Appendix: Five Children's Creations

To give the reader a feeling for what children have been able to accomplish on MOOSE Crossing, this appendix includes all the programs and descriptions of five randomly-selected children. A random-number generator was used to pick them. I decided in advance that I would continue picking children randomly and use the first who fit into each of these categories: a participant in the local after-school program, a home-schooled child, a child who heard about MOOSE Crossing over the net and participates from home, and a child who participates as part of an in-school activity. I also decided that I would keep picking until the full range of ages (7 to 13) was represented. The first four children randomly picked filled most of these categories. I had to pick several more until a child participating from an in-school program was selected.

While this sample was randomly selected, it is unrepresentative in two ways. First, four girls and one boy are included in the sample. The over-all population of MOOSE Crossing is 56% male and 44% female. Second, these children have participated more than is typical. The mean number of commands typed for all children on MOOSE Crossing is 2440 but the mean for this sample is 6994.

Of the children selected, one (Mouse) I would call unusually successful; one (Angela) I would call unusually unsuccessful. Angela participates in school, and has been singled out as having particular difficulty compared to her classmates. The other three children (Goofy, Werdna, and Rowena) are more typical in their level of accomplishment.

Only those objects in existence as of March 1997 are shown. (Mouse in particular has a large number of objects which she recycled when she no longer wanted them.) The children are listed in order of increasing age.

The children's objects are listed in the order in which they were created. This means that the programs they have written are *not* listed in the order in which they were written. For example, Mouse has written a number of programs on her own character object. Your character is the first object you own, so these are listed first. However, these programs are actually relatively advanced programs that she wrote at a much later date. Her first program is on the next object she created, Charlie the caterpillar.

Goofy

Age:	7
Gender:	Female
Participating from:	Media Lab after-school program; no home access
Joined in:	October 1996
Total commands typed:	153

I never anticipated that MOOSE Crossing would be used by kids as young as seven. It's a very different activity for young children who are just learning to read. Goofy is the youngest of four siblings who all participated in the Media Lab's after-school program. Her eldest brother Zoro joined the program first, and the others followed in age order, a few months apart. Zoro had been participating for almost a year by the time Goofy decided to give it a try.

Writing is a painstaking process for Goofy. The long "emote" command in her banana joke script on her monkey took her a few hours of work, spread out over several sessions. She would often pause to ask her older sister (Liza, age 10) how to spell a particular word.

```
*** goofy (parent: MOOSE player class) ****
a fat person with little arms and legs


*** goofy's Room (parent: Generic MOOSE Room) ****
light pink  with blue and  green dots


*** goofy (parent: generic exit) ****
From: Paradise Island
To: goofy's Room


*** out (parent: generic exit) ****
From: goofy's Room
To: Paradise Island


*** a sing tree (parent: generic thing) ****


*** generic monkey (parent: Generic Puppet) ****
he has a red shirt


*** jj (parent: generic monkey by goofy) ****
he has a red shirt and black pants he is a ranbow  monkey

2 scripts on jj:

  on talk
    say knock knock
    say whos there
```

```
    say boo
    say boo who
    say "don't cry it's only a  joke"
  end

  on banana
    say "knock knock"
    say "nobody is home"
    emote "reaches into his pocket and pulled out a bunch of bananas"
    emote "reaches into his pocket and pulled out a pietray and then
      said hmmmn how can I do this then he reaches into his pocket
      and pulled's out a portable oven and say's hmmmn how can I do
      this then he unpeels all the bananas smushis the bananas into
      the pietray and puts it in to the oven and wates for it to cook
      then it gos ding rb pushes the button that says cool then the
      oven gos ding rb  pulls the pie out of the oven and smacks itto
      goofys face the end.
  end


*** lemon chime (parent: Generic Puppet) ****
she is brown she loves to eat sweet milk grass she loves to run and
   eat sweet milk grass she understands me and I understand her we
   love each other and she loves to leap over things


******** TOTAL: 2 scripts on 8 objects. ********
```

Mouse

Age:	8 to 10
Gender:	Female
Participating from:	Media Lab after-school program; additional access from home starting in June 96
Joined in:	November 1995
Total commands typed:	12972

Like Goofy, Mouse wasn't originally supposed to be participating in MOOSE Crossing—she was, after all, only eight years old. She got involved as a result of a child-care problem. Her ten-year-old sister, Miranda, was one of the first children to try it out. On Miranda's fourth visit to the Media Lab, their mother Lynn had no place to leave Mouse. Lynn asked if it would be OK if Mouse watched. For three sessions, Mouse watched intently over Miranda's shoulder, not saying a word. Two things became immediately clear about Mouse: she is extremely shy, and she worships her older sister. Lynn commented that Mouse generally won't talk to adults at all, unless she knows them extremely well. Every time I asked Mouse if she would like to try MOOSE Crossing too, she responded with a silent shake of the head. At the start of her fourth visit, I asked again. This time, she nodded.

Mouse had clearly been watching carefully. Three and a half minutes after first connecting, she had already found the secret path to the clouds and built a home next to her sister's room there. She gave it this description:

```
a tiny room with a desk in the center of the room. On the desk there
is a pen and a stuffed teddy bear.  In the corner is a mouse hole. A
mouse sticks its head out.
```

Both her name and room description emphasize a sense of feeling small. After describing her room she joined Miranda and typed 'say "Hi Miranda".' Then she didn't say anything, but sat looking at Miranda at the computer next to her, silently. I said out loud to Mouse, "I don't think she's looking at her screen." Miranda heard me and turned to her computer and typed "say hi" back. This conversation ensued:

```
Miranda gives you a hug
Mouse says, "I'm here to hug you!"
Mouse hug Miranda
Mouse hugs Miranda
Mouse says, "I made a mistake"
Miranda smiles
Mouse smiles back
```

Here Mouse types "ask Eddy for joke." Eddy is one of Miranda's creations—a giant light bulb that tells light bulb and other jokes.

```
Eddy says, 'What is the best way to catch a squirrel?'
Eddy says, 'Climb up a tree and act like a nut'
Miranda says, "Great joke, right?"
Mouse says, "I guss so."
Mouse hugs Miranda again
Miranda says, "You spelled 'guess' wrong"
Mouse says, "I made a mistake again"
Miranda says, "Everybody makes mistakes."
```

Variations on Miranda's "on blink this number times" script on Eddy would form the basis for many of Mouse's projects over the next few months. Initially, she was just following a pattern without fully understanding its component parts. Later on, she would come to understand those parts, and progress to writing more varied and original scripts.

The nine scripts on Mouse's character object were written at a later date. Her first scripts are those on Charlie the caterpillar.

```
*** Mouse (parent: generic_answering_machine by Miranda) ****
Mouse has Dark brown hair which is worn in a lose ponytail. Her eyes
   are brown and are twinkling happily. She is wearing blue jeans and
   a white, velvet shirt.

9 scripts on Mouse:
```

```
on follow any_person
  set person to any_person
  join person
  fork 500
    join person
    tell me "You are not following anybody anymore."
  endfork
  fork 400
    join person
  endfork
  fork 300
    join person
  endfork
  fork 200
    join person
  endfork
  fork 100
    join person
  endfork
end

set my awake to 1
end

set my awake to 0
end

on float
  tell this "Who would you like to float into?"
  set float to input
  join float
   tell float "Mouse's soul has chosen to float into your body. It
 will follow you where ever you go."
   tell this "Mouse's soul has chosen to float into your body. It
 will follow you where ever you go."
  set my floater to float
end

on exit here by object
  if player is my floater
    fork 5
      this:join player
      tell player "soul is in your body, it followed you"
      tell me "you follow " + player's name
    endfork
  endif
end

on unfloat
  tell my floater "I float out of you"
  tell this "I float out of you"
  set my floater to {}
end

on Easy_Audit
  set Dog to context's owned_objects
  set pigs to {}
  for mouse in dog
```

```
      set rat to nn mouse
      set pigs to (add rat to pigs)
    endfor
    columnize pigs into 3 of width 135
    tell_lines context it
  end


*** Mouse (parent: generic exit) ****
From: Home in the Clouds
To: Main Kitchens


*** Charlie (parent: Generic Following Object) ****
a dark green catorpilor with red bumps on his legs. He has purple
   eyes with bule dots in the middle of them.

2 scripts on Charlie:

  on change this number "times"
    set changed to number
    if changed > 5 times
      emote "bumps turn blue"
    endif
    if changed > 50 times
      emote "bumps turn purplish pink"
    endif
    if changed > 100 times
      emote "bumps turn light green"
    endif
    if changed > 500 times
      emote "bumps start to blink black and brown"
    endif
    if changed > 550 times
      emote "bumps blink purple and pink then turn red"
    endif
  end

  on enter here by object
    emote " wiggles bumps madly and turns a bright yellow."
  end


*** Mouse (parent: generic exit) ****
From: Paradise Island
To: generic_penguin


*** Stacy (parent: Generic Joke-Telling Object) ****
a frendly killer whale. She has Brown eyes and her tail has a rash.

1 script on Stacy:

  on flap this number "times"
    set flapped to number
    if flapped > 5 times
      emote " blinks her eyes happily"
    endif
```

```
    if flapped > 50 times
      emote " waves fin as in a way to say hi"
    endif
    if flapped > 100 times
      emote "looks angry"
    endif
    if flapped > 500 times
      emote "wiggles arond madly"
    endif
    if flapped > 550 times
      emote "flips over"
    endif
  end
```

*** R.C. (parent: Generic Puppet) ****
a gray dolphin with a really, really, really shinny tail. He is Stacy's boyfriend.

