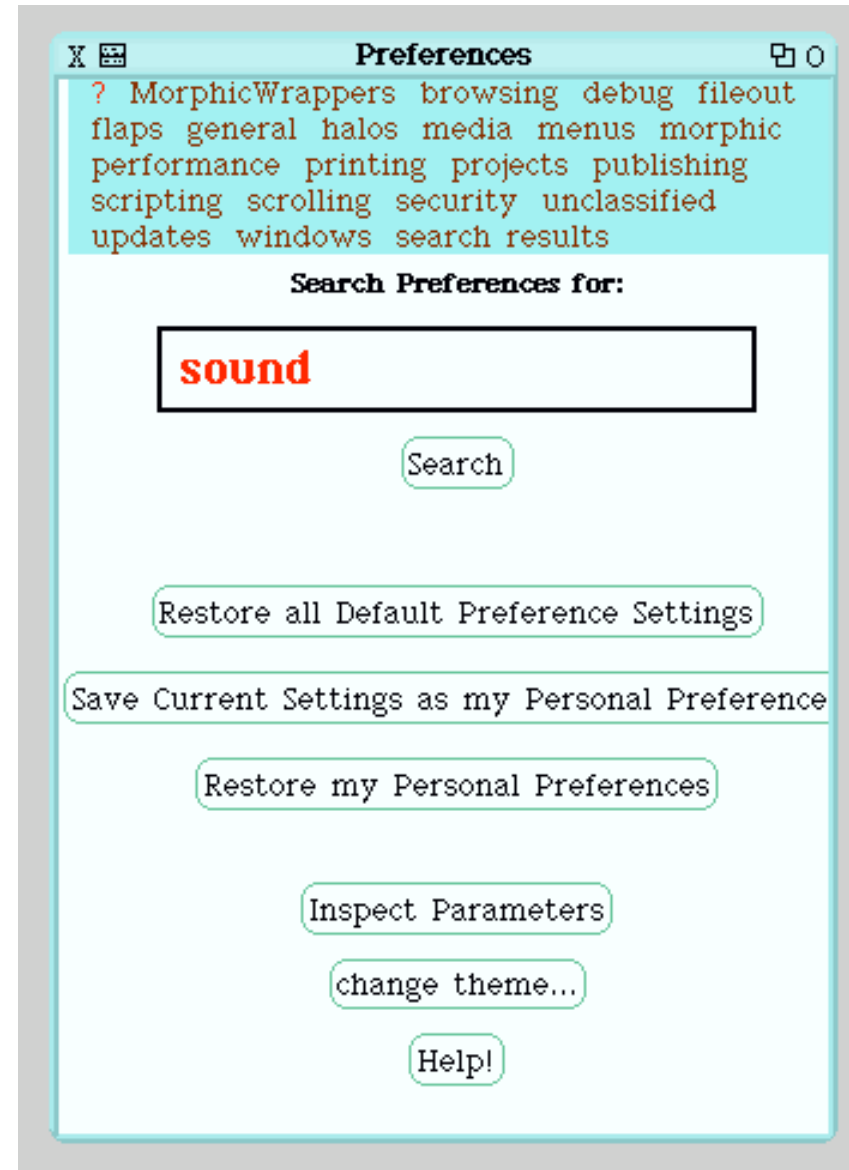
match: text
    "Answer whether text matches the pattern in this string.
    Matching ignores upper/lower case differences.
    Where this string contains *, text may contain any character.
