



Interaction and Narrative

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IMPA

Definitions

Cambridge Dictionary

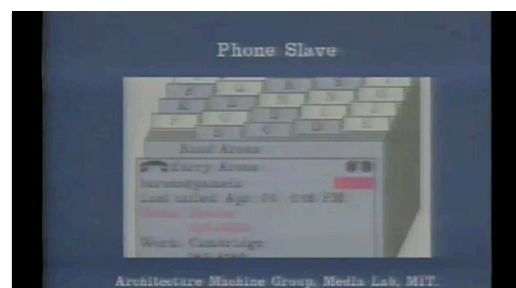
- Interaction
 - "when two or more people or things communicate with or react to each other"
- Narrative
 - "a particular way of explaining or understanding a series of events"

A Blast from the Past

Early 1980's — MIT Architecture Machine Group

- Phone Slave
 - Graphical Telecommunications Interface
- Put That There
 - Voice and Gesture at the Graphics Interface

Phone Slave



Put That There



Lessons Learned

- Play by the “Rules of the Game”
 - Follow the Protocol
 - Fulfill Expectations
- Know “Were You Are”
 - Understand the Surroundings
 - Manipulate Tangible Elements

A Glimpse into the Future

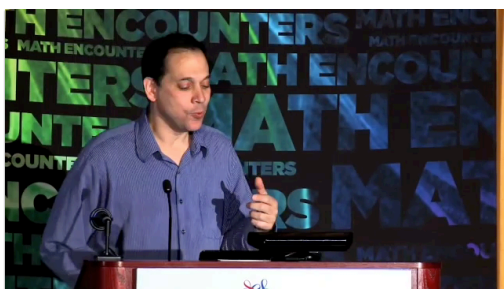
Recent Developments over the Last Few Years

- Sophia
 - Social Humanoid Robot
- Ken Perlin
 - Presentation and Communication Language

Social Robot



MoMath Talk



What is Coming Next?

- The Brain (*AI / Deep Learning*)
 - Scene Understanding: Visual / Speech
 - Reasoning and Learning: Unsupervised / Reinforcement
- The Senses (*XR / Expanded Reality*)
 - Full Immersion: Light/Sound-Field Devices
 - Self-Aware: Body Tracking / Sensing
 - Ubiquitous: Mobile / Networked
 - Situated: SLAM

Novel Interfaces

Change of Paradigm

- Integrated Platform
 - Intelligent Mediation
 - Tangible Environment
- Higher Level Interaction
 - Content-Based
 - Reactive / Adaptive

Some Concepts

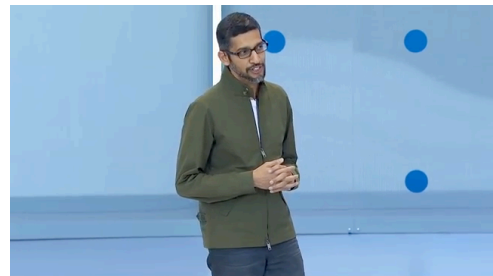
- Context
 - Spatial (Environment)
 - Logical (Protocol)
- Knowledge
 - What (Objects)
 - When (Actions)
- Mediation
 - Supervision (Computer)
 - Collaboration (Human)

It's Happening Now

New and Current Initiatives

- Google I/O
 - Making a Call
- Chalk Talk and AR
 - Teaching a Concept
- Garry The Gull
 - Interactive Character

Google I/O



Chalk Talk 2.0



Garry the Gull



Thank You!