

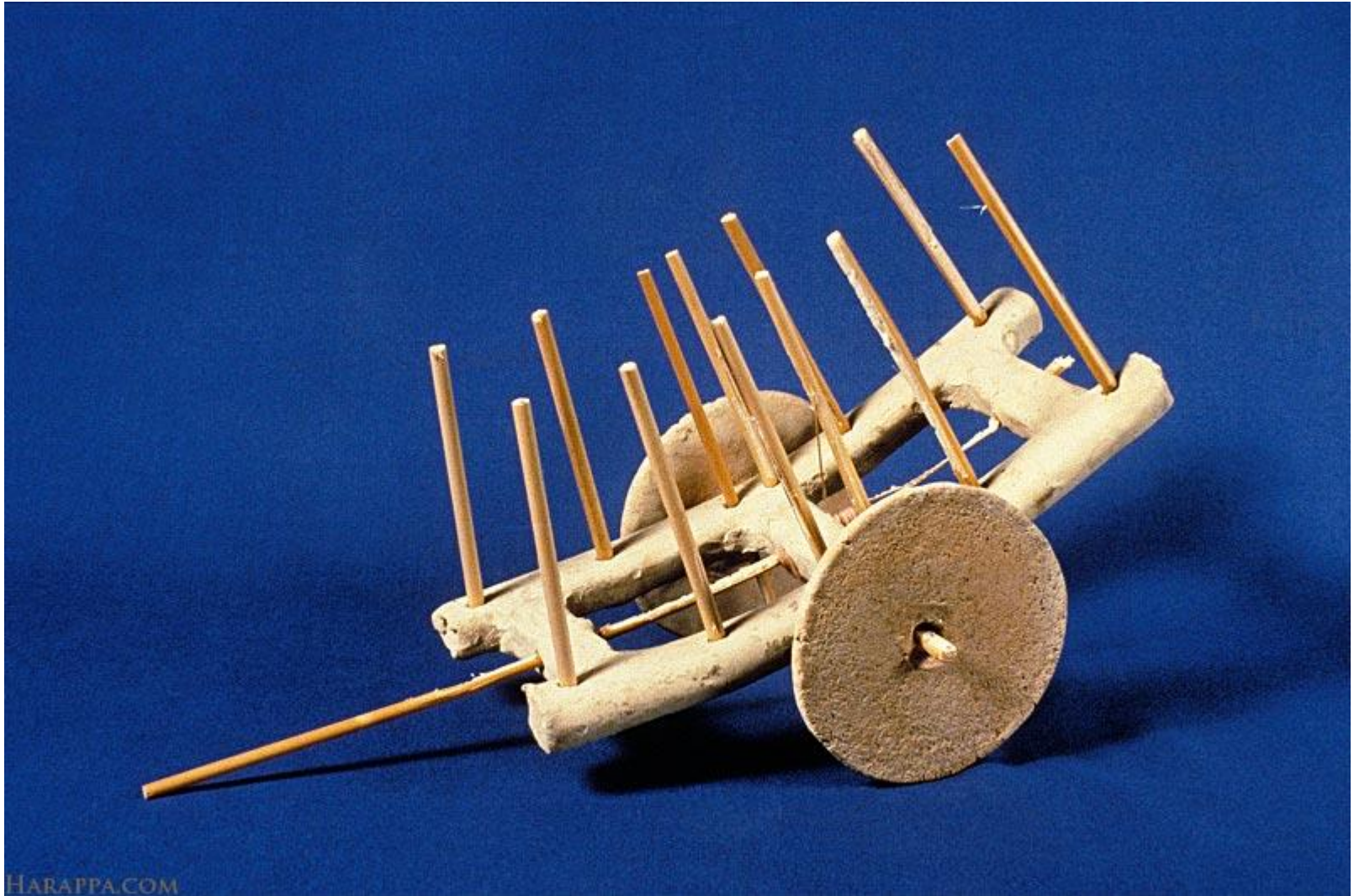
Human Centered Computing

Nisheeth

Office Hours (1500-1630 WTh)

