

The IDA Technology

Stan Franklin
and the
'Conscious' Software Research Group



Introducing IDA



An intelligent software agent
capable of entirely automating
human information agents

- *Customer Service Agents*
- *Travel Agents*
- *Insurance Agents*
- *Loan Officers*

IDA Negotiates



IDA negotiates with clients in natural language—English

IDA Accesses Databases



IDA locates and understands information from databases

IDA Adheres to Policies



IDA understands and adheres to numerous company policies

IDA Makes Decisions



IDA makes sophisticated decisions involving deliberation and constraint satisfaction

IDA Produces a Product



IDA can produce useful products

- *Airline tickets*
- *Loan papers*
- *Insurance policies*

IDA Generates Hypotheses

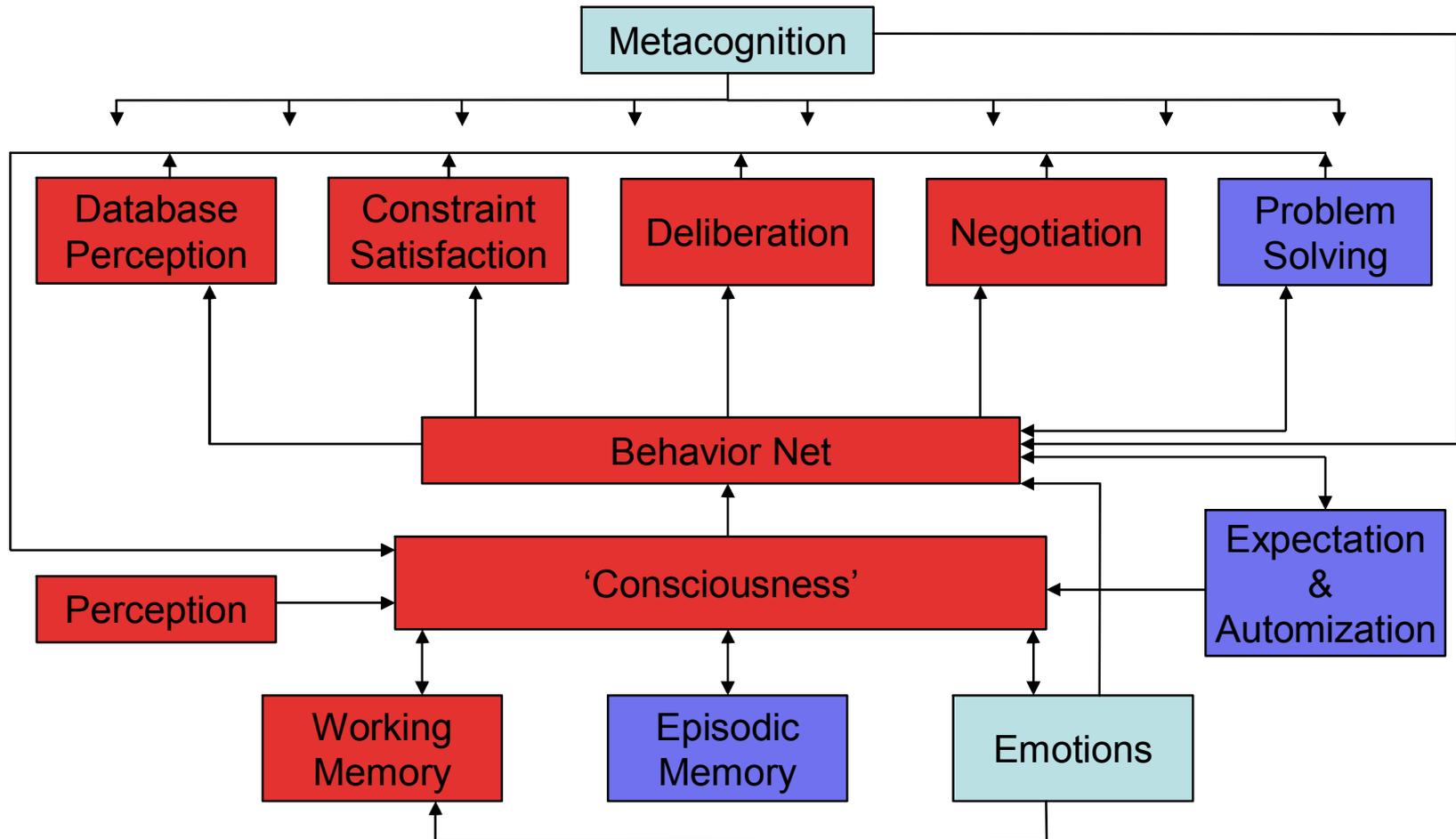


IDA generates hypotheses about how minds work to guide cognitive scientists and neuroscientists

