



***Charging Ahead  
into the  
Next Millennium***

**DARPATech '99**  
Denver • June 7-10, 1999





*ISO*

# Total Information Awareness

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Deputy Director,  
Information Systems Office



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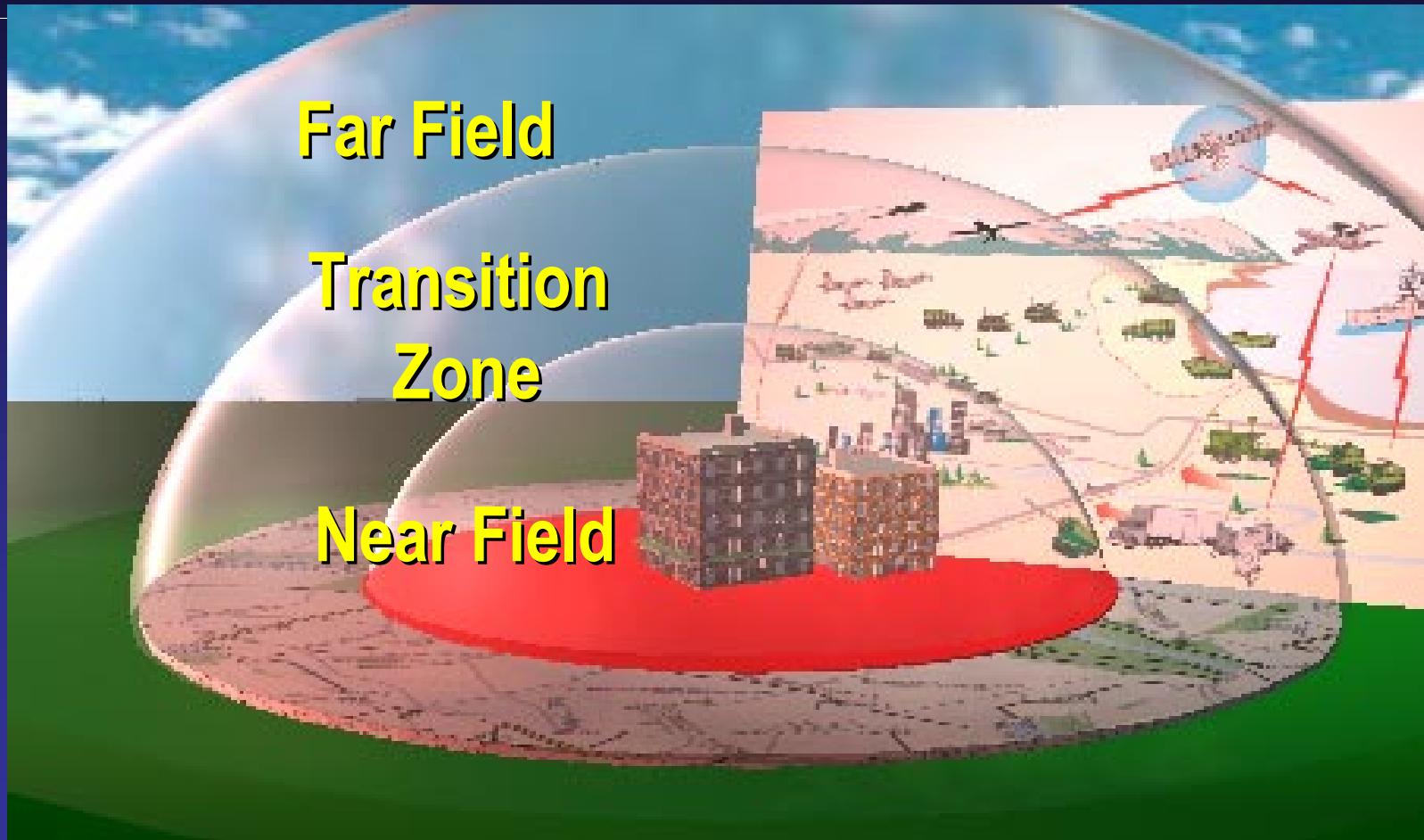
# Asymmetric Warfare