1 script on R.C.:

```
  On flap this number "times"
    set flapped to number
    set Stacy_here to #xxx member here's contents
    if flapped > 5 times
      if Stacy_here
        emote " jumps over Stacy"
      else
        emote " jumps  up in the air"
      endif
    endif
    if flapped > 20 times
      emote "dances around like a crazy person."
    endif
    if flapped > 50 times
      emote "does the hokey pokey."
    endif
    if flapped > 100 times
      emote " puts his fins on his hips."
    endif
    if flapped > 500 times
      if Stacy_here
        emote "dances on Stacy's head"
      else
        emote " spins like a top"
      endif
    endif
  end
```

*** Newty Cutey (parent: generic_newt by Byron) ****

2 scripts on Newty Cutey:

```
  On crawl this number "times"
    set Crawl to number
    if crawl > 10 times
      emote "slimes you!"
```

```
    endif
    if crawl > 50 times
      emote "sticks its toungh out at you."
    endif
    if crawl > 100 times
      emote "turns around dizzlely."
    endif
    if crawl > 500 times
      emote "bites you."
    endif
  end

  On sign_here
  end
```

*** Mouse's room (parent: Generic MOOSE Room) ****
a chocolate covored room. You lick some of the chocolate off, yummy. You lick some more. You can see through the chocolate! You see a box. You lick around the box and take it out. It's full of chocolate bars! You also see a blue couch and a blue table.

*** Mouse (parent: generic exit) ****
From: Paradise Island
To: Mouse's room

*** out (parent: generic exit) ****
From: Mouse's room
To: Paradise Island

*** generic_bubble_blower (parent: generic thing) ****
A bottle with a labble on it that says "do not touch." You also see a bubble blowing stick taped to the bottle. You guess it's a bubble blower.

2 scripts on generic_bubble_blower:

```
  on blow bubbles number "times"
    set blow_bubbled to number
    if blow_bubbled > 5 times
      announce_all "bubbles float around in the air."
    endif
    if blow_bubbled > 100 times
      announce_all " bubbles look angry"
    endif
    if blow_bubbled > 500 times
      announce_all " bubbles blow up!!"
    endif
  end
  on blow red bubbles
    announce_all "red bubbles floats in the air"
  end
  on blow blue bubbles
    announce_all "blue bubbles pop on your head"
  end
```

```
  on blow green bubbles
    announce_all "green bubbles pop as they float through the air"
  end
  on blow yellow bubbles
    announce_all "yellow bubbles do a silly dance"
  end


*** Dolly (parent: Generic Following Object) ****
 A little doll with a little hat and a little outfit and little
   shoes.

3 scripts on Dolly:

  on drop this
    tell context " I fell down.  Pick me up mommy! "
    pass
    fork (25)
      if this memberof player's contents
        tell context " thank you mommy! Ha!Ha!Ha!  Ha!Ha!Ha! "
      else
        tell context " BAD MOMMY!!! "
      endif
    endfork
  end


  on Somersault this number "times"
    set somersaulted to number
    if somersaulted > 5 times
      emote "Somersaults 5 times and drols happily."
    endif
    if somersaulted > 30 times
      emote "then somersaults 30 times and falls on his head."
    endif
    if somersaulted > 50 times
        emote "then Somersaults 50 times and Tinky tinkles in his
   toilt."
    endif
    if somersaulted > 100 times
      emote " then somersaults 100 times and starts to spin around in
   circles."
    endif
  end


*** Quiet Clearing (parent: Generic Residence Hall) ****
A huge clearing.  On the right there is a freash water pond.  You
   hear birds singing.  It seems like a quiet and cozy place to build
   a home. To build a house, type 'build'


*** Quiet (parent: generic exit) ****
From: Redwood Forest
To: Quiet Clearing


*** out (parent: generic exit) ****
```

```
From: Quiet Clearing
To: Redwood Forest


*** Floppy (parent: generic_greeting_creature by Byron) ****
A cute Puppy with floppy ears. She is black, except her back which is
   white. As you look at her face, You see a gold metal around her
   neck that reads:FLOPPY IS HEREBY NAMED 'OBJECT #xxxx'. Floppy is a
   REALY cute dog.

5 scripts on Floppy:

  on touch this string
    if string is "on the tail"
      say "Hee, hee, hee!"
    endif
    if string is "on the eye"
      say "Ow!"
    endif
    if string is "on the nose"
      say " Don't do that! "
    endif
    if string is "on the head"
      say " Bopy Bop "
    endif
    if string is "on the feet"
      say "watch out I might scratch you"
    endif
    if string is "on the back"
      say " That feels good! "
    endif
    if string is "on the ear"
      say " what did you say? "
    endif
    if string is "on the tummy"
      say "tummy tum tum!"
    endif
    if string is "on the leg"
      say "Hey! You can't touch me there!"
    endif
  end

  on leash_on this
    emote "smiles happily as you put her leash on."
  end

  on tell this string
    if index string "Floppy"
       announce_all_but this "floppy smiles when she hears her name
   being called"
    endif
  end

  On carry this
    tell player "You pick up floppy and pet her on the head."
  end
```

```
  on hug this
    tell player "Floppy woofs in delight"
  end


*** Mouse's Plants (parent: Generic MOOSE Room) ****
You are in a Florist. There are plants everywhere!


*** Mr.Planter (parent: generic_creator) ****

2 scripts on Mr.Planter:

  on buy plant
    tel player "What name would you like your plant to have?"
    set plantname to input
    make #xxxx named plantname
    if context not memberof my buylist
      set my buylist to (add context to my buylist)
    endif
  end
  on buy bush
    tel player "What name would you like your bush to have?"
    set bushname to input
    make #xxxx named bushname
    if context not memberof my buylist
      set my buylist to (add context to my buylist)
    endif
  end
  on buy tree
    tel player "What name would you like your tree to have?"
    set treename to input
    make #xxxx named treename
    if context not memberof my buylist
      set my buylist to (add context to my buylist)
    endif
  end
  on buy flower
    tel player "What name would you like your flower to have?"
    set flowername to input
    make #xxxx named flowername
    if context not memberof my buylist
      set my buylist to (add context to my buylist)
    endif
  end

  on enter here by person
    say "Hi," + person's name + " , you are at Mouse's Plants. To buy
   a tree, type buy_tree, to buy a bush, type buy_bush, to buy a
   flower, type buy_flower, and to buy a plant, type buy_plant.  If
   you want to ask a question about a plant, a bush, a flower or a
   tree, page  Mouse with the question or join her and ask her."
  end


*** flu (parent: generic_plant by Miranda) ****
```

```
*** proy (parent: generic_flower by Mouse) ****


*** hoyem (parent: generic_bush by Mouse) ****


*** green (parent: generic_tree by Mouse) ****

1 script on green:



*** generic_bush (parent: generic thing) ****

1 script on generic_bush:

  on enter here by object
    announce you see a rabbit scamper away from behind the bush
  end


*** generic_tree (parent: generic thing) ****

1 script on generic_tree:

  on enter here by object
    announce "a bunch of nuts pour out of a hole in the trunk and a
   squirrel poks his head out."
  end


*** generic_flower (parent: generic thing) ****

1 script on generic_flower:

  on enter here by object
    announce a petal drops from the flower
  end


*** Ouija_Board (parent: generic thing) ****
A big board with the alphabet on it and a magnifying piece

1 script on Ouija_Board:

  on use this
    tell context "ask question that initials will answer."
    fork (60)
      set initials to pick my letters
      tell context initials
      set initials2 to pick my letters
      tell context initials2
    endfork
  end


*** Generic_Multiple_personality_puppet (parent: Generic_Assistant by
   Rachael) ****
```

```
4 scripts on Generic_Multiple_personality_puppet:
```