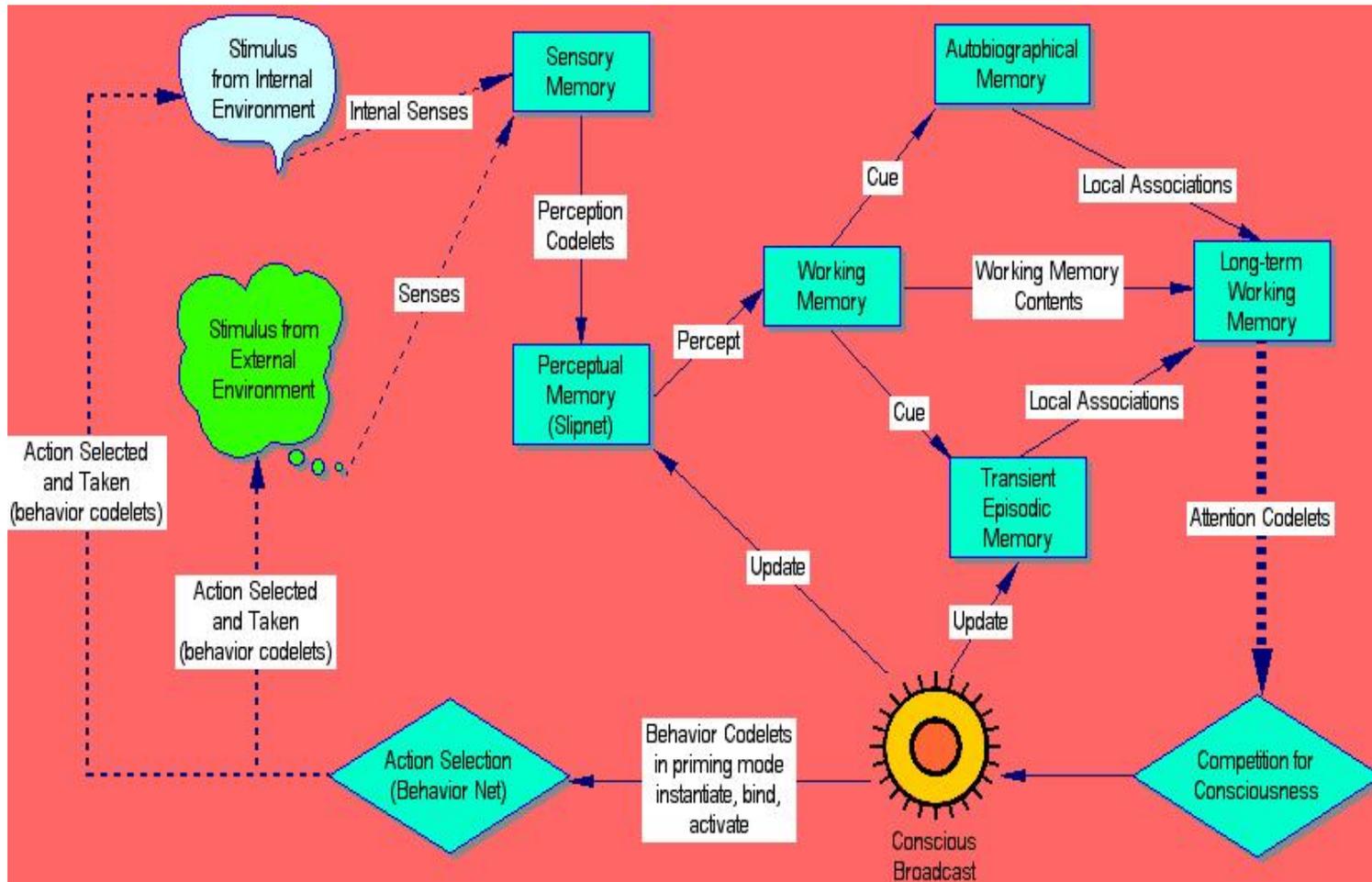
IDA'S Modules and Mechanisms

- Perception—Copycat Architecture—Hofstadter
- Action Selection—Behavior Net—Maes
- Episodic Memory—Sparse Distributed Memory—Kanerva
- Emotions—Pandemonium Theory—Jackson
- Metacognition—Fuzzy Classifier Systems—Holland
- Learning—Copycat Architecture, Reinforcement
- Constraint Satisfaction—Linear Functional
- Language Generation—Pandemonium Theory
- Deliberation—Pandemonium Theory
- ‘Consciousness’ —Pandemonium Theory