KD 303

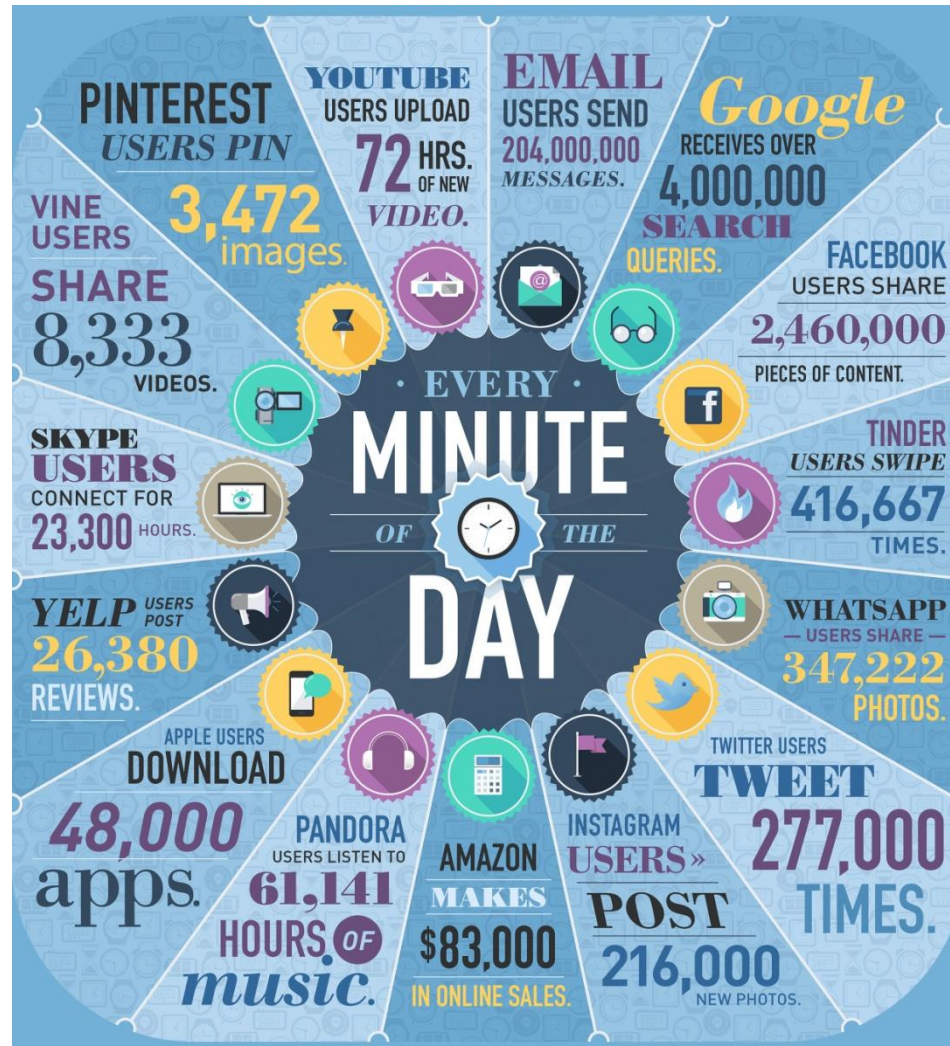
Anthropology exercise



Possible inferences

- They were bipedal
- They had division of labor, but were primarily agrarian
- They lived on flat terrain
- Typical travel distances shorter than 20 kms
- They had a civic governance system