Type	Source	Nation State	Trans-National
Symmetric		X	
Asymmetric		X	X



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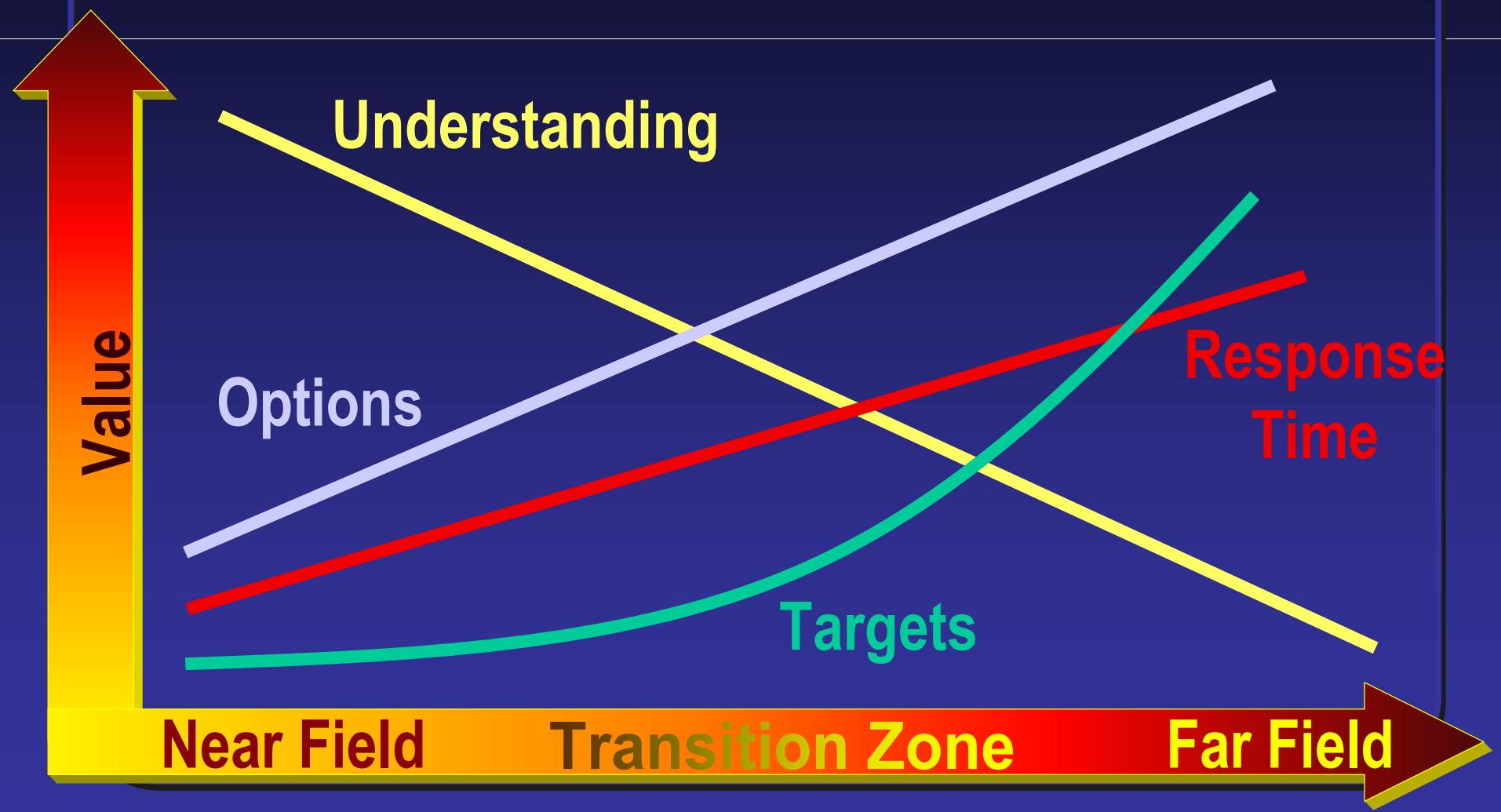
# Environment