    Where this string contains *, text may contain any sequence of
    characters. "

    ↑ self
    startingAt: 1
    match: text
    startingAt: 1"
    '* match: 'zort' true
  
```

# Methods in ChangeSets + Versions

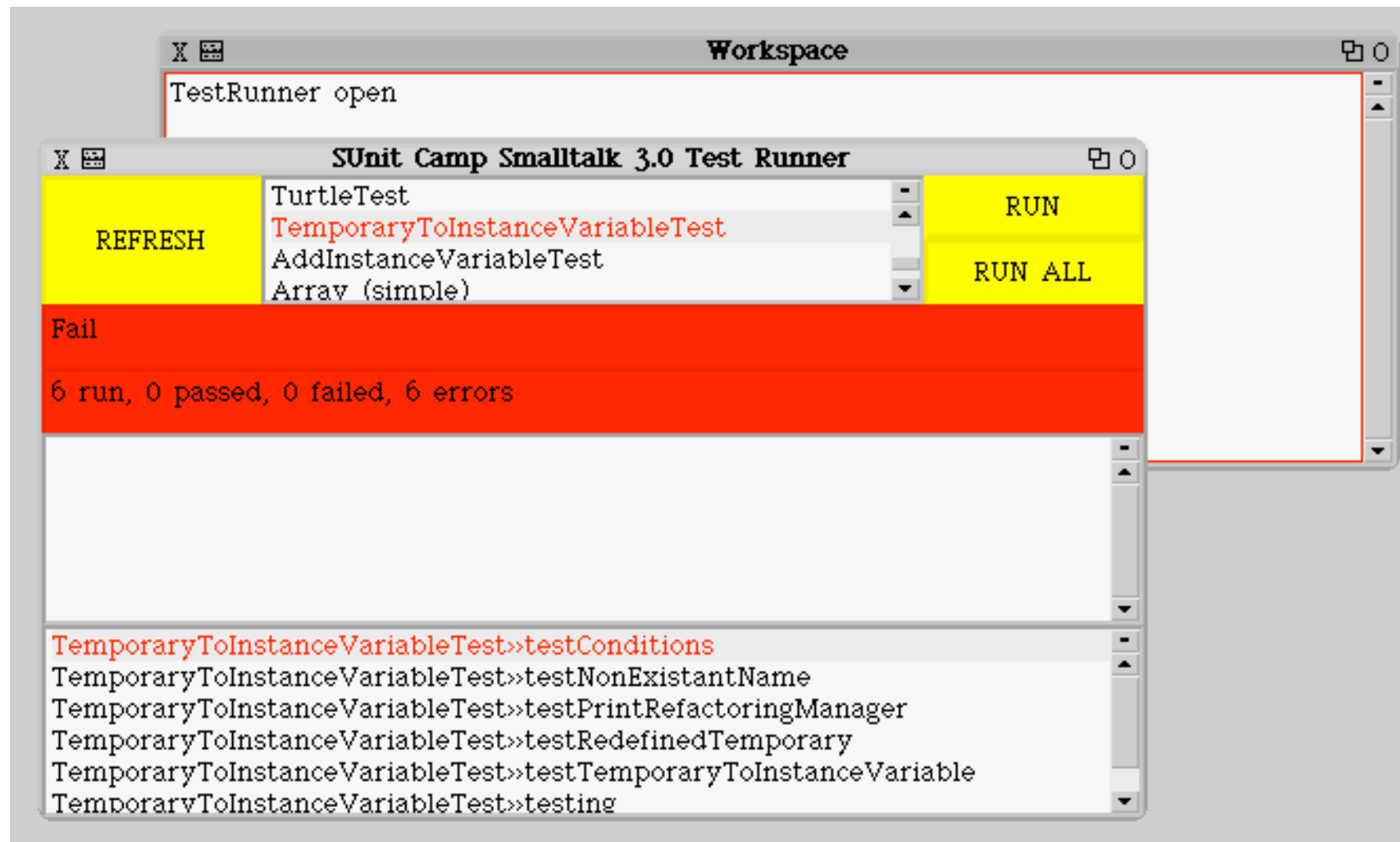
The screenshot displays two windows from the Smalltalk IDE. The main window, titled "Methods in Change Set Sesame", lists several methods for the "Monster" class: `askForCookie {asking}`, `complaintAbout: {asking}`, `eat: {behavior}` (highlighted in red), `initializeToStandAlone {initialization}`, and `isEmpty? {behavior}`. Below the list are tabs for `browse`, `senders`, `implementors`, `versions`, `inheritance`, `hierarchy`, `inst vars`, `class vars`, and `col`. The `eat: someItem` method is selected. A secondary window, titled "Recent versions of eat:", shows a list of versions: `sd 10/11/2002 21:55 Monster eat:` and `sd 10/11/2002 21:31 Monster eat:`. Below this list are buttons for `compare to current`, `revert`, `remove from changes`, `help`, and a checkbox for `diffs`. The diff view shows the changes between the selected version and the current one: `eat: someItem` (added), `eat: someItem` (removed), and `tummy add: someItem` (added).