[Note: The scripts on this object were copied by Mouse from a system object, without her really understanding them. Many kids use “generic multiple personality character” to enable them to switch personalities. Mouse decided she wanted her puppet to be able to switch names and descriptions as well. She copied the code from multiple personality character to make multiple personality puppet. I helped her with this. The code isn’t representative of her level of achievement, so I have omitted it here.]

```
*** Mouse's favorite Ice Cream (parent: Generic MOOSE Room) ****
A very big Ice cream store.  There is a big, shiny red counter in the
   center.  Behind the counter, there is a robbot with an apron that
   says Mouse's Helper.  To buy somthing, type buy <flavor>. The Ice
   cream is FREE.  The room is all white except for the floor which
   is covered with a brown carpet.  On the wall, there are pictures
   of famos people eating Ice Cream.  In the back there is a blue
   door that reads: Employees Only.  You like this store a lot. You
   will probably buy some.  The Robot smiles at you warmly and says '
   What flavor would you like.'  You think hard and decide you'll
   get.........


*** Ice_cream_man (parent: generic_creator) ****

1 script on Ice_cream_man:

  on buy string
    tell player "In a cone or a cup?"
    set cko to input
    tell player " You now have " + string + " Ice cream in a " + cko
   + " To lick, type 'lick' now"
    if string memberof my flavors
       tell player " You now have double fudge " + string + " Ice
   cream in a " + cko + "  You get double fudge, because you are a
   friend of Mouse.  To lick, type 'lick' now"
    endif
    set slobber to input
    if slobber is lick
      tell player " You lick your " + string + " Ice cream. "
      tell player "You lick your " + string + " ice cream again."
       tell player "You  lick your ice cream until the Ice cream is
   gone."
    else
      tell player " You tip your ice cream " + cko + "."
    endif
    if context not memberof my buylist
      set my buylist to (add context to my buylist)
    endif
  end


*** Mouse's Nest (parent: Generic MOOSE Room) ****
A tiny ramshakle nest which is falling apart. To fix it up, type
   'describe here as <description'.
```

```
*** Mouse (parent: generic exit) ****
From: Nest Gather Grounds
To: Mouse's Nest


*** down (parent: generic exit) ****
From: Mouse's Nest
To: Nest Gather Grounds


*** Side Hall (parent: Generic Residence Hall) ****
A Very airy, long Hall with a view of a lake. there are lots of open
   windows. On windows, there are lots of plants.

2 scripts on Side Hall:

  on enter here by player
    (pick my open)
    announce_all it
    set my window to it
  end

  on set tempature
    tell player "What would you like the tempature to be? It has to
   be above 40 degrees and under 100 degrees."
    set temp to input
    if temp is "40"
       tell player "The temp is forty, it's mighty cold , you might
   want to turn it up a noch."
      set my temp to 40
    endif
    if temp is "41"
       tell player "The temp is forty one, it is cold in here, you
   might want to turn the heat up more."
      set my temp to 41
    endif
    if temp is "42"
       tell player "The temp is forty two, it is a little cold, you
   should turn it up a little."
      set my temp to 42
    endif
    if temp is "43"
       tell player "The temp is forty three, it's cool in here, you
   should turn it up a little, so people dont shiver."
      set my temp to 43
    endif
  end


*** Mouse's Labratory (parent: Generic MOOSE Room) ****
A very green room with blue carpet. There is a desk with lots of
   bottles full of stuff like, blue liquid and strange possions. Next
   to the desk there is a HUGE window covering tho whole wall! Next
   the window is a tiny table with two books on it and a pad of paper
   and a pen. On the other side of the room there is a bookcase with
   many books about chemisty. Next to the desk there is a little
   stove.  This is a cozy little lab.
```

```
*** Mouse (parent: generic exit) ****
From: Side Hall
To: Mouse's Labratory


*** out (parent: generic exit) ****
From: Mouse's Labratory
To: Side Hall


*** Mouse's bed room (parent: Generic MOOSE Room) ****
You're standing in a small space with a bunk bed on the side. There
   is also a dresser and a wooden desk.  Next to the desk there is a
   bookcase. A closet is next to the bookcase. This is Mouse's bed
   room.


*** Bedroom (parent: generic exit) ****
From: Mouse's Labratory
To: Mouse's bed room


*** Lab (parent: generic exit) ****
From: Mouse's bed room
To: Mouse's Labratory


*** whatsnew (parent: Generic Large-Capacity Mail Recipient) ****
a mailing list with lots of new stuff.


*** LAB (parent: generic exit) ****
From: Mouse's favorite Ice Cream
To: Mouse's Labratory


*** BAL (parent: generic exit) ****
From: Mouse's Plants
To: Mouse's Labratory


*** Down (parent: generic exit) ****
From: Side Hall
To: Main Kitchens


*** up (parent: generic exit) ****
From: <nowhere>
To: Side Hall


*** Plants (parent: generic exit) ****
From: Mouse's Labratory
To: Mouse's Plants


*** Cream (parent: generic exit) ****
```

```
From: Mouse's Plants
To: Mouse's favorite Ice Cream


*** Time Traveler (parent: Generic Viewable Room by Churchill) ****
You see a big Black tube in front of you. On the wall there is a sign
   that looks very old. It reads: 'To travel to a time, Either 1987,
   1984, 1000 bc, 20034 or 90000, just type 'Travel_to <time>'

3 scripts on Time Traveler:

  on Travel_to string
    if string is "1987"
      travel_to 1987
    endif
    if string is "1984"
      travel_to 1984
    endif
    if string is "1000 bc"
      travel_to 1000 bc
    endif
    if strig is "9000"
      travel_to 9000
    endif
  end
  on travel_to 1987
     describe this as "This year was when Mouse was born! You see a
   person holding a baby, The baby's Mouse. You float to a window of
   a house and see the same person, (Mouse's mother) holding Mouse. A
   3 yr. old walks over to Mouse and says 'Ooh! I have a Little
   sister!' That's Miranda. To go Back to 1996, type go_back."
    look
    pick my Says
    tell player it
    tell player "remember, if you want to go type 'go_back'"
  end
  on travel_to 1984
     describe this as "This year was when Miranda was born! You see a
   person holding a baby, The baby's Miranda. You float to a window
   of a house and see the same person, (Mouse's mother) holding
   Miranda. As you look through the window, You see all or Miranda's
   relatives are there. They all never leave her"
    look
    pick my Saysb
    tell player it
     tell player "Remember: if you want to go back to 1996, type
   'go_back'"
  end
  on travel_to 1000 bc
      describe this as "As you look around you see big trees
   everywhere. On rocks carved into chairs, there are people carving
   bows and arows, knitting quilts and molding Bowls. To buy
   something, type buy <thing>. "
    Look
    Tell player "If you want to buy somthing type 'buy <thing>."
    set buy to input
    pass
    tell player "remember, if you want to go type 'go_back'"
```

```
  end


  on buy string
    if string is "Bow and arrow"
      Tell player "you walk over to a man carving a bow and arrow and
   ask 'Can you make me one?' the man looks at you oddly, so you
   repet it slowly. He nods his head as if to say 'ok'. He starts
   carving. After awhile he asks you 'what name I carve on bow?'"
      set Bowname to input
      make #xxx named Bowname
    endif
  end
  if string is "Quilt"
     Tell player "you walk over to a women knitting a quilt and ask
   'Can you knit me one?' the women must know a little english
   somehow, because she nods her head as if to say 'ok'. She then
   starts knitting. After a long, long, while, she asks you 'what
   name I knit on quilt?'"
    set quiltname to input
    make #xxxx named quiltname
  endif
  end
  if string is "bowl"
    Tell player "you slowly walk over to a little child molding bowls
   'Can you give me one?' you watch the child walk over to the women
   nitting quilts,(who must be her mother) and says some thing too
   her, she comes back and nods her head. She then picks up a nice
   blue bowl and says, 'what name I carve on bowl on quilt?'"
    set bowlname to input
    make #xxx named bowlname
  endif
  end


  on go_back
    tell player "you go back to 1996"
     describe here as "You see a big Black tube in front of you. On
   the wall there is a sign that looks very old. It reads: 'To travel
   to a time, Either 1987, 1984, 1000 bc, 20034 or 90000, just type
   'Travel_to <time>'"
  end


*** Time (parent: generic exit) ****
From: Mouse's Labratory
To: Time Traveler


*** back (parent: generic exit) ****
From: Time Traveler
To: Mouse's Labratory


*** Generic_Bow_and_arrow (parent: generic thing) ****
```

```
1 script on Generic_Bow_and_arrow:

  on shout this
     Tell player "you shout your bow across the room and it land in
   the wall."
    pick my Shout
    set ho to input
    tell player "you walk over to the wall and" + ho + "it out."
  end


*** Generic_quilt (parent: generic thing) ****

1 script on Generic_quilt:

  on Lay_on this
    If player is #xx
      tell player "You lay softly down on the blacket, (hi amy!).
    endif
  end
  if player #xxx
     tell player "Since you are Miranda, As you lay down a pillow
   appers under your head."
  endif
  end
  if player #xxx
     Tell player "You lay softly on the blacket. As you do a voice
   Comes out of the air and says 'Hi austina!'"
  endif
  end
  if player #xxx
    tell player "HI Mouse! You are a hero! You lay on a gold blacket
   and a pillow slides under your head. Also, a blacket falls down
   over you."
  endif
  end


*** generic_Bowl (parent: generic thing) ****

1 script on generic_Bowl:

  on eat string
    tell player "You eat" + string + "out of your bowl"
  end


*** a sign (parent: Generic Sign by Austina) ****


*** Heavy Cedar Door (parent: generic exit) ****
From: Side Hall
To: Rachael's study


*** Side hall (parent: generic exit) ****
From: Rachael's study
To: Side Hall
```

```
*** Code room (parent: Generic MOOSE Room) ****

2 scripts on Code room:

  on code string
    set answer to ""
    set h to characters string
    for dog in h
      set hog to dog memberof my letters
      set how to item hog of my code
      set answer to answer + how
    endfor
    return answer
  end

  on say string
    set newstr to (code string)
    tell context "You say, " + newstr
     announce_all_but context context's name + " says, '" + newstr +
   "'"
  end


*** Code (parent: generic exit) ****
From: Mouse's bed room
To: Code room


*** back (parent: generic exit) ****
From: Code room
To: Mouse's bed room


*** Hannah/Ileza (parent: generic_conversation by Miranda) ****

1 script on Hannah/Ileza:

  on tell bob string
    pick my Bob
    set bob1 to it
    tell player Bob1
  end


*** Special_Code (parent: generic thing) ****
Code room's code

1 script on Special_Code:

  on read this
    if player is not #xxx
      tell player "You're not Mouse! you just want to read the code!"
    else
    endif
```

```
    tell player "A=@ b=e c=; d=$ e=n f=? g=o h=& i=t j=s k=* l=m m=<
   n=r o=> p=q q=% r=w s=( t=c u=) v=h w=: x=g y=~ z+d  =  .=|!=b
   ?=_"
  end
```