# Understanding the Environment

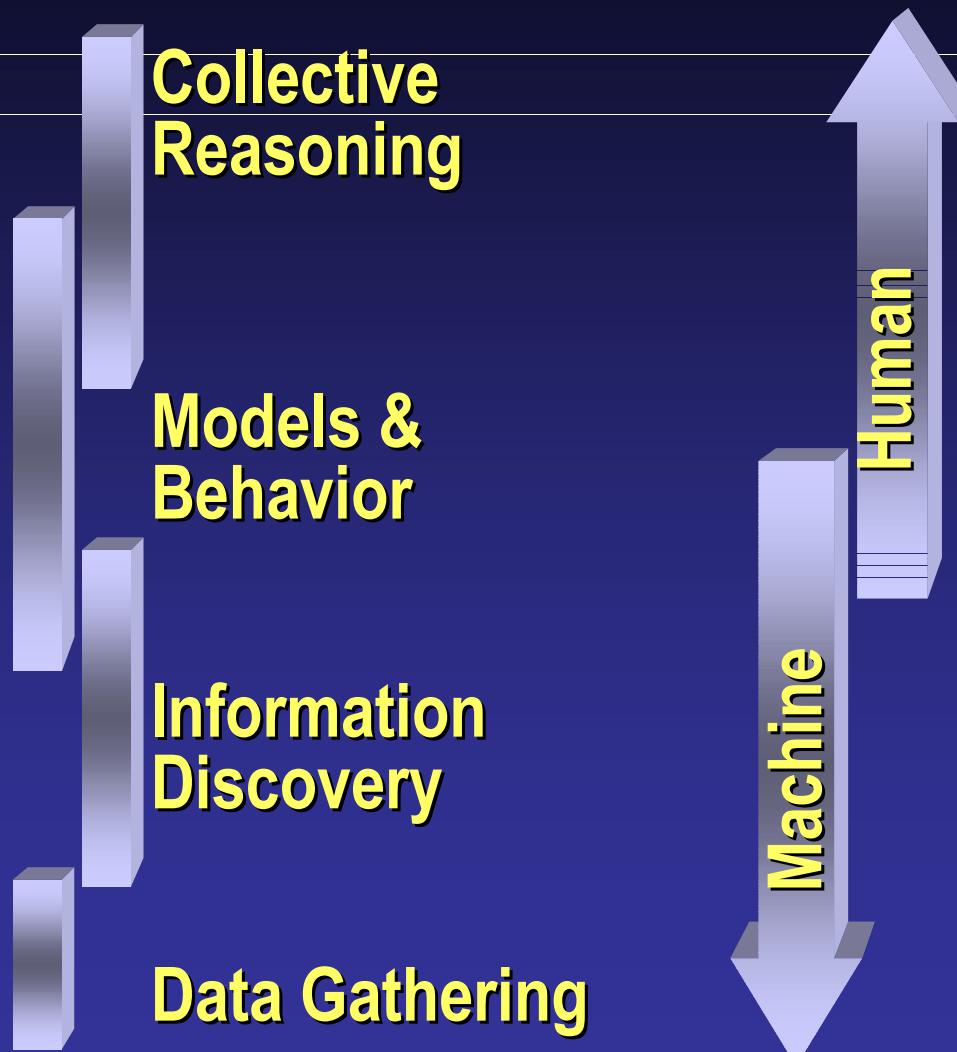
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