Nothing Never Happens

Seeing the Cognitive Aspects of Patterns of Behavior Captured on Video

Tools for scientific seeing

- Microscope
- Telescope
- Still camera
- Motion picture camera
- Audio recording
- Video recording

- Microbes
- Planets, stars, galaxies
- A moment
- A linked sequence of moments
- Speech
- Activity

Cognitoscope

Cogniton

When a horse gallops does it ever have all four feet off the ground at once?

Eadweard Muybridge

The natural history of an interview

- Object of analysis: a film of a couple in a psychiatric interview
- Analyses: linguistic, non-verbal behavioral, cultural, psychiatric
- Attempts to find the patterns in each and in the relations among them
- Product: a 1500 page manuscript! It was never published.
- Is there ever a moment in interaction in which nothing is happening?
- “Nothing never happens.”
Malinowski recorded Trobriand Island Magic texts by writing them down in his notebooks. This is the only sort of language he could record word-for-word using that technology.

Philosopher Dorothy Lee studied those texts and concluded that Trobrianders do not understand the concept of causality.

My audio recordings and different inferences

- What words are actually uttered in natural discourse?
- Word order and logical relations (they do conceive of cause-effect relations and they can reason logically)
- Tempo and rhythm
- Stress contours
- Rhetorical devices:
  - Repetition,
  - alliteration, enumeration

Audio recording makes possible

- Phonology
- Pragmatics
- Discourse analysis
  - (openings, closings, adjacency pairs, conditional relevance, multi-speaker sentences…)
- Protocol Analysis
- Cultural Models analysis

Video recording makes possible

Audio recordings and discourse analysis

Some ways to do video transcription

- Hutchins and Palen, fuel leak
- Robert Williams, time telling instruction
- Charles Goodwin, interaction with an aphasic man
- Gillian Sebestyen-Forrester Gorilla motion
Robert Williams

More examples

- Marty on Machines that Shape surfboards
- Representations of situation awareness and the visual approach
- Collaborative construction of multimodal meaning
Marty on machines that shape surfboards

Flying a visual approach

The visual approach path

Human-Feline interaction

Recipient design in referential actions