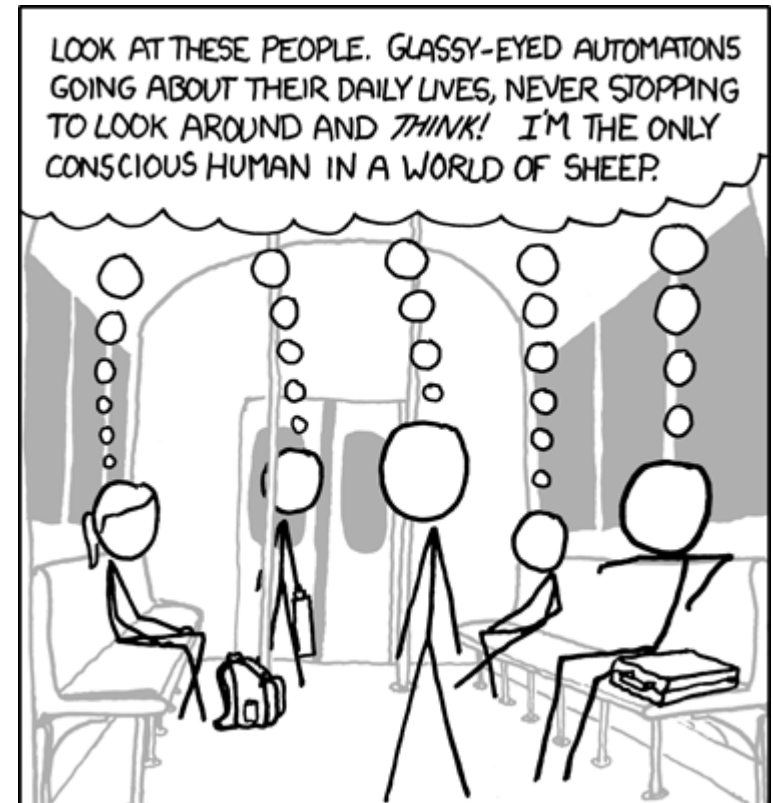
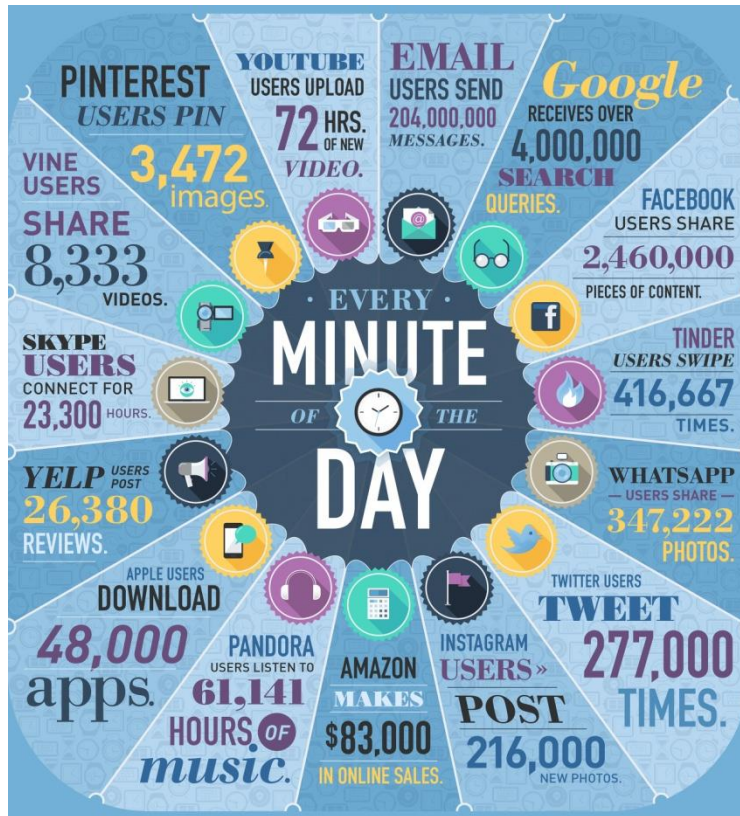
Anthropology exercise