# Preferences

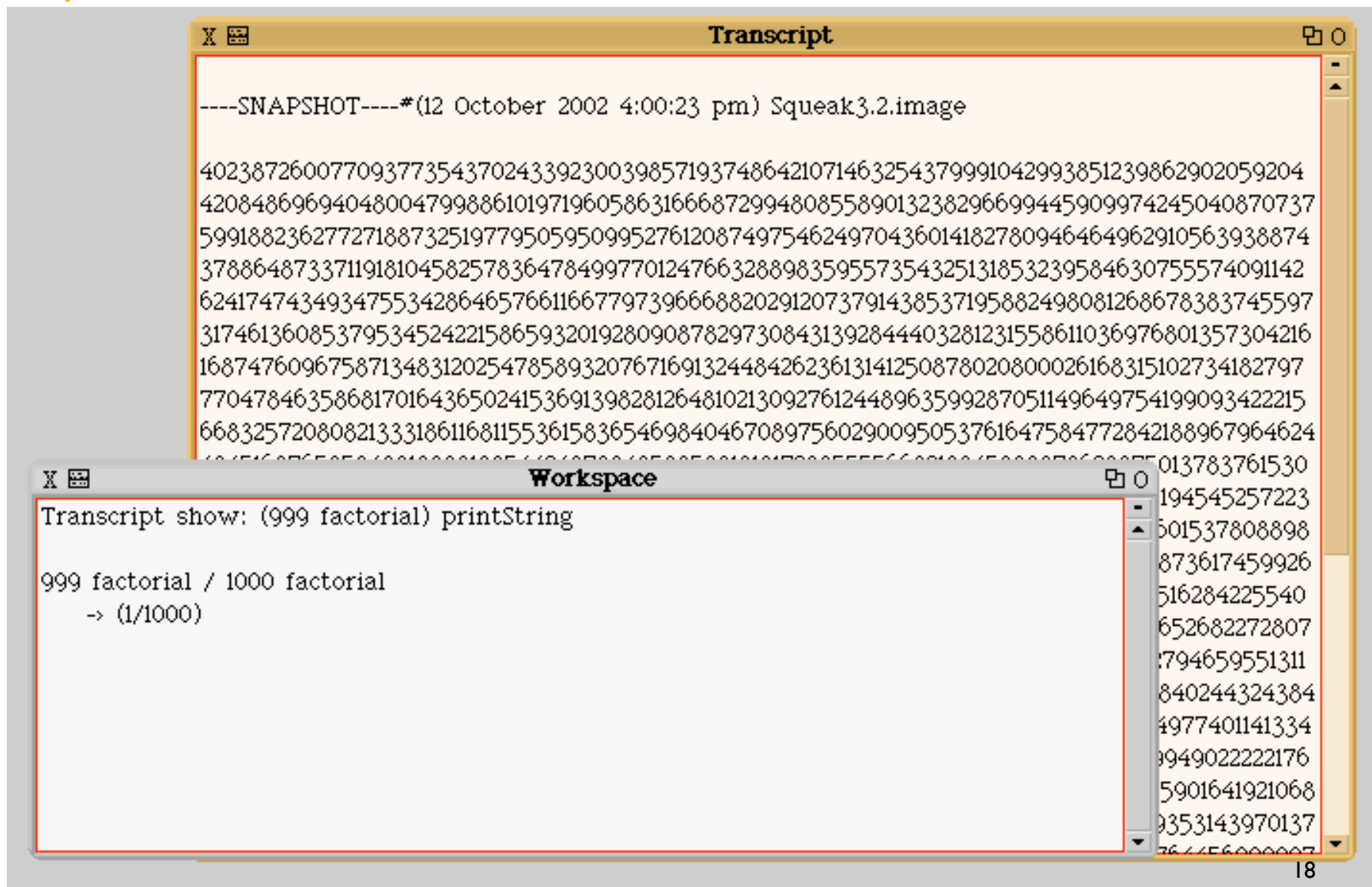




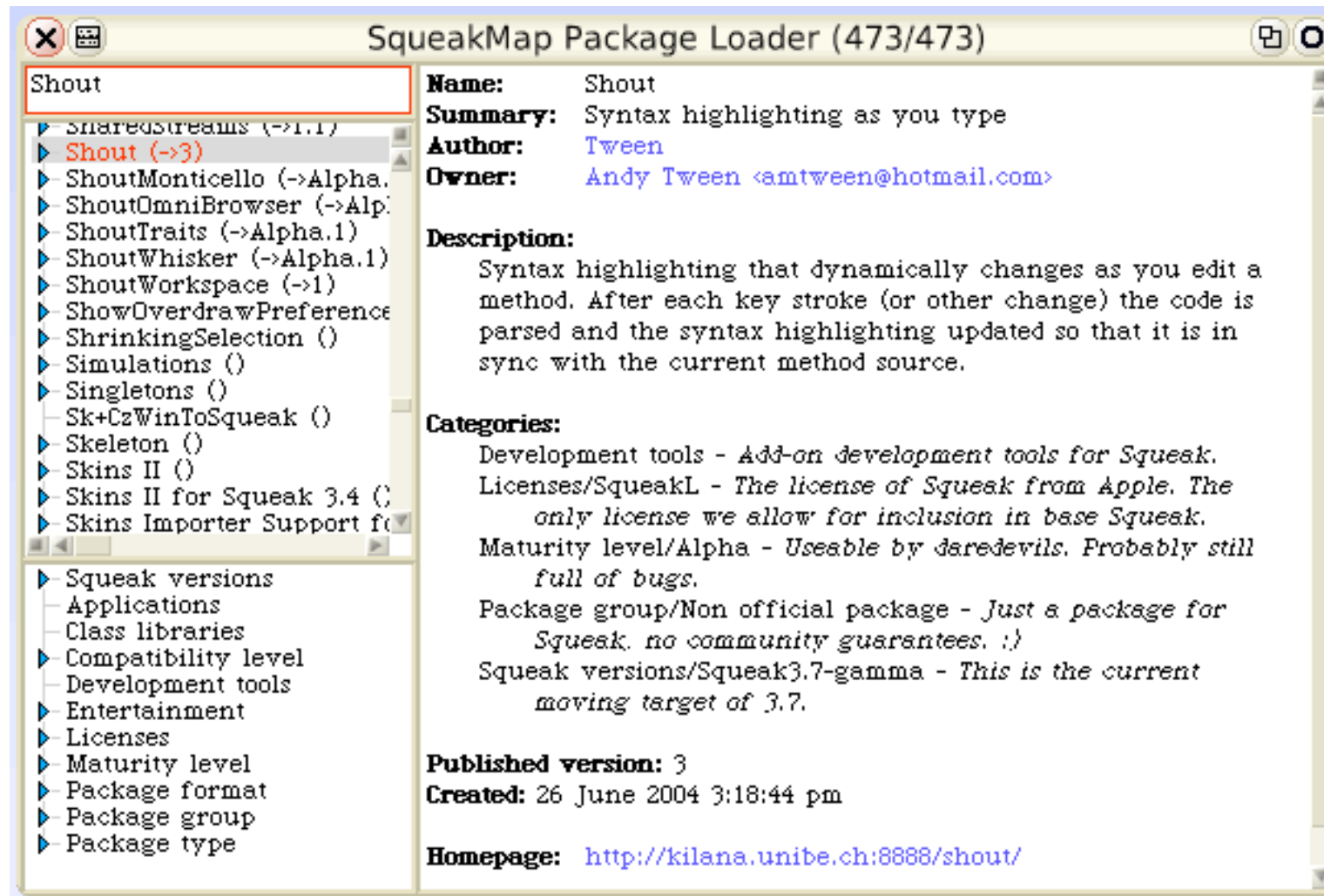
# SUnit



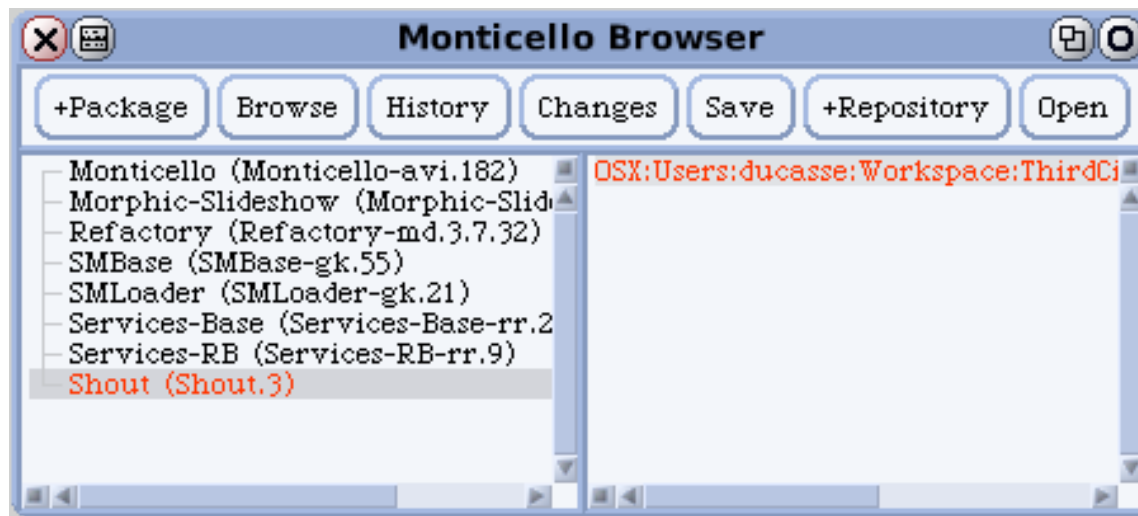
# Transcript is Sloooooooooooooow



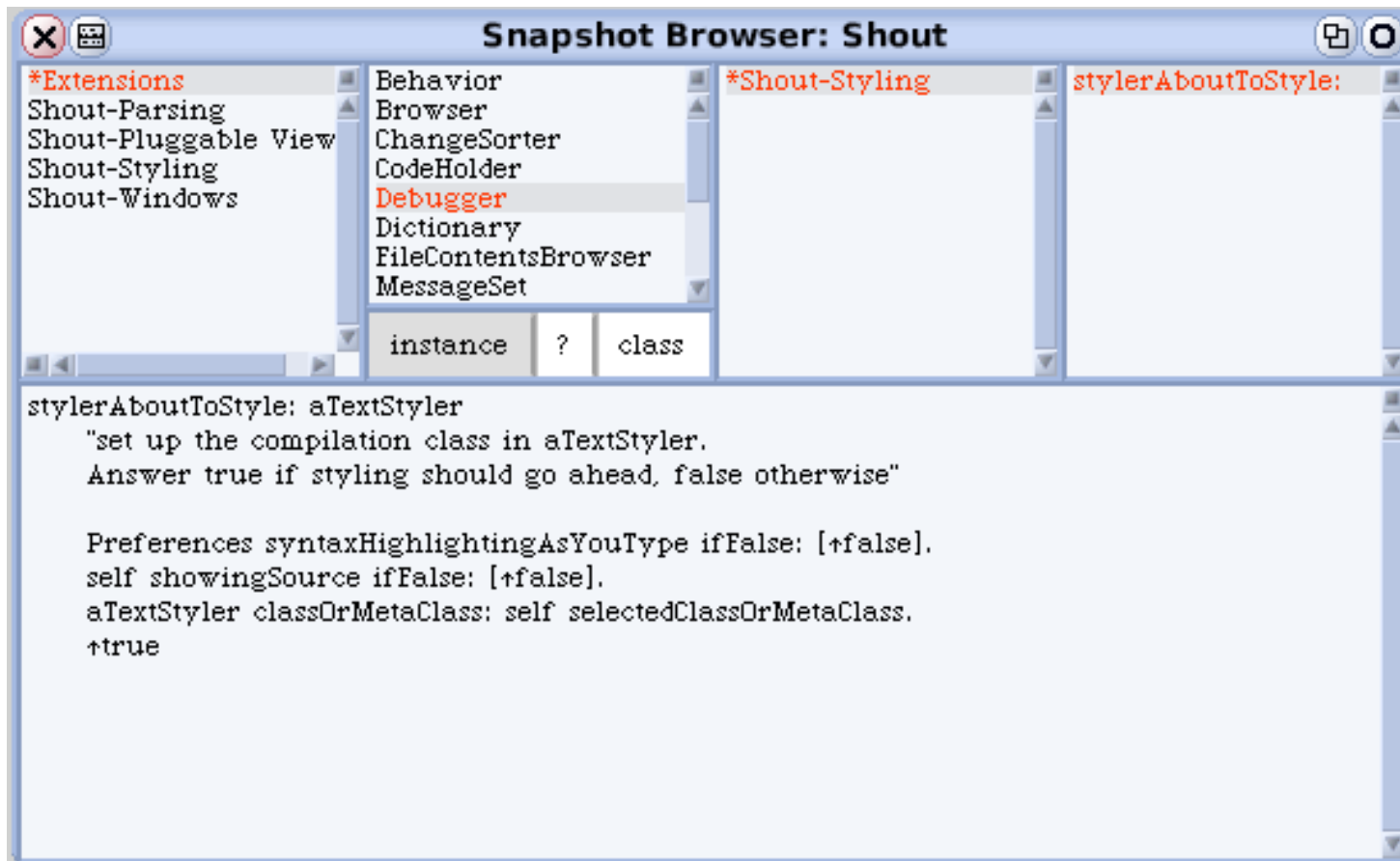
# Squeak Map Package Loader



# Monticello



# Monticello Change Browser



# Repository



# SqueakSource

The screenshot shows a web browser window with the address bar displaying `http://www.squeaksource.com/@gNAkqNOzCUEJFjgw/tXvngQdA`. The browser's tab bar shows several open tabs: bib, scg, SCGWk, leo, stef, STwk, ESUG, ST03, SmallWiki, BDG, frsq, Stefwk, SDwk, selfbooks, and K. The website header features the "SqueakSource" logo