*** Box (parent: generic container) ****
A box with all of Mouse Generics in it

*** The GreenHouse (parent: Generic MOOSE Room) ****
You stroll down a garden path with cobblestones along the side, you enter a huge greenhouse full of exquisite bushes, trees, and flowers. The greenhouse is comfortably warm, and it smells of flowers. There are sprinklers sprinkling cool water on the plants. In this room, you feel at peace with the world.

*** LAB (parent: generic exit) ****
From: The GreenHouse
To: Mouse's Labratory

*** Golumeena (parent: Generic Cliche-Spouting Object) ****
A little round, plump, two inches tall person. She is very cute. But has a loud vouce for her size.

2 scripts on Golumeena:

```
  on poke this number "times
    set poke to number
    if poke > 1
      tell player "Kindly stop poking me"
    endif
    if poke > 5
      tell player "I'll give you one more chance: stop poking me NOW"
    endif
    if poke > 10
      tell player "STOP POKING ME NNNNNNNNOOOOOOOOWWWWWW!!!!"
    endif
    if poke > 20
      emote throw a fit.
      tell player "STOP!!!!"
    endif
    if poke > 50
      tell player "I'll punch you if you don't stop"
    endif
    if poke > 100
      tell player "NOW I'M SO MAD"
      Emote turns red
    endif
    if poke > 500
      tell player "STOP! I CAN'T TAKE IT ANY LONGER!!!!"
      emote crys
    endif
  end
```

```
  on enter here by object
    emote quickly jumps out of Mouses pocket
    emote waves
  end
```

*** Mouse's Room (parent: Generic MOOSE Room) ****
You turn the handle of a red door with a green handle. As you turn the handle, it turns into a unique, gold door knob with a lion carved into it. You slowly walk into a small room with a nice flowery chair in the center. The chair looks as though it is magic, it has has a dusty look to it.

*** out (parent: generic exit) ****
From: Mouse's Room
To: turtle

*** Bearuni (parent: Generic_Multiple_personality_puppet by Mouse) ****
Bearuni is really Possie, but now Possie thinks she is a white Polar Bear!

1 script on Bearuni:

```
  On Talk_to this
     say "Hi!  " + player's name + " is it?  Well, anyway, can you
   tell me a story? I love storys."
    set story to input
      say "Nice Story! I'm making a book called Possie's book of
   story's. Can you tell me your name so that I can put this story in
   my book?"
    set nme to input
    set Entry to {story, nme }
    set my Stories to (add entry to my Stories)
    say "Thank you SO much! I love when people add a new story to my
   book! When you have time, tell people to add a story to my book.
   Can you tell me an animal? I can become different animals, and I
   need ideas."
    set idea to input
    If idea memberof my Ideas
      say "I already have that name, but thanks any ways."
      return
    endif
    set my Ideas to (add idea to my Ideas)
     say "Thank you! I don't have that animal yet. Do you have any
   ideas on what my name name should be when I become that animal?"
    set name2 to input
    set my Ideas to (add name2 to my Ideas)
    say "That's a lovely name! Can you describe it for me?"
    set descript to input
    set my name to (add descript to my Ideas)
    say "Well, gotta go! See you later!"
  end
```

*** Possie's Book (parent: generic thing) ****

1 script on Possie's Book:

```
  on Scan this
     tell player "You open a small brown book with a gold broken
    clasp. As you look at the contents you see:"
     slice #xxxx.stories 2
     set author to it
     set nut to length author
     for time in 1 to nut
       tell player time + ". " + author[time]
     endfor
  end
```

*** Mouse's Room (parent: Generic MOOSE Room) ****
READ THIS FIRST!!!!!
As you walk into Mouse's room, you see it's not a room at all! It's a hallway, an endless hallway! You walk cautionsly onward through the corridor. As you walk passed the first door, the stench of garbege fills the air. YUCK! You quickly read the sign on the first door: STINKY LAND *under construction* You walk on until you get to the second door. COME IN! reads the purple letters painted onto the door. You turn the door knob. As you look down at your hand you realize there was gum on the door! You peel the gum off into a ball. Once you do, it flatens out and on it appers the words: Tricked you! It then falls back onto the door. You walk on to the next door, dazziled. You look at the sign on the door: COME IN AND HAVE SOME TEA! Just as you read the last words, you get sucked into the door and apper in a cartoon world! You look down at your hands and realize you're a cartoon drawing too! There is a tree on the right with a little blonde girl on a branch, sleeping. HEY! You're in the first scene of Alice in Wounderland! The abbreviations for:
The scene where Alice falls down a hole:AH
The scene with the Mad Hatter and the March Hair:MH
The scene where the Queen is playing Croquet:QC
The scene with the Treasure cat:TC
The scene where Alice is on trial:AT
Use the abbreviations to figure out where the exits below lead.

*** Mouse (parent: generic exit) ****
From: Tech City
To: Mouse's Room

*** out (parent: generic exit) ****
From: Mouse's Room
To: Tech City

*** Roo's Room (parent: Generic MOOSE Room) ****
Roo's home to which also belongs to Kanga. It will soon be described better!