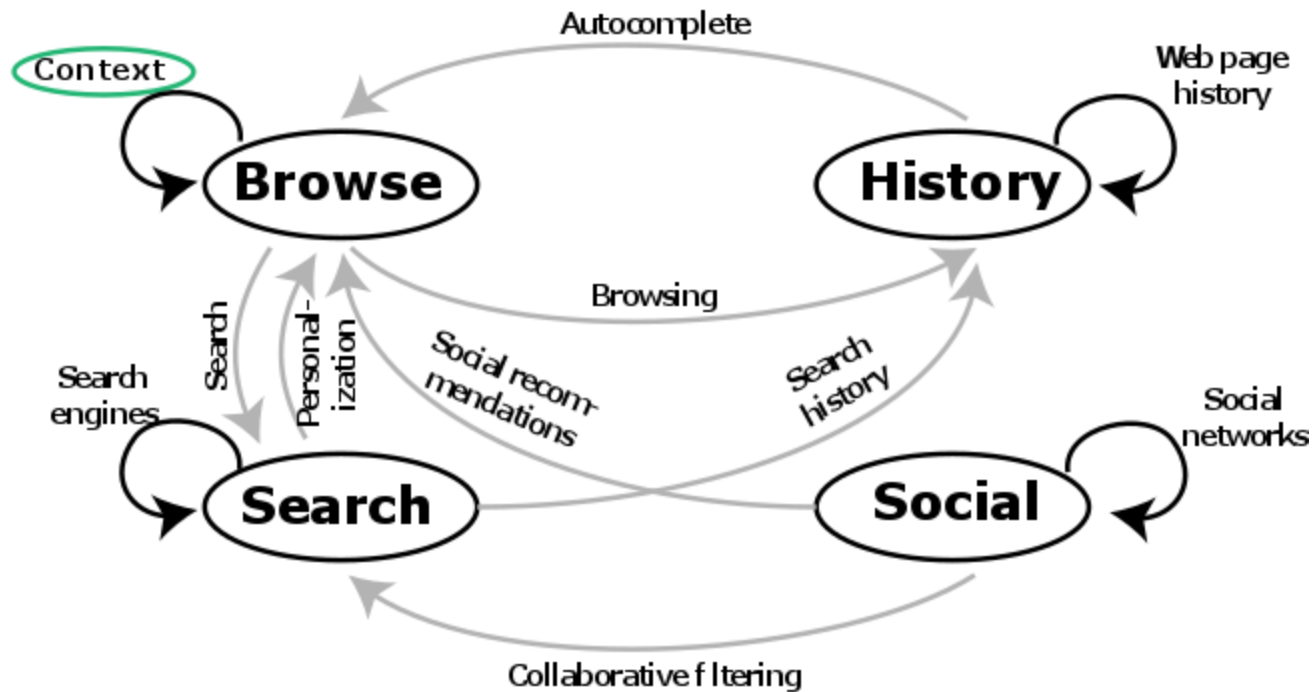
Possible inferences

- A whole lot of people
- Mechanized industrial production
- Massive communication infrastructure
- Lots of loneliness, not much to do

Personal data is way more interesting



Human-centered computing



Course structure

- Tools
 - Finding interesting datasets
 - ETL
 - Descriptive statistics
 - Probability distributions
 - Inference, model fitting, model selection
- Search
 - Architecture
 - Text processing
 - Query processing
 - Retrieval models
 - Evaluation
- Recommender systems
 - Content-based recommenders
 - User-based recommenders
 - Hybrid recommenders
 - Evaluation
 - Context sensitivity
 - Constraint-sensitivity

Course structure

- Affective computing
 - Sentiment analysis
 - Theory
 - Applications
 - Emotion inference
 - Theory
 - applications
- Goals
 - Goal representation
 - Sub-goal construction
 - Reinforcement learning
 - Explore-exploit dilemma
 - Probabilistic skill learning
 - Information-theoretic goals

Course evaluation

- 5 quizzes (1 per module)
 - Both MCQs and long-form; closed book
 - Quizzes will use $(\text{avg} + \text{min})/2$ scoring
- 5 projects
 - I will assign base project code, you will improve on it
 - Preferable to work in teams
 - Within project evaluation
 - 50% code
 - 25% report
 - 25% presentation (10 mins) – peer-scored
 - I'll be looking for both competence and creativity
 - Projects will use $(\text{avg} + \text{max})/2$ scoring
- No relative grading
- Cooperation bonus in projects (+1 to both counterparties)
- Projects will be assigned at the beginning of each course module

Expectations

- Learn to do practically
- Understand theoretically
- Think about how to apply in ways that help other people

Course logistics

- Lecture slides will be posted online 48 hours after lecture
- No attendance restrictions, but you will suffer if you are irregular
- Makeup quizzes = very hard to get

Course logistics

- Lecture slides and code samples will be posted to my CSE webpage
- We'll use Dropbox file request to manage project and report submissions