in white text on a blue background with a pattern of small white arrows. Below the header is a navigation menu with links for Home, Projects, Members, and Help. The main content area is divided into two columns. The left column contains a sidebar with the following sections: "Actions" (with links for Syndication, Register Member, and Register Project), and "Authentication" (with a link for Login). The right column contains the main content, which starts with a "Home" section. This section includes a welcome message, a paragraph about the service being free and hosted on a Solaris server, and a request for reports to the Squeak Mailing-List. Below the Home section is a "Statistics" section, which includes a "Members (123)" subsection listing "Recently Joined" (Jeff Sparkes, Bernd Eckardt, Luc Fabresse, ...) and "Most Active" (Lex Spoon, Hernán Tylim, Samuel Tardieu, ...) members. The "Projects (111)" subsection is also visible at the bottom of the right column.

http://www.squeaksource.com/@gNAkqNOzCUEJFjgw/tXvngQdA

bib scg SCGWk leo stef STwk ESUG ST03 SmallWiki BDG frsq Stefwk SDwk selfbooks K

## SqueakSource

Home Projects Members Help

**Actions**  
[Syndication](#)  
[Register Member](#)  
[Register Project](#)

**Authentication**  
[Login](#)

### Home

Welcome to SqueakSource, the smart Monticello code-repository for Squeak. To get started, you need to create a personal account and create any number of projects to host on our server. You'll immediately have the necessary permissions to create and manage your account, projects and versions. Detailed instructions are found on the [Help](#) page.

This service is brought to you for free: it is hosted on a Solaris server that is backed up daily to ensure that you have proper backups and note that we cannot give any accessibility guarantee. We wish you can set up your own SqueakSource server. It is self-hosted and can be downloaded from [our website](#).

Please report any problems or suggestions to the [Squeak Mailing-List](#). Enjoy!

