

My Research from past to future

Shohei Hidaka

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2002 修士課程 @京都

2004 博士課程

2006 学振DC2

2007 博士(情報学)取得

2008 Post-doc@Indiana U.

2010 助教@JAIST

2013 with Neeraj

2015 with 雑談

2016 現在

Language development
Comp. modeling

環境情報による語彙獲得バイアス変化のモデル研究

幼児の新奇語カテゴリー化のモデル研究
発達研究固有の実験的制約を考慮した定量的分析方法
Semantic packing as a core mechanism of category coherence, fast mapping and basic level categories.

語彙獲得過程におけるカテゴリー化空間の幾何学的モデル.

Body parts and early-learned verbs.

How Features Create Knowledge of Kinds.
Packing: A Geometric Analysis of Feature Selection and Fast-Mapping in Children's Category Formation.

A Computational Model Associating Learning Process, Word Attributes, and Age of Acquisition.

On the Estimation of Pointwise Dimension.
The Generalist Approach to Frame Problems. Estimating the latent number of types in growing corpora with reduced cost-accuracy trade-off.

Which types of learning make a simple game complex?
読書時の身体情報による熟集中度変化の記述.

Embodied cognition
Imitation learning to understanding

Analyzing Multimodal Time Series as Dynamical Systems
Quantitative Linking Hypotheses for Infant Eye Movements.

人の多感覚コミュニケーションにおける情報ネットワークの可視化
力学的不変量仮説: 運動制御の最適化理論の上位原理として.
Topological Similarity of Motor Coordination in Rhythmic Movements.

Sound Symbolism Facilitates Word Learning in 14-Month-Olds.

情報の伝達から理解へ
認知科学の新たなパラダイムに向けて

Research keywords

Word learning
Category/ concept

Statistical methods

Semantic space/
Manifold

Optimization

Multi-sensory

Embodiment

Imitation

Understanding

Dynamic learning

Frame/ Reading

Neuroscience/
Consciousness

Math. Biology/ programming

Neural networks

Multivariate analysis

Linear algebra

Statistics (freq)/ Info. Geo.

Bayesian statistics/ MCMC

Dynamical systems

Info theory & Dim theory

Nonlinear time series analysis

Math writing/ proof

Game theory

Framing/ thinking

Diff. eq./ variational

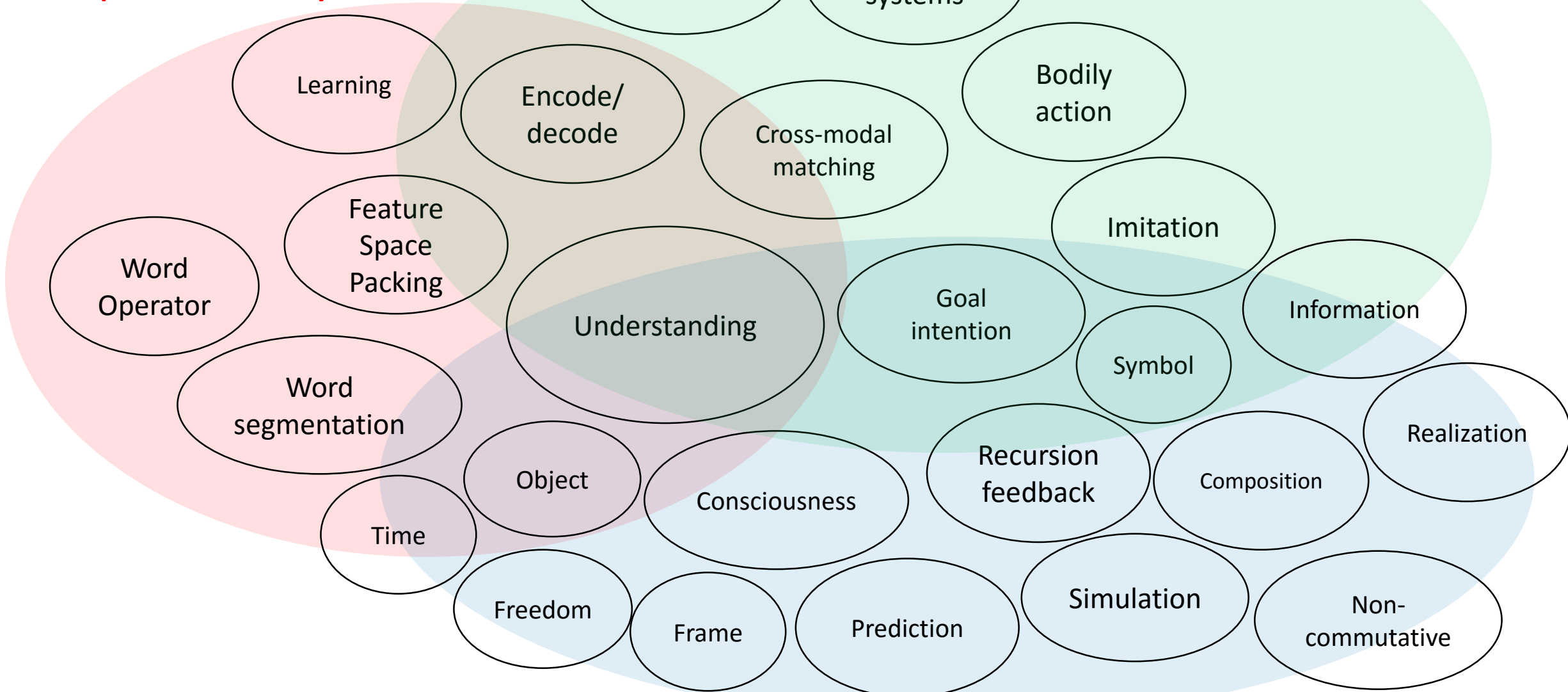
Learned Techniques

History/
Situation

“Language”
Operation/ Syntax

“Imitation”
Semantics/ pragmatics

Computational building block



“Language”
Operation/ Syntax

“Imitation”
Semantics/ pragmatics

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