*** Roo (parent: generic exit) ****

```
From: The Hundred Acre Woods
To: Roo's Room


*** out (parent: generic exit) ****
From: Roo's Room
To: The Hundred Acre Woods


*** mall (parent: generic exit) ****
From: Mouse's favorite Ice Cream
To: The Grand Moose Mall


*** Lily (parent: generic_female_potato by Miranda) ****


*** Bill (parent: generic_male_potato by Miranda) ****


*** Beely (parent: generic_bee by Miranda) ****


*** little boy potato (parent: generic_male_potato by Miranda) ****
A creamy, buttery, mashed potato.


*** Cheese_Machine (parent: generic_creator) ****
You see a big metal machine built with big metal poles and small red
   buttons. At the end of the machine there is a mini Conveyor belt.
   In the center there is a large button with the Words 'BREAD'
   printed on it. There are 3 diffrent levels with little doors on
   the sides of them.

1 script on Cheese_Machine:

  on push red button
     tell player "What kind of bread would you like, Pita Bread,
   hamburger bun, Rye bread, Wheat bread or white Bread? ?"
    set bread to input
    If bread is Pita Bread
      Tell Player "Two little mice pop out of a door. One dressed in
   a pink tu-tu with a Pink bow tied in her hair, The other is
   dressed in a black tux with a black bow-tie at the coller. They
   dance out andpush a small blue button labuled 'claw'"
    endif
  end


*** The Anteater Rentel Shop (parent: Generic MOOSE Room) ****
A big whote room with with and blue tiles on the floor.  There is a
   desk in the back with a sign on it that reads: To Buy a Anteater,
   type buy anteater.


*** Ant (parent: generic exit) ****
From: Mouse's bed room
To: The Anteater Rentel Shop
```

```
*** eater (parent: generic exit) ****
From: The Anteater Rentel Shop
To: Mouse's bed room


*** Anteater1 (parent: generic thing) ****

2 scripts on Anteater1:

  on buy Anteater
    if my Babies is 1
        tell player "You're in luck! There are still babies left!
   Would you like a boy or girl?"
      set gender to input
      if gender is "girl"
         tell player "You pick up a fuzzy anteater with a bow on her
   head. Her long nose sniffs you with her eyes closed.  Suddenly,
   She sneezes all over you!"
      endif
      if gender is "Boy"
        tell player "You pick up a rough anteater with ablue and with
   cap on his head. He puts his hands together and swings them back
   and forth as though swinging a baseball bat.  How Funny!"
      endif
      tell Player "Have good luck with your anteater!  What would you
   like to name it?"
      set name to input
      make #xxxx named name
    endif
    if my babies is 0
       tell player "Tell Mouse, (#xxx) right away that there are no
   more babies, then try again later."
    endif
  end

  on exterminate here
    tell player My name + " sucks up all you ants and get a little
   bigger."
  end


*** AnteaterPen (parent: generic thing) ****
A cardboard box full of anteater babies

2 scripts on AnteaterPen:

  on load this
    set babies to 1
    describe me as "A cardboard box full of anteater babies"
  end

  on unload this
    set babies to 0
    describe me as "an empty cardboard box."
  end
```

```
*** fuzzball (parent: Anteater1 by Mouse) ****


*** JarOfAnts (parent: generic thing) ****

1 script on JarOfAnts:

  On pour this
    tell player "you pour ants all over the room"
     Page here's owner with "Ants are invading one of your rooms!
   Teloport to Anteater rental shop and buy an anteater to
   exterminate your ants!"
  end


*** Kleenex (parent: generic thing) ****
You see a cute, red-brown puppy.  His ears flop around when he walks
   around and his tongue hangs sideways out of his mouth.  His tail
   wags back and forth with exitment. He is a time-telling dog.  To
   see the time, type 'dial Kleenex'.

2 scripts on Kleenex:

  on dial this
     Tell player "You dial the number. Ring! Ring! Goes the phone.
   Soon, you here a voice say: You have reached " + my name + "'s
   Clock.  At the tone, his clock will read," (hhmmss (timestr)) ".
   Beep!!!!! Thank you for calling " + My name + "'s Clock. Call
   again soon!"
    fork 20
       Tell player "Oops! I forgot to tell you, If you want to find
   out the date, type: Dial-date " + My name + "."
    endfork
  end

  on dial_date this
    tell player "You dial:553-3639. Ring! Ring! Goes the phone. Soon,
   you her a voice say: You have reached " + my name + "'s Calendar.
   His calendar says it's" (ddmmyy (Timestr)) ". Thank you for
   calling " + My name + "'s Calender. Call again soon!"
    Fork 20
       tell player "Oops! I forgot to tell you, If you want to find
   out the time, type: Dial " + my name + "."
    endfork
  end


*** Mouse's Useful Pet Shop (parent: Generic MOOSE Room) ****


*** Pet (parent: generic exit) ****
From: Mouse's bed room
To: Mouse's Useful Pet Shop
```

```
*** back (parent: generic exit) ****
From: Mouse's Useful Pet Shop
To: Mouse's bed room


*** Ms.Saleswoman (parent: generic_creator) ****

2 scripts on Ms.Saleswoman:

  on enter here by player
     tell player "Welcome to Mouse's Useful Pet Shop. Here, we sell
   all kinds of useful pets. If you would like to buy: A Time-telling
   dog, type 'buy TimeDog'. Thank you for shopping here at Mouse's
   Useful Pet Shop."
  end

  on buy timeDog
    tell Player "What would you like to name your time-telling dog?"
    set name to input
    make #xxxx named name
  end


*** SUPER_CHEESE =) (parent: generic thing) ****


******** TOTAL: 63 scripts on 93 objects. ********
```

Angela

Age:	9 to 10
Gender:	Female
Participating from:	In school
Joined in:	October 1996
Total commands typed:	308

Angela participates in MOOSE Crossing from school. Her class is scheduled to all log on together for an hour and a half once per week. Many of her classmates chose to log on during recess and other free periods as well. On a visit to Angela's class, I noted that she seemed less interested in MOOSE Crossing than her classmates. Her teacher commented that Angela often seems uninterested in school activities.

```
*** Angela (parent: MOOSE player class) ****
I am about 5 feet tall and I have brown eyes.I have light brown hair.


*** Angela's Room (parent: Generic MOOSE Room) ****
You see a room with a toy box that has my name on it. Next to the box
   is a red throne with a dog named Faith sitting on it. On one side
   of the room is my bed. Next to my bed is my dresser. My dresser
   has school supplies on it.  Next to the dresser is a blue
   handball.
```

```
*** Angela (parent: generic exit) ****
From: Paradise Island
To: Angela's Room


*** out (parent: generic exit) ****
From: Angela's Room
To: Paradise Island


*** Tiffany (parent: Generic Dog) ****
Tiffany is a grey dog that is about 12 inches tall.She has brown
   eyes.She is very nice.She likes to play fetch.


*** toy box (parent: generic thing) ****


*** toy box (parent: generic thing) ****


*** Angela's Shop (parent: Generic MOOSE Room) ****
You enter Angela's pet shop.In the middle of the shop is the bird
   cage.Look to the right of the bird cage and you see the big
   dogs.Next to that are the bunnies and rabbits.On the left side of
   the bird cage are the puppies.Next to them are the hampsters and
   small pets.To the north side of the bird cage is the counter.


*** Angela (parent: generic exit) ****
From: Crossroads
To: Angela's Shop


*** out (parent: generic exit) ****
From: Angela's Shop
To: Crossroads


******** TOTAL: 0 scripts on 10 objects. ********
```

Werdna

Age:	9 to 10
Gender:	Male
Participating from:	Home (home schooled)
Joined in:	May 1996
Total commands typed:	9880

Werdna is particularly fond of dice games, and has spent a significant portion of his online time teaching other children how to make dice so that they can play dice together.

```
*** Werdna (parent: Generic_Nest_Player by Rachael) ****
a short male elvin wolfrider beside him stands his wolf (nightrunner)
   he is very loyal and will not hurt you

1 script on Werdna:



*** Werdna's room (parent: Generic Atmospheric Room) ****
one door with a lock on it to the north it looks as if it is locked
   and can only be opened from this side so you will have to teleport
   out. blue carpet. its a castle like room with non painted brick
   walls"


*** Werdna (parent: generic exit) ****
From: North Main Street
To: Werdna's room


*** out (parent: generic exit) ****
From: Werdna's room
To: North Main Street


*** Bobo (parent: Generic Dog) ****
You see a large Golden Retriever.

3 scripts on Bobo:

  on tickle Bobo
    say ha ha ha that tickles stop that
    emote rolls on his belly
  end

  on pet
    emote wags tail
  end


*** Werdna's room (parent: Generic MOOSE Room) ****
Green cloud white walls with a roof window to the right one window on
   each wall and a door to the north that has a sign that says
   gambling room for dice games


*** Werdna (parent: generic exit) ****
From: Home in the Clouds
To: Werdna's room


*** out (parent: generic exit) ****
From: Werdna's room
To: Home in the Clouds


*** luckey die (parent: Generic Die) ****
                            |----|
```

```
1 script on luckey die:

  on roll die
    (random 5) + 1
    announce my name + " rolls " + it
  end


*** Wackey Toaster (parent: generic thing) ****
A little toaster-person with white hands coming out of the sides of
   its toaster body. its two big eyes and its wide, happy smile make
   you feel like you'd really like some toast.
```