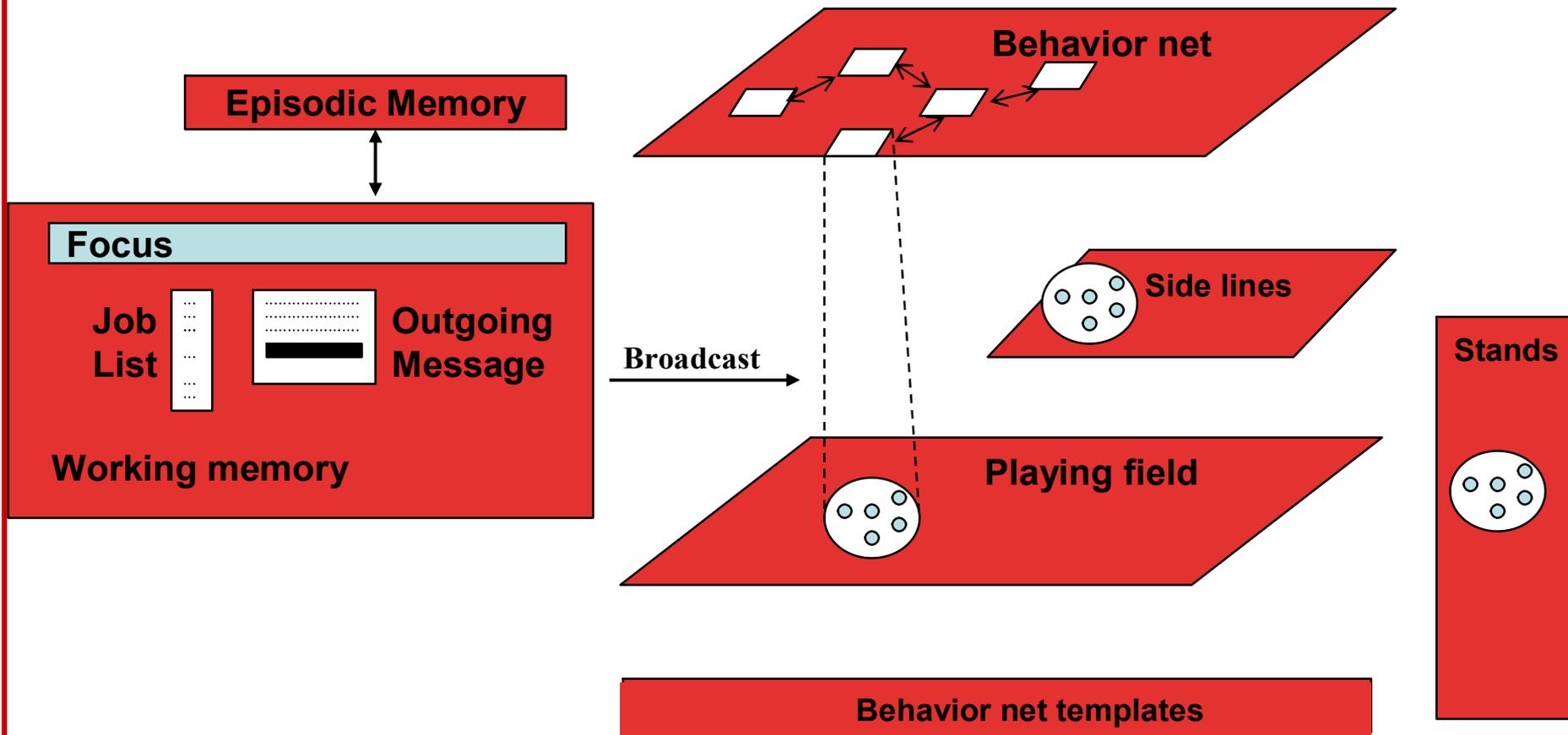
IDA's Architecture



IDA's Cognitive Cycle



IDA' Technology in Action



Is IDA Conscious?



IDA is functionally ‘conscious’, but what about subjective experience?

Is IDA the world’s first conscious artifact?