### Statistics

**Members (123)**

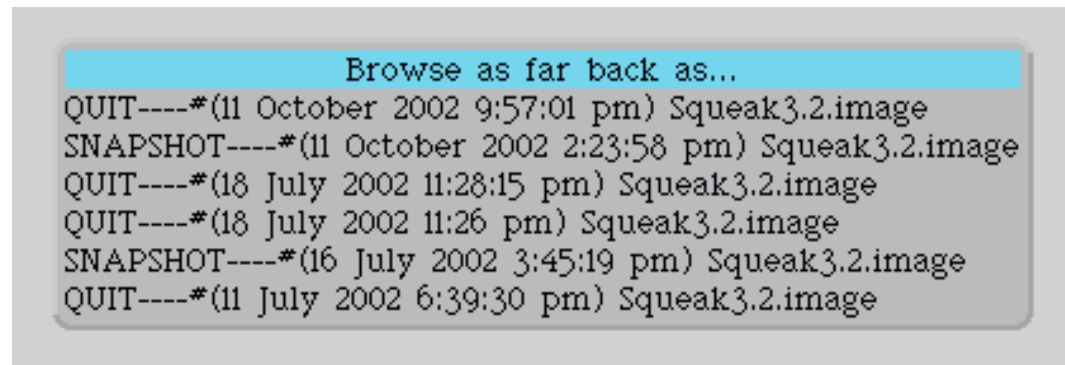
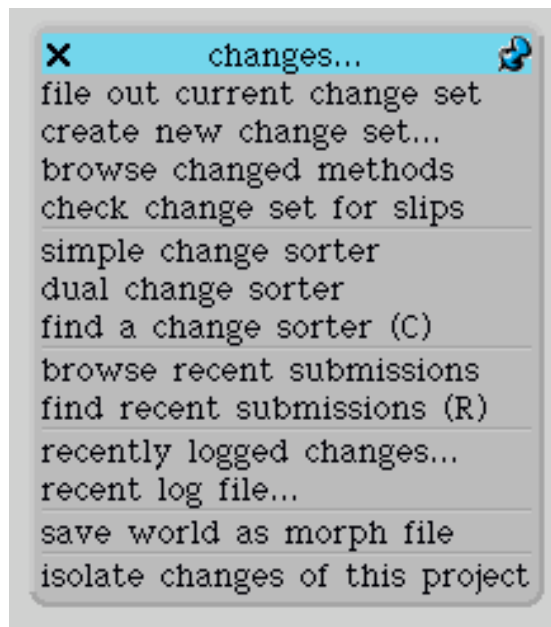
Recently Joined: [Jeff Sparkes](#), [Bernd Eckardt](#), [Luc Fabresse](#), ...

Most Active: [Lex Spoon](#), [Hernán Tylim](#), [Samuel Tardieu](#), ...

**Projects (111)**

# Changes Menu...Recently logged files

- Everything you do is recorded





# ChangeSorter: to sort your changes

## ✕ Change Set

make changes go to me (m)

new change set... (n)

find...(f)

show category... (s)

select change set...

rename change set (r)

file out (o)

mail to list

browse methods (b)

browse change set (B)

copy all to other side (c)

submerge into other side

subtract other side

add preamble (p)

add postscript...

category functions...

destroy change set (x)

more...

Changes go to "Sesame"

MW-base	CookieMonster	AniTurtle	AniTurtle
4917dupNavBar-sw	Monster	Monitor	AniTurtle class
Sesame		ExtendedTurtleBeha	
More About Sound		TurtleforMW	
Squeak in 3D		TurtleBrowsers	
Squeak and the Inte		TurtleEnvironment	
askForCookie			
complaintAbout:			
eat:			
initializeToStandAlone			
isEmpty			
askForCookie			
↑ FillInTheBlank request: 'Give me cookie!!! (please)'			

# Cool Packages to Load

Shout

Refactoring Browser

eCompletion



# Change your Mind

Everything you do is recorded !!  
So try and learn how to recover your code

You are smart so  
Experiment,  
Learn for you, browse,  
educate your taste (not all Squeak code is good)  
Be aggressive, \*\*\*all\*\*\* the code is there