Learners, Computers & the Storytelling Habit
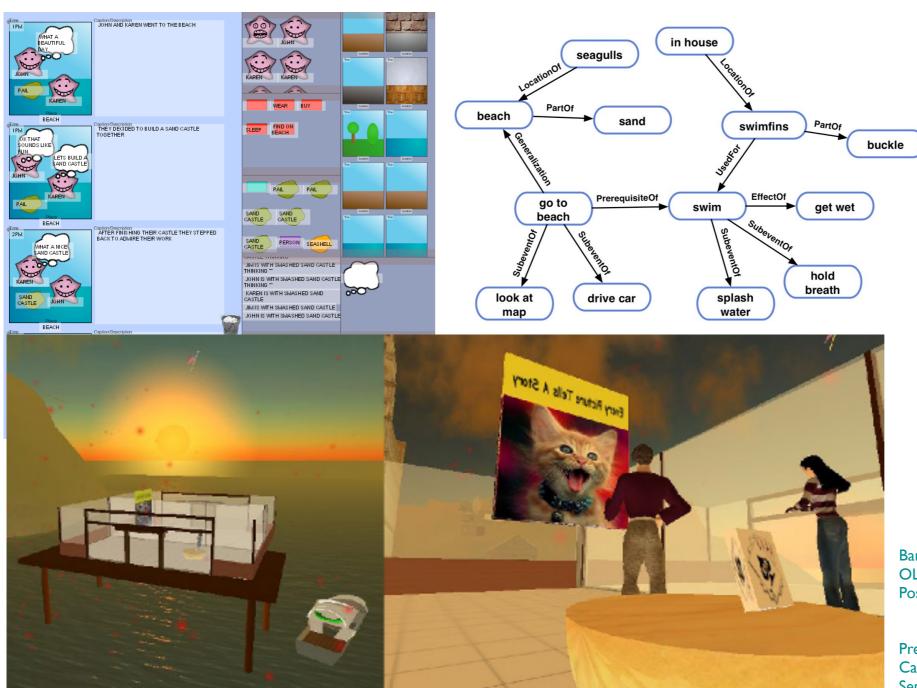
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What is a Story: Many definitions and everyone person in the world is an expert!

Beginnings + Middles + Ends
(Aristotle, 'Poetics')

Fabula & Sujet
(Vladimir Propp, 'Morphology of the Folktale')

Creating a coherent life narrative
(Kearney, 'On Stories')

Cognitive tool kits and Objects of social power
(Marie Laurie Ryan, 'On Narrative')

Humans and computers as predictive and reflective storytellers
(Story Generation with Computers; Davenport, Minsky)

Storytelling: Why Computation Matters

"A child is given a collection of beads of different colors, say green, red, blue, and black, and is asked to construct all the possible pairs of colors: green-blue, red-green, green-black, and then the triplets and so on. Just as children do not acquire conservation until the seventh year, children around the world are unable to carry out combinatorial tasks before their eleventh year or twelfth year. Indeed, many adults who are "intelligent' enough to live normal lives never acquire this ability.

From a computational point of view, the most salient ingredients of the combinatorial task are related the idea of procedure - systematicity and debugging. A successful solution consists of the following some such procedure:

1. Separate the beads into colors
2. Choose a color A as color 1.
3. Form all the pairs that can be formed with color 1.
4. Choose color 2
5. Form all the pairs that can be formed with color 2.
6. Go back and remove the duplicates

From Mindstorms by Papert (p. 175-176).

Combinatorics and Story....from beads to phrases

How stories work : patterns and recombining elements

Story elements as chaining together elements with dependencies!

Event + Event + Event + Event
I saw a bird + I went to school + I ate a cookie + I tied my shoe
(text, audio, or video)

Motivation + Event + Explanation + Event + Emotion
I wanted to see a bird + I chased the bird + because I wanted to catch it + I caught the bird + I was happy (i get it!)

Event + Event + Explanation + Motivation + Emotion
ORDER Dependance Matters!
I caught the bird + I chased the bird + because I wanted to catch it + I wanted to see a bird + I was happy (huh?)

Let's make a story and think about the patterns!

3 Storytelling Example Exercises on the XO

* Documenting Life
  - Interview starting with breakfast
  - Keep track of your free form questions

* Documenting Learning
  - Over the course of today document one learning moment (internal or external). Be sure to include the moment and the explanation!

* Stories One Degree from Reality
  - Creating a new story by identifying links between your interview story and a folklore or fiction story you find on the web

Finale :
Benefits of Cultivating the Storytelling Habit

1. Reflecting- Individual, Neighborhood, Global Community

2. Communicating - 1:1 , 1: many

3. Learning concepts and practices by simulation in stories

4. Acknowledging and developing creativity

5. *Building a strong personal toolkit for thinking, feeling, acting in the world!*

Storytelling Challenge for the XO / Scratch

Make an animated story in Scratch that shows:

- A character trying to do a task (e.g. inspired to try something new)
- The character encounters an obstacle
- The character gets help
- With the help the character accomplishes the task
- There is a surprise ending

Group work:
What is the theme or lesson in the story?
What are different kinds of character obstacles?
What is unique about this story?
How did the group collaborate to form the story?

Share:
Upload to Scratch site to share
Account : Learning Workshop Password: OLPClearn

Thank you!

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