[Note: Werdna's toaster is the result of him following the system's toaster tutorial.]

```
2 scripts on Wackey Toaster:

  on turn knob to string
    set my knob_setting to string
    tell context "You turn the knob on " + my name + " turns the knob
   on "
    + my name + " to " + string + "."
  end

  on make toast
    tell context my name + " gets all excited and puts on a bis simle
   when it realizes that you would like some toast."
     tell context "First, " + my name + " shoves a piece of fresh
   bread in the slot in its belly."
     tell context "Then, " + my name + " takes a deep breath and
   clenches his fists, working hard to make your toast."
    tell context "CLICK!"
    tell context my name + " pops your piece of " + my knob_setting +
   " toast high into the air. it lands straight into your hands."
     announce_all_but context my name + " makes a piece of " + my
   knob_setting + " toast for " + context's name + "."
  end


*** Werdna's castle (parent: Generic MOOSE Room) ****
a huge room with one door to the south


*** castle (parent: generic exit) ****
From: Werdna's room
To: Werdna's castle


*** great hallway (parent: Generic MOOSE Room) ****


*** south (parent: generic exit) ****
From: Werdna's castle
To: great hallway


*** back (parent: generic exit) ****
```

```
From: great hallway
To: Werdna's castle


*** Werdna's gambling room (parent: Generic MOOSE Room) ****
"a big room with tables all over the place. a counter sticking out of
   the wall to the south Werdna's clerk is behind it he says 'wecome
   do you want to play dice. ask somebody to play with you. want some
   beer Ha Ha Ha NOT your to young and i don't have any because this
   is a kids bar or gambling room Ha Ha Ha you kid Ha Ha Ha'


*** gambling (parent: generic exit) ****
From: Werdna's room
To: Werdna's gambling room


*** back (parent: generic exit) ****
From: Werdna's gambling room
To: Werdna's room


*** Werdna's passage (parent: generic exit) ****
From: Werdna's room
To: Werdna's room


*** Werdna's passage (parent: generic exit) ****
From: Werdna's room
To: Werdna's room


*** The arcade (parent: Generic MOOSE Room) ****
"you see many coin games here. (sorry but right know we don't have
   any games programed but when we do we will take this part away.)


*** leave (parent: generic exit) ****
From: The Mall
To: The arcade


*** the mall (parent: generic exit) ****
From: The arcade
To: The Mall


*** ford f - 150 (parent: Generic Vehicle) ****


*** hawk (parent: Generic_Assistant by Rachael) ****
You see a elf as short as Werdna he loves the stars has silver hair
   and blue pants.


*** Werdna's nest (parent: Generic MOOSE Room) ****
```

```
a very nice nest (and pretty big) there are no details but a picture
   to your right the picture is Werdna the elvin wolfrider and his
   wolf (Nightrunner)


*** Werdna (parent: generic exit) ****
From: Nest Gather Grounds
To: Werdna's nest


*** down (parent: generic exit) ****
From: Werdna's nest
To: Nest Gather Grounds


*** fuzzy (parent: Generic Joke-Telling Object) ****
a fuzzy dog like creature but this guy can tell jokes


*** leather shirt and pants (parent: Brown Cloak by Rachael) ****
You see a simple pair of leather pants and a leather shirt which can
   be pulled over ones head. (Quite a feat if I may say so myself.)


*** Werdna's armor and accessories (parent: Generic MOOSE Room) ****
A room full of leather and metal armor he also has wallets and weapon
   holders he will get other things soon.


*** Werdna (parent: generic exit) ****
From: Crossroads
To: Werdna's armor and accessories


*** out (parent: generic exit) ****
From: Werdna's armor and accessories
To: Crossroads


*** if i'm not here read this (parent: generic note) ****
if you want some armor or accessories page me if i'm not connected
   mail me tell me what you want and what you want it made out of and
   any special things you want


*** metal armor (parent: generic thing) ****
bright metal armor that covers the entire body it makes byron look
   very strong and brave and its true he is.

1 script on metal armor:

  on wear this
    this:moveto player
       set players description to add my worn_msg to player's
   description
    announce_all_but player player's bame + " " + my oputon_msg
    tell player my pton_msg
  end
```

```
*** golden gold halberd (parent: generic_weapon by Byron) ****


*** fireplace (parent: fireplace by Jack) ****


*** dagger sheath (parent: generic container) ****
a lovely dagger sheath with the name of the person who made it in the
   bottom right hand corner it says Werdna! it is very nice and must
   hold a lovely dagger it is owned by hera she welds it greatly


*** comfy chair (parent: Generic Chair by Austina) ****


*** chainmail (parent: generic thing) ****

2 scripts on chainmail:

  on wear this
    this:moveto player
       set  players  description  to  add  my  worn_msg  to  player's
   description
    announce_all_but player player's name + " " + my oputon_msg
    tell player my puton_msg
  end

  on wear this
    this:moveto player
       set  players  description  to  add  my  worn_msg  to  player's
   description
    announce_all_but player player's name + " " + my oputon_msg
    tell player my puton_msg
  end


*** figaro (parent: Generic Dog) ****
A big male black cat not fat but big with a black and pink nose white
   tummy and white paws

2 scripts on figaro:

  on pet Figaro
    announce_all_but context context's name pets Figaro
    set answer to pick {"purrs and lies down", "runs away from you",
   "walks away from you" }
    tell context my name + " " + answer
  end

  on pick up figaro
    announce_all_but context context's name + " picks up Figaro"
     set answer to pick {"meeows and scratchs + " context's name", "
   jumps out of + " context's names arms", "purrs and rubs up against
   + " context's name" }
    emote answer
  end
```

```
*** anna (parent: Generic Dog) ****
a white and grey female cat pretty small for a grown up cat with a
   white tummy and a white and pink nose with white paws

1 script on anna:

  on pet Anna
    announce_all_but context context's name + " pets anna
    set answer to pick {"purrs and lies down", "runs away from you",
   "walks away from you" }
    emote answer
  end


*** fireball (parent: generic spell_book by Gandalf) ****


*** corgan (parent: generic magic_staff by Gandalf) ****


*** time spender (parent: generic_conversation by Miranda) ****


*** "the mall to the room (parent: Generic MOOSE Room) ****


*** The mall (parent: generic exit) ****
From: The Mall
To: The arcade


******** TOTAL: 13 scripts on 47 objects. ********
```

Rowena

Age:	13
Gender:	Female
Participating from:	Home (heard about over the net)
Joined in:	May 1996
Total commands typed:	11657

Rowena enjoys role playing, and has been a key participant in the medieval role-playing subcommunity started by Rachael.

```
*** Rowena (parent: generic_answering_machine by Miranda) ****
Rowena is a girl with short dark hair.
She is wearing a light forest green dress. It is lightweight and
   seems to 'breathe' in air, making it look cool as a cucumber. It
   looks cheerful and relaxing. Her collar has a white border with
   yellow violets on it. The dress comes down to just below her
   knees, and hangs there. When she walks, it flows around
   majesticly.
```

She is wearing a light forest green dress. It is lightweight and seems to 'breathe' in air, making it look cool as a cucumber. It looks cheerful and relaxing. Her collar has a white border with yellow violets on it. The dress comes down to her ankles, and hangs there. When she walks, it flows around majesticly.

2 scripts on Rowena:

```
  if (hug Rowena)
    disp "Rowena smiles and hugs you back!"

  on 'hi Splat
    emote splats Splat on the head.
  end
```

*** Wheel of Time (parent: generic_book by Rachael) ****
"You see a very old brown leather-bound book. The spine looks as if it has been opened and closed so many times that the cover is ready to fall off. On the cover the title " The Wheel of Time" is written in flowing gold script. The pages look yellow with age."

*** storeroom (parent: Generic Viewable Room by Churchill) ****
You are in a dark room lit only by a single candle. The walls are of stone. Along one wall you see a ladder leading up. This is a viewable room. type 'view <object>' to see something in more detail.

2 scripts on storeroom:

```
  on grab stone
    if my stone_out is 0
      tell context "You pull the stone out of the wall."
      announce_all_but context context's name + " pulls a loose stone
   out of the wall."
      set my stone_out to 1
      set #xxxx's locked to 0
    else
      tell context "The stone is already out of the wall."
    endif
  end

  on replace stone
    if my stone_out is 1
      tell context "You put the stone back into the hole."
       announce_all_but context context's name + " puts a stone into
   the hole in the wall."
      set my stone_out to 0
      set #xxxx's locked to 1
    else
      tell context "The stone is already in the hole."
    endif
  end
```

Views on storeroom:

up: Above you you see a square of faint light. If you climb up to ladder you cluld see it better.

candle: You see a yellowish wax candle. It appears to be melting quickly. The flame dances, throwing strenge shaddows on the wall.

ladder: You see an old-looking wooden ladder stretching up the wall to a square of light in the celing. The rungs appear to be simply lashed to the sides, making it look quite unsteady, but hey, you climbed down it to get here.

shadows: You see strange shadows fliting across the wall. The look almost as if they are cast by strange beings, not just the candle's dancing flame.

wall: You see a stone wall with moss growing all over it. ne of the stones looks loose.

stone: You see a loose stone. If you grabed it just right it looks like you could get it out...