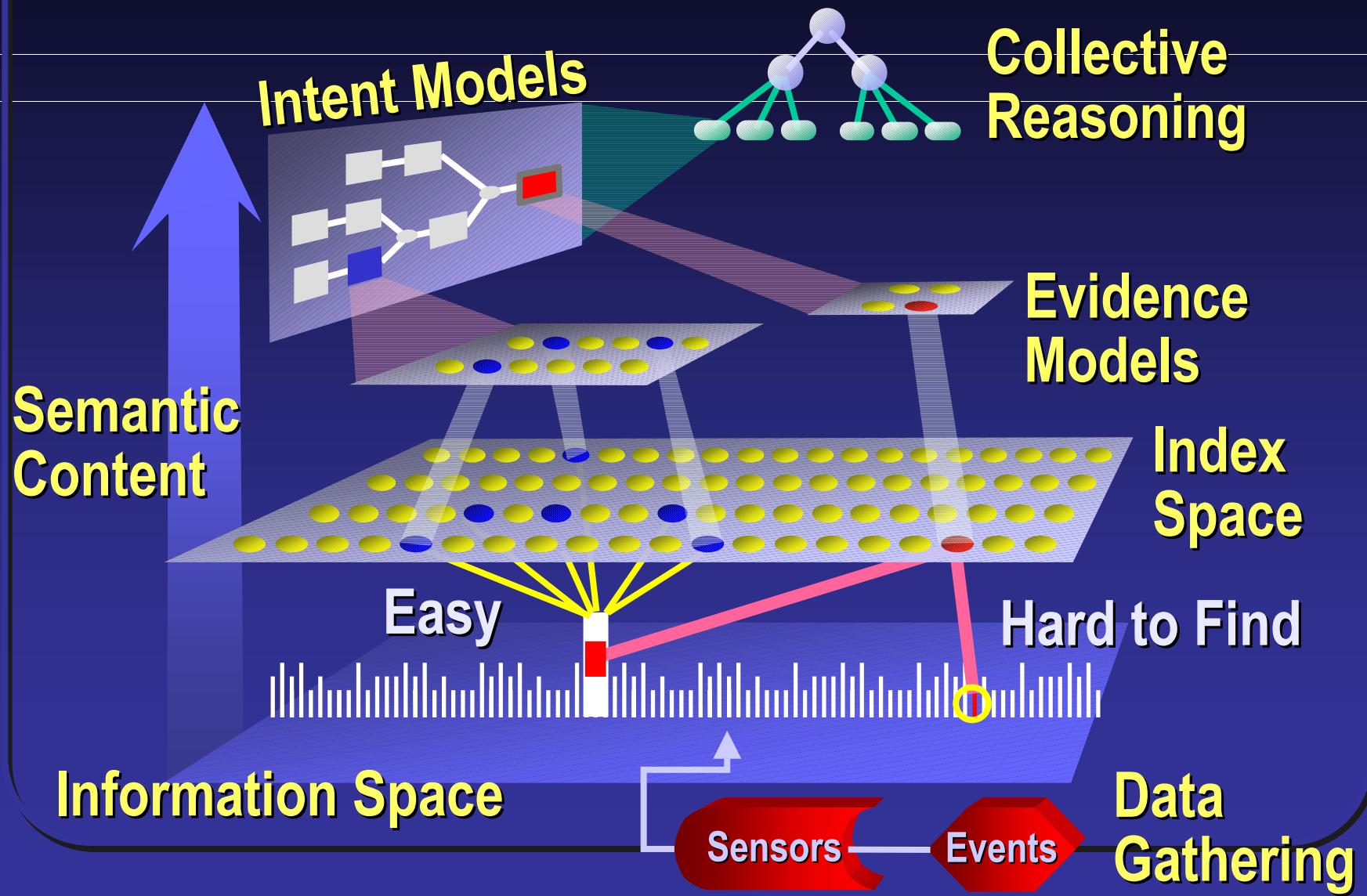
# Total Information Awareness





