## DB/IR: Rethinking the great divide



SIGMOD 2005 Panel
Thomas Roelleke

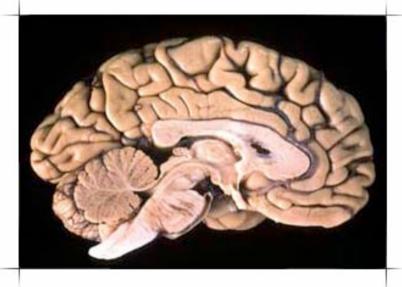




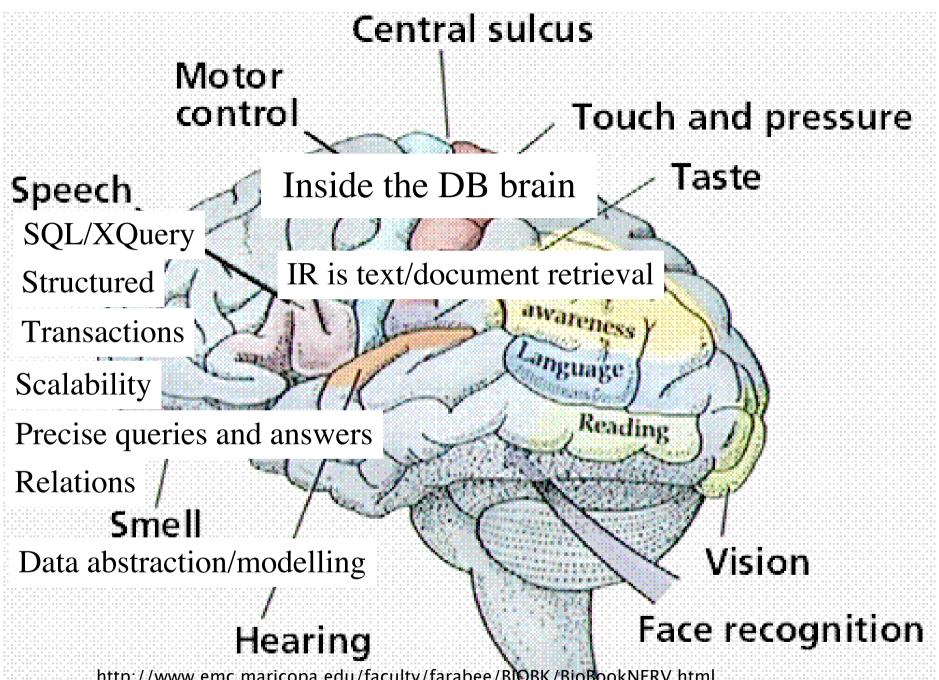
# Rethinking the great divide



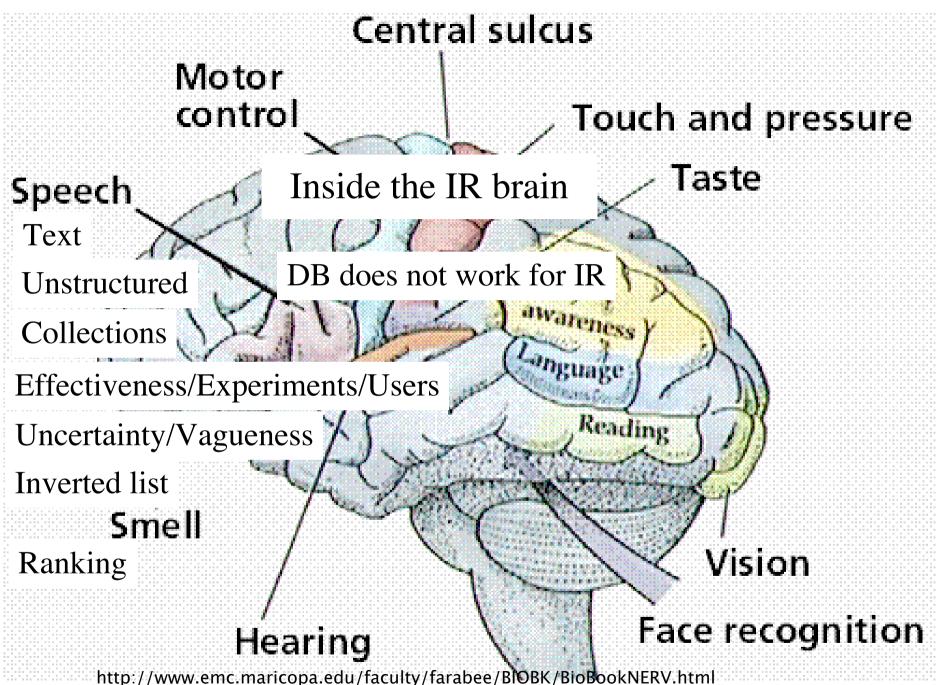




The brain of an IR research



http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BioBookNERV.html Image from Purves et al., Life: The Science of Biology, 4th Edition, by Sinauer Associates (www.sinauer.com) and WH Freeman (www.whfreeman.com)