*** Mystic (parent: generic thing) ****

2 scripts on Mystic:

```
  on bless object
    announce_all player's name + " chants in Latin."
    emote glows yellow.
     announce_all player's name + " seems to glow white as she lays
   her hands on either side of " + object's name + "'s head."
    announce_all object's name + " is blessed."
  end

  on zap object
    announce_all player's name + " chants in Latin."
    announce_all "A bar of white light shoots out of " + my name + ".
   "
      announce_all "You hear a small rip and " + object's name + "
   suddenly disapears."
    move object to object's home
  end
```

*** Mat (parent: Generic_badger by Zoro) ****
You see a large bager with a beautiful white stripe down his back. He looks like quite a trickster.

*** a hole in the wall (parent: Generic MOOSE Room) ****
The walls are entirely lined with wooden shelves and cabinets. The shelves have lots of jars and bottles on them as well as some fresh potted herbs and the cabinets are filled with dried herbs. Sitting against the wall there is a large wooden chest.

```
*** hole (parent: generic exit) ****
From: storeroom
To: a hole in the wall

1 script on hole:



*** back (parent: generic exit) ****
From: a hole in the wall
To: storeroom


*** mrMemo (parent: generic_memopad by Miranda) ****


*** Generic Musical Instrument (parent: generic thing) ****
You see a beautiful silver lap harp.  The REAL silver leaf covering
   the harp looks shiny enough to see yourself in, exept for around
   the intricate scroll-work which looks slightly tarnished.

2 scripts on Generic Musical Instrument:

  on sing string
    set my song to string
    tell context my name + " will now sing " + my song + "."
  end

  on play this
    announce_all_but context context's name + " plays " + my song + "
   on " + my name + "."
    tell context "You play " + my song + " on " + my name + "."
    emote rings out with the melody.
  end


*** Bowl of the Winds (parent: generic_Bowl by Mouse) ****
you see a huge bowl. It looks very old. The bottom of the bowl is
   decorated with clouds. When you glance back at the bowl the clouds
   appear to be in a different position.


*** chest (parent: generic container) ****
You see a large wooden chest. It looks very sturdy, though quite old.
   On the front it has a large brass lock.


*** Elcoiwen (parent: generic exit) ****
From: Tech City
To: storeroom


*** up (parent: generic exit) ****
From: storeroom
To: Tech City


*** Flying Toaster (parent: generic thing) ****
```

```
You see one of those silver toasters that's almost round. It has
   wings sticking out of its sides and a flock of toast hovering
   around it.
```

[Note: Rowena's toaster is the result of her following the system's toaster tutorial.]

```
2 scripts on Flying Toaster:

  on turn knob to string
    set my knob_setting to string
    tell context "You turn the knob on " + my name + " to " + string
   + "."
    announce_all_but context context's name + " turns the knob on " +
   my name + " to " + string + "."
  end

  on make toast
    tell context "You push down on the little lever on " + my name +
   " and in a minute your " + my knob_setting + " toast pops up."
    announce_all_but context context's name + " pushes down on the
   little lever on " + my name + " and in a minute " + context's pp +
   " " + my knob_setting + " toast pops up."
  end


******** TOTAL: 11 scripts on 15 objects. ********
```

Bibliography

Appadurai, Arjun (1986). *The Social Life of Things : Commodities in Cultural Perspective*. New York, Cambridge University Press.

Arnold, Michael (1995). "The Semiotics of Logo." *Educational Computing Research* **12**(3): 205-219.

Aspnes, James (1992). Personal communication.

Baker, Charles L. (1981). "Johnniac Open-Shop System." History *of Programming Languages* Ed. Richard Wexelblat. New York, Academic Press.

Bartle, Richard (1990). "Interactive Multi-User Computer Games." MUSE Ltd. *ftp://ftp.lambda.moo.mud.org/pub/MOO/papers/mudreport.txt*

Batson, Trent (1993). "The origins of ENFI." *Network-Based Classrooms* Eds. Bertram Bruce, Joy Peyton and Trent Batson. New York, Cambridge University Press.

Benedikt, Michael, ed. (1991). *Cyberspace, First Steps*. Cambridge, MA: MIT Press.

Bray, Hiawatha (1997). "Survey: 'Net usage doubled since late '95." The Boston Globe. Boston, MA, D17.

Brown, Carl (1992). "MicroMUSE History." *ftp://ftp.musenet.org/micromuse/Muse.History*

Bruce, Bertram, Joy Kreeft Peyton, et al., Eds. (1993). *Network-Based Classrooms*. New York, Cambridge University Press.

Bruckman, Amy (1992). "Identity Workshop: Social and Psychological Phenomena in Text-Based Virtual Reality." MIT. *ftp://ftp.media.mit.edu/pub/asb/papers/identity-workshop.{ps.Z,rtf.Z}*

Bruckman, Amy (1994). "Programming for Fun: MUDs as a Context for Collaborative Learning." National Educational Computing Conference, Boston, MA. *ftp://ftp.media.mit.edu/pub/asb/papers/necc94.{ps.Z,rtf.Z,txt}*

Bruckman, Amy (1995). "Cyberspace is Not Disneyland: The Role of the Artist in a Networked World." Commissioned by the Getty Art History Information Program. *http://www.ahip.getty.edu/cyberpub/bruckman.html*

Bruckman, Amy (1996). "Finding One's Own Space in Cyberspace." *Technology Review* **99**(1): 48-54.

http://web.mit.edu/afs/athena/org/t/techreview/www/articles/jan96/Bruckman.html

Bruckman, Amy and Mitchel Resnick (1995). "The MediaMOO Project: Constructionism and Professional Community." *Convergence* **1**(1). *http://www.gold.ac.uk/difference/bruckman.html*

Cherny, Lynn (1995). "The MUD Register: Conversational Modes of Action in a Text-Based Virtual Reality." PhD dissertation, Stanford University.

Crowther, Will (1992). Personal communication.

Curtis, Pavel (1993). "LambdaMOO Programmer's Manual." *ftp://ftp.lambda.moo.mud.org/pub/MOO/ProgrammersManual.{ps,dvi,txt}*

Curtis, Pavel (1996). Personal communication.

Dewey, John (1938). *Experience and Education*. New York, Macmillan Publishing Company.

diSessa, Andrea A. and Harold Abelson (1986). "Boxer: A Reconstructible Computational Medium." *Communications of the ACM* **29**(9): 859-868.

Eisenberg, Michael (1995). "Programmable Applications: Interpreter Meets Interface." *SIGCHI Bulletin* **27**(2): 68-83.

Evard, Remy (1993). "Collaborative Networked Communication: MUDs as Systems Tools." Seventh Systems Administration Conference (LISA VII), Monterey, CA, USENIX Association. *http://www.mcs.anl.gov/people/evard/papers/cncmast.html*

Falbel, Aaron (1989). "Friskolen 70: An Ethnographically Informed Inquiry Into the Social Context of Learning." PhD dissertation, Massachusetts Institute of Technology.

Fanderclai, Tari (1996). "Like magic, only real." *Wired Women: Gender and New Realities in Cyberspace* Eds. Lynn Cherny and Elizabeth Weise. Seattle, WA, Seal Press.

Feurzeig, Wally (1984). "The Logo Lineage" *Digital Deli*. Ed. Steve Ditlea. New York, NY, Workman Publishing Company.

Feurzeig, Wally (1996). Personal communication.

Frazier, Frank (1967). "The Logo System: Preliminary Manual." Cambridge, MA, Bolt Beranek and Newman.

Geertz, Clifford (1973). *The Interpretation of Cultures*. New York, Basic Books.

Glusman, Gustavo, E. Mercer, et al. (1996). "Real-time Collaboration On the Internet: BioMOO, the Biologists' Virtual Meeting Place." *Internet for the Molecular Biologist.* Eds. S.R. Swindell, R.R. Miller and G.S.A. Myers. Norfolk, UK, Horizon Scientific Press.

Goffman, Erving (1959). *The Presentation of Self in Everyday Life*. New York, Doubleday.

Goodman, Danny (1988). *The Complete HyperCard Handbook*. New York, Bantam Books.

Guzdial, Mark (1994). "Software-Realized Scaffolding to Facilitate Programming for Science Learning." *Interactive Learning Environments* **4**(1): 1-44.

Harel, Idit (1991). *Children Designers*. Norwood, NJ, Ablex Publishing.

Holdaway, Don (1979). *The Foundations of Literacy*. New York: Ashton Scholastic.

Honey, Margaret, Babette Moeller, Cornelia Brunner, Dorothy Bennett, Peggy Clements, and Jan Hawkins (1991). "Girls and Design: Exploring the Question of the Technological Imagination." Technical Report No. 17. New York: Bank Street College of Education.

Hooper, Paula (1997a). Personal communication.

Hooper, Paula (1997b). "Their Own Thoughts." MIT.

Hughes, Billie (1996). Personal communication.