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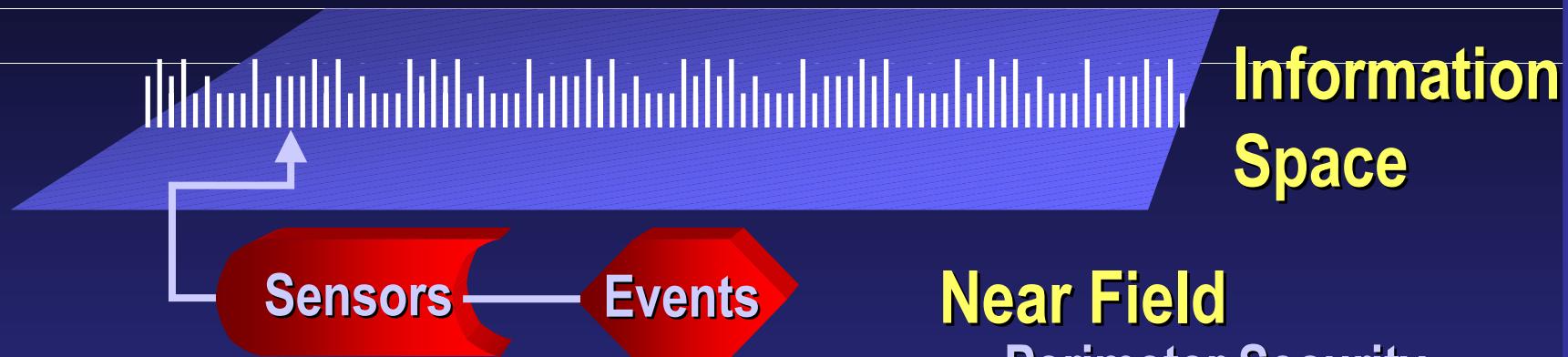
# Total Information Awareness





