

# **Digital Dust**

**On Data, Figures and Other  
Computational Particles**

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# Attempting the Impossible

- **Profiling Life Situations, Profiling People**
  - Navigational routes, patterns and associations, cause-effect relationships, action itineraries
  - Habits, life styles and attitudes
- **Knowledge, Data Availability, Data Permutations**
- **The New Everyday**
  - Computational Monitoring of Living
- **Reflections on Materiality**

# The Sensible and the Intelligible

- Perception
  - Human Sensorium and the Body
- Cognition
  - Beyond Ostensive Reference
  - Abstraction, Classification, Counting
- Perception versus Cognition
- Computation: Data-driven Pattern Recognition
  - The Holy Grail of Data Availability

# Example: Medical Knowledge

- **Computer Tomography and the Secret of Aging**
  - Understanding how our bones wear out from the inside
  - Digital Scans and Data Generation
  - Millions of Scans and a Dizzying Amount of Data
- **Churn through the data to identify patterns**
  - in how the trabeculae -the material inside the bone- changes in people who have diseases like osteoporosis and arthritis

# Beyond Perception

- **Perception and Data Availability**
  - Beyond Memory, Attention Span and the Register Capacity of Humans
- **Scans as Data of Bone Loss**
  - The Medical Functions of Scans
- **Computational Superiority**
  - Computations (Statistical Correlations) Performed upon Terabytes of Data

# Cognitive Shifts

- **Beyond Concepts?**
- **Algorithmic Agnosticism and Inductive Inference**
- **Neo-positivism**
  - **The End of Theory, The End of Science?**
- **“Reality is regained after a long analytic retreat out of the cognitive dust of computational particles”**

# Example: Mapping Global Food Supply

- Lanworth uses **satellite images, digital soil maps** and **weather forecasts** to project harvests at the **scale of individual fields**, it even looks at crop conditions and rotation patterns-combining all the numbers to determine future yields...
- The company sorts 100 gigs of intel everyday, adding to a **database of 50 terabytes**. It is also moving to world production prediction-wheat fields in Russia, Kazakshtan and Ukraine are already in the data set, as are corn and soy plots in Brazil and Argentina The firm expects to reach **petabyte scale** in five years...

# The New Everyday

- **Romanticism and the Colonization of Experience**
- **The Project of “Making Up People”**
  - Foucault and Hacking
  - Counting, Quantifying and Correlating
- **Professional Practice and Contextual Variation**
- **Monitoring the Trivia of Life**
  - Life Situations as Cognitive Problems of Computational and Navigational Status
  - IBM and Autonomic Computing

# On Materiality

- **Living in the Cloud: Data and Computations**
- **The Material Anchorage of Digital Dust**
  - Bodies, Machines, Cables, Factories, Social Relations, Rivers...
- **A New Relationship between the Sensible and the Intelligible**
  - The Computational Rendition of Reality
- **Dominance as Fragility**