http://www.emc.maricopa.edu/faculty/farabee/BIOBK/BIOBookNERV.html Image from Purves et al., Life: The Science of Biology, 4th Edition, by Sinauer Associates (www.sinauer.com) and WH Freeman (www.whfreeman.com)

### Past, Presence, and Future

- Past: Rijsbergen:79 (data vs info retrieval), Schek/Pistor:82, Fuhr:93, ..., Croft:95: "what people want from IR: the top 10", SIGIR 2004 workshop on integration of DB and IR
- Presence:
  - XML drives DB and IR: XQuery + Text
  - Chaudhuri/Ramkrishnan/Weikum: Can you clap ...
  - DB+IR platforms: Stream-based algebra, lazy probabilistic evaluation, new index structures, etc.
- Future: Next DB+IR workshop in planning

#### **Position Statements**

Web retrieval has poor quality. IR technology is insufficient. It it about time that we add semantics to data and queries!

You are going to SIGMOD? But they will never understand what IR is about!

A senior IR researcher

A senior DB researcher

Information retrieval is not just document retrieval!

Meanwhile, DB does.
Will it be IR on-top of DB?
Will it be DB+IR?

IR did not take IR+DB on board.

A senior IR researcher

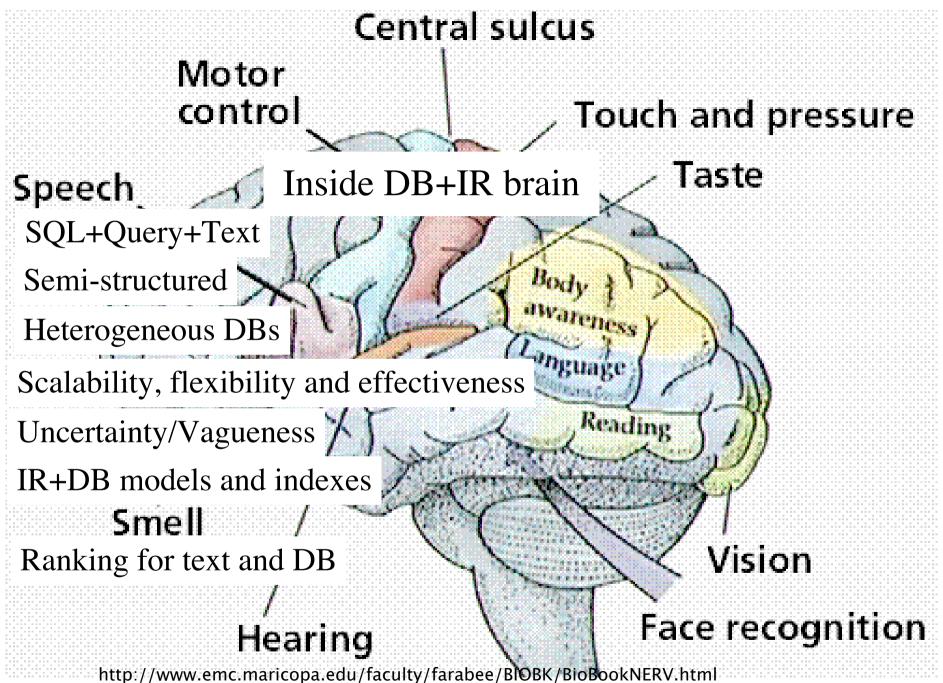
A senior IR researcher with links to DB research

### My Position

- DB+IR needed? Yes. Why?
  - To improve expressiveness, flexibility and abstraction, and, overall, productivity (codd:70)
  - Scalability? The main reason for DB+IR?
- XML native? No. Why?
  - XML on top of RDBMS works ok for us
  - Integration with SQL comes for free
  - My brain relationally imprinted?

### My Questions

- Which brain (community) has room for the cells and wiring needed?
- Is there more than a technological divide to overcome?
  - A sociological divide?
  - An emotional divide?



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