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# Data Gathering



## Near Field

- Perimeter Security
- People Tracking
- Face Recognition
- News Bulletin

## Far Field

- Data Bases
- Data Mining
- Heterogeneous Search



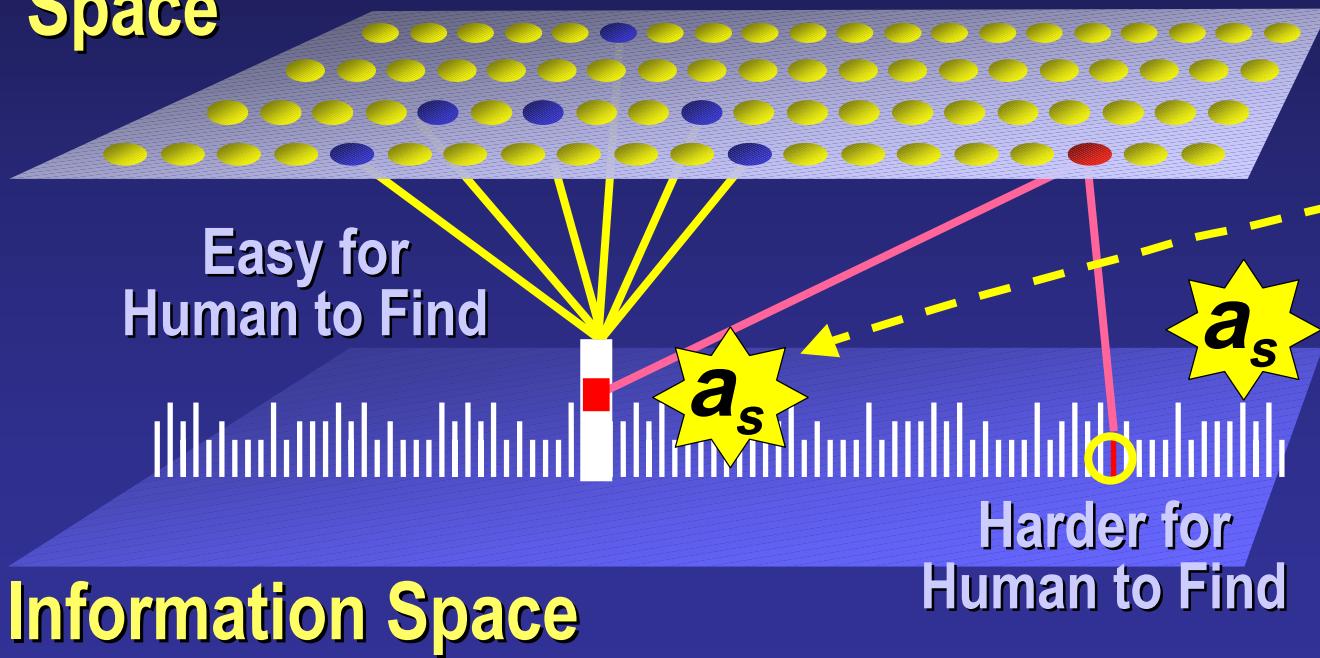