Hughes, Billie and Jim Walters (1995). "Children, MUDs, and Learning." AERA, San Francisco, CA.
http://pcacad.pc.maricopa.edu/Pueblo/writings/bib/AERA-paper-1995.html

Hughes, Billie and Jim Walters (1997). Personal communication.

Jenkins, Henry (1992). *Textual Poachers, Television Fans and Participatory Culture*. New York, Routledge.

Kaehler, Ted (1996). Personal communication.

Kay, Alan (1996). “The Early History of Smalltalk.” *History of Programming Languages-II* . New York, ACM Press.

Keller, Evelyn Fox (1985). *Gender and Science*. New Haven: Yale University Press.

Kleinschmidt, Klaus (1996). “The Internet is a waste of time for schools.” The Boston Globe. Boston, 22.

Klietz, Alan (1992). Personal communication.

Kort, Barry (1997). Personal communication.

Kurtz, Thomas (1981). “BASIC.” *History of Programming Languages* Ed. Richard Wexelblat. New York, Academic Press.

Latour, Bruno and Steve Woolgar (1986). *Laboratory Life: The Social Construction of Scientific Facts*. Princeton, NJ, Princeton University Press.

Laurel, Brenda, Ed. (1990). *The Art of Human-Computer Interface Design*. Reading, MA, Addison-Wesley.

Laurel, Brenda (1991). *Computers as Theatre*. Reading, MA, Addison-Wesley.

Lave, Jean and Etienne Wegner (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge, UK, Cambridge University Press.

Leron, Uri (1985). “Logo Today: Vision and Reality.” *The Computing Teacher*.

Levin, James A., Al Rogers, et al. (1989). “Observations on educational electronic networks: The Importance of appropriate activities for learning.” *The Computing Teacher* **16**:

Morningstar, Chip and F. Randall Farmer (1991). “The Lessons of Lucasfilm’s Habitat.” *Cyberspace, First Steps*. Michael Benedikt, editor. Cambridge, MA, MIT Press.

Newman, Denis, Peg Griffin, et al. (1989). *The Construction Zone: Working for Cognitive Change in School*. Cambridge, England, Cambridge University Press.

O’Day, Vicki (1997). Personal communication.

O'Day, Vicki, Daniel Bobrow, et al. (1996). "The Social-Technical Design Circle." CSCW 96, Cambridge, MA, ACM Press.

Oldenburg, Ray (1989). *The Great Good Place*. New York: Paragon House.

Papert, Seymour (1980). *Mindstorms: Children, Computers, and Powerful Ideas*. New York, Basic Books.

Papert, Seymour (1991). "Situating Constructionism." *Constructionism* Eds. Idit Harel and Seymour Papert. Norwood, NJ, Ablex Publishing. 518.

Pea, Roy (1993). "Practices of Distributed Intelligence and Designs for Education." *Distributed Cognitions: Psychological and Educational Considerations* Ed. Gavriel Salomon. Cambridge, England, Cambridge University Press.

Postman, Neil (1985). *Amusing Ourselves to Death, Public Discourse in the Age of Show Business*. New York, Viking.

Putnam, Robert (1995). "Bowling Alone: America's Declining Social Capital." *Journal of Democracy* **6**(1).

Radway, Janice (1984). *Reading the Romance: Women, Patriarchy, and Popular Literature*. Chapel Hill, University of North Carolina Press.

Raymond, Eric (1991). *The New Hackers Dictionary*. Cambridge, MA: MIT Press.

Reid, Elizabeth (1991). "Electropolis: Communication and Community on Internet Relay Chat." Bachelors thesis, University of Melbourne. *ftp://ftp.lambda.moo.mud.org/pub/MOO/papers/electropolis.{ps,txt}*

Resnick, Mitchel (1993). Personal communication.

Resnick, Mitchel (1994). *Turtles, Termites, and Traffic Jams: Explorations in Massively Parallel Microworlds*. Cambridge, MA, MIT Press.

Resnick, Mitchel, Amy Bruckman, and Fred Martin. "Pianos, Not Stereos: Creating Computational Construction Kits." *Interactions* September/October 1996, 40-50.

Resnick, Mitchel (1997). "StarLogo Reference Manual." *http://www.media.mit.edu/~starlogo/documentation/refman.html*

Resnick, Mitchel, Robert Berg, et al. (1997). "Beyond Black Boxes: Brining Transparency and Aesthetics Back to Scientific Instruments."

Resnick, Mitchel and Natalie Rusk (1996). "The Computer Clubhouse: Preparing for Life in a Digital World." *IBM Systems Journal* **35**(3-4): 431-440. *http://el.www.media.mit.edu/groups/el/Papers/mres/Comp_club/Clubhouse.html*

Resnick, Paul and James Miller (1996). "PICS: Internet Access Controls Without Censorship." *Communications of the ACM* Forthcoming. *http://www.w3.org/pub/WWW/PICS/iacwcv2.htm*

Rheingold, Howard (1993). *The Virtual Community: Homesteading on the Electronic Frontier*. Reading, MA, Addison-Wesley Publishing Company.

Rogoff, Barbara (1994). "Developing Understanding of the Idea of Communities of Learners." *Mind, Culture, and Activity* **1**(4): 209-229.

Rubin, Andee and Brad Goodman (1991). "TapeMeasure: Video as Data for Statistical Investigations." Proceedings of American Educational Research Association, Chicago.

Sammet, Jean (1981). "The Early History of COBOL." *History of Programming Languages* Ed. Richard Wexelblat. New York, Academic Press.

San Jose Mercury News (1996). "Clinton Makes Cyberspace Connection." San Jose Mercury News. San Jose, CA, 18A.

Scardamalia, Marlene and Carl Bereiter (1994). "Computer Support for Knowledge-Building Communities." *The Journal of the Learning Sciences* **3**(3): 265-283.

Schlager, Mark and Patricia Schank (1996a). "A Networked Environment for Teacher Professional Development." SRI. *http://tappedin.sri.com/info/concept.html*

Schlager, Mark and Patricia Schank (1996b). "TAPPED IN: A Multi-User Virtual Environment for Teacher Professional Development and Education Reform." The Virtual Classroom, Berkeley, CA, *http://www.soe.berkeley.edu/~schank/TappedIn.html*

Schon, Donald A. (1987). *Educating the Reflective Practitioner*. San Francisco, Jossey-Bass.

Shaffer, David Williamson (1996). "Escher's World: Learning Mathematics through Design in a Digital Studio." MIT.

Shaw, Alan (1994). “Social Constructionism and the Inner City: Designing Environments for Social Development and Urban Renewal.” PhD dissertation, Massachusetts Institute of Technology.

Skinner, B. F. (1968). *The Technology of Teaching*. New York, Appleton-Century-Crofts.

Songer, Nancy (1996). “Exploring Learning Opportunities in Coordinated Network-Enhanced Classrooms: A case of kids as global scientists.” *The Journal of the Learning Sciences* **5**(4): 297-327.

Stone, Allucquere Rosanne (1991). “Will the Real Body Please Stand Up?: Boundary Stories about Virtual Cultures.” *Cyberspace, First Steps*. Michael Benedikt, editor. Cambridge, MA, MIT Press.

Strohecker, Carol (1991). “Why Knot?” PhD dissertation, Massachusetts Institute of Technology.

Turkle, Sherry (1984). *The Second Self: Computers and the Human Spirit*. New York, Simon and Schuster.

Turkle, Sherry (1986). “Computational Reticence: Why Women Fear the Intimate Machine.” *Technology and Women’s Voices* Ed. Cheris Kramerae. New York, Pergamon Press.

Turkle, Sherry and Seymour Papert (1992). "Epistemological Pluralism and the Revaluation of the Concrete." *Journal of Mathematical Behavior* 11:3-33.

Turkle, Sherry (1995). *Life on the Screen: Identity in the Age of the Internet*. New York, Simon & Schuster.

Van Buren, David, Pavel Curtis, et al. (1994). “The AstroVR Collaboratory.” *Astronomical Data Analysis Software and Systems IV* Eds. R. Hanish and H. Payne. San Francisco, Astronomical Society of the Pacific.

Vygotsky, Lev (1978). *Mind in Society*. Cambridge, MA, Harvard University Press.

Wall, Larry (1996). “Wherefore Art, Thou?” *The Perl Journal* **1**(1): 5 - 7.

Walters, Jim and Billie Hughes (1994). “Camp MariMUSE: Linking Elementary and College Students in Virtual Space.” National Educational Computing Conference, Boston, MA, Weir, Sylvia (1992). "Electronic Communities of Learners: Fact or Fiction." Cambridge, MA: TERC Communications.

Winner, Langdon (1986). *The Whale and the Reactor*. Chicago: University of Chicago Press.

Winograd, Terry and Fernando Flores (1987). *Understanding Computers and Cognition*. Reading, MA, Addison-Wesley.