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# Information Discovery

Index  
Space

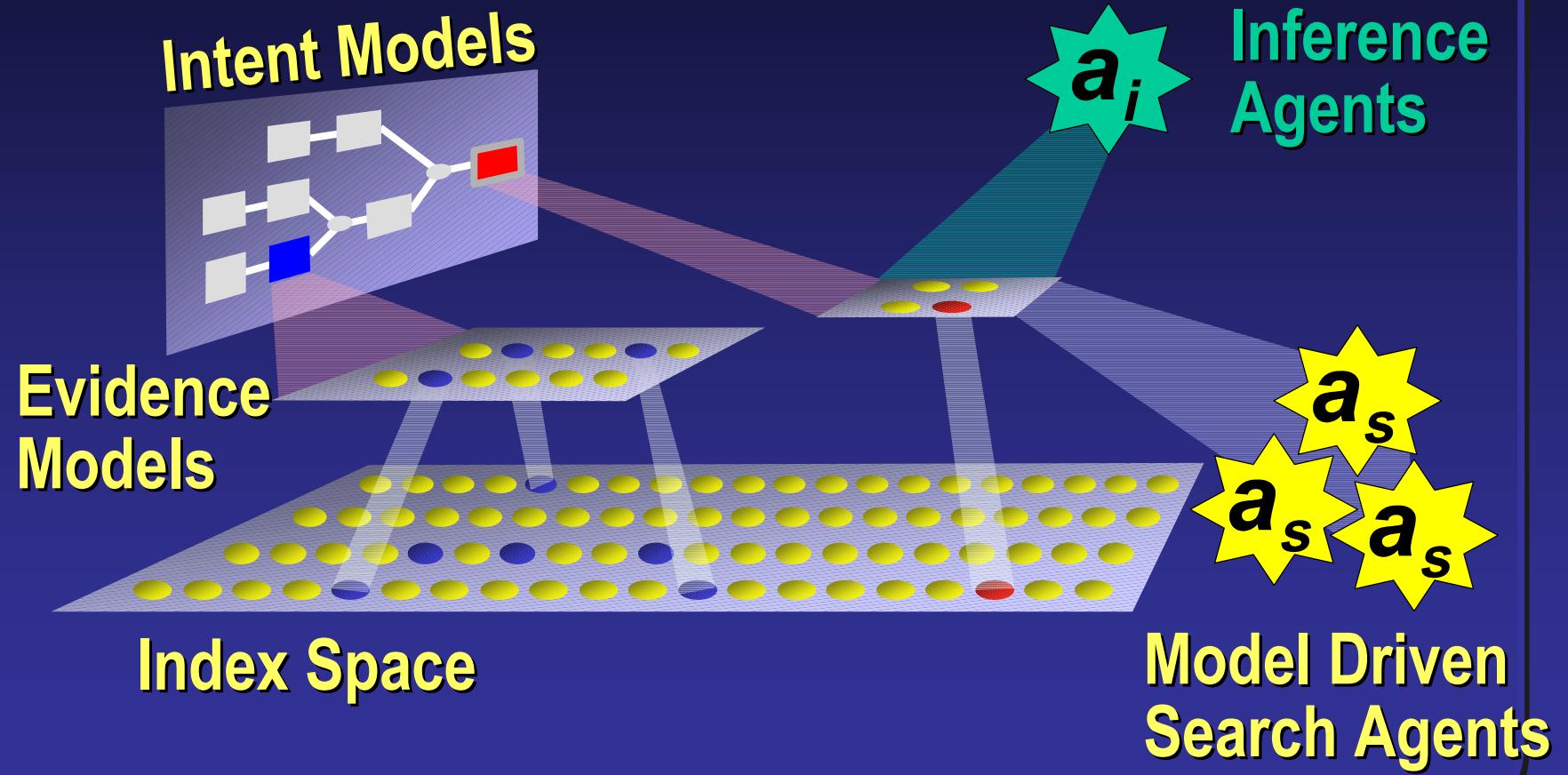
Model Driven  
Search Agents





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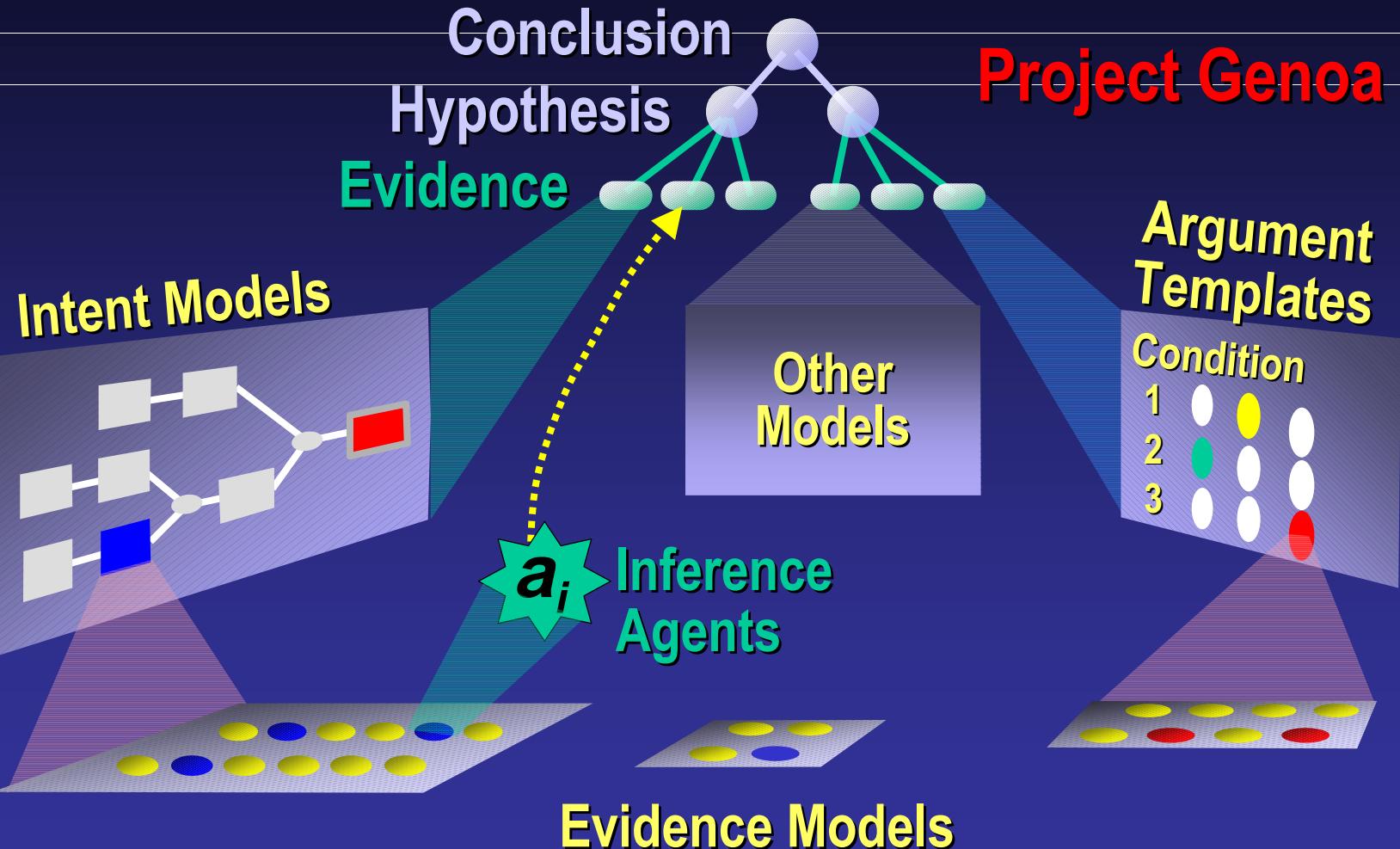
# Models and Behavior Analysis





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# Collective Reasoning





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# Project Genoa





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# Total Information Awareness

Collective Reasoning

Models & Behavior

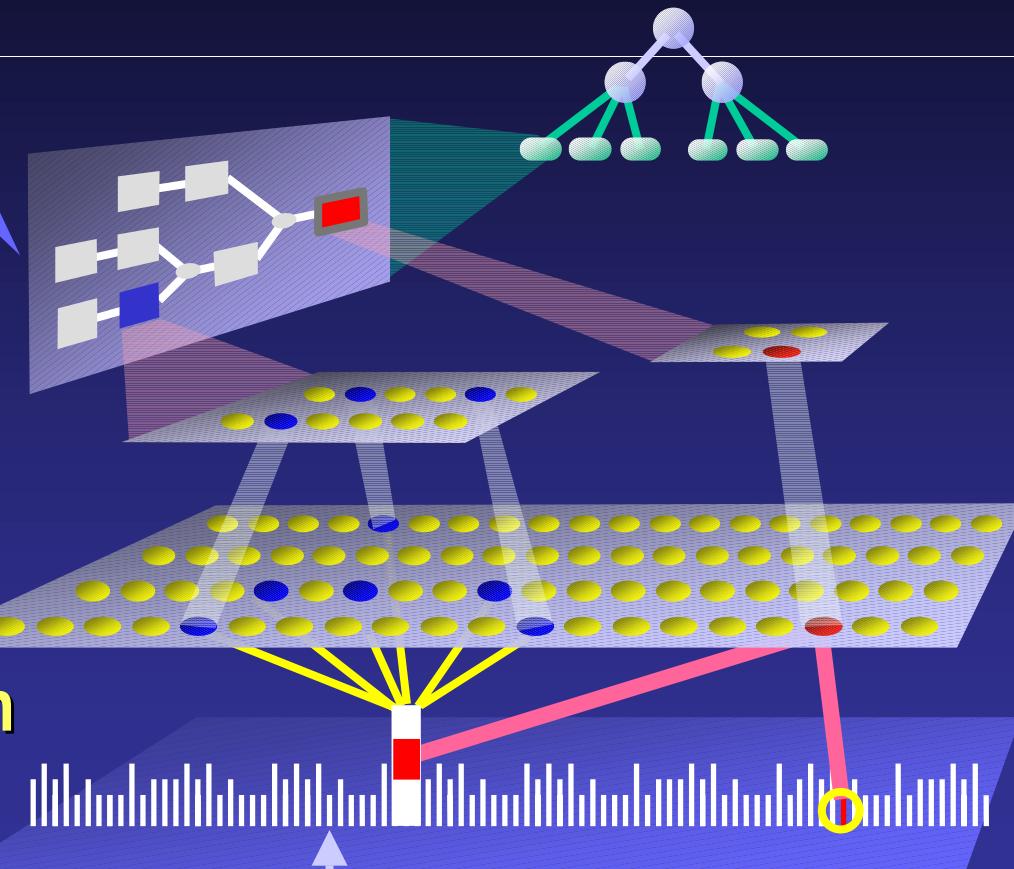
Information Discovery

Data Gathering

Human

Machine

Sensors → Events





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# Collective Reasoning

Information  
Discovery

Collective  
Reasoning

Information  
Discovery

Models

Data  
Gathering

Data  
Gathering

Near Field

Transition Zone

Far Field



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# Humans and Computers

Human  
Reasoning

Semantic Content

Automation

Near Field

Transition Zone

Far Field