Models of Language Evolution
Session 10: Students Presentations Part II

Roland Mühlenbernd

2015/01/07
<table>
<thead>
<tr>
<th>date</th>
<th>speaker</th>
<th>literature / project topic</th>
</tr>
</thead>
</table>
| 7.1  | Kameliya Hristova  
Franziska Koesling | Culture: Copying, Compression, and Conventionality (Tamariz, Kirby 2014)  
Talking to Neighbors: The Evolution of Regional Meaning (Zollman 2005) |
| 14.1 | Carina Rüdinger  
Patrick Zahn  
Vanessa Nadler | Social Language Learning (Steels 2003)  
Modelling the Cultural Evolution of Language (Steels 2011)  
Signalling Games: Evolutionary Convergence on Optimality (Lentz, Blutner 2009) |
| 21.1 | Larissa Meier  
Clara Baumgärtner  
Marcel Binz | Language Structure: Psychological and Social Constraints (Jäger, van Roiij 2007)  
Integrating the Horizontal & Vertical Cultural Transmission of Novel Communication Systems (Theisen-White, Kirby, Oberlander 2014)  
**project topic**: signaling & the game of life (Mühlenernd, Schulz 2014) |
| 28.1 | Sabrina Selck  
Daniel Schuhmacher  
Pink Powerangers | **project topic**: evolution of the lexicon (Steels 1995)  
**project topic**: communication & changing interaction structure  
**project topic**: evolution of recursive compositionality |
| 4.2  | Vivian Fresen  
Team 1  
Team Nash | **project topic**: evolution of human vowel systems (de Boer 2002)  
**project topic**: evolution of compositionality in signaling games  
**project topic**: evolution of semantic variation (Zollman 2005) |
Three Types of (Language) Evolution

3 adaptive systems in language evolution (Kirby & Hurford 2002)

Social Evolution
Cultural Evolution

Biological Evolution

3 evolutionary processes (Steels 2011)
Luc Steels

- Director of the ‘Sony Computer Science Laboratory’ in Paris
- Professor of Artificial Intelligence at University of Brussels
- Research: origins and learning of language
- Methods: computational models and robotic models
- Concepts: framework of evolutionary language games (guessing game, naming game, classification game...)

Studies of Today

1. Carina Rüdinger
   ▶ Topic: *Social Language Learning* (Steels 2003)
   ▶ Background: *Robotic Language Learning, Classification Game*
   ▶ Category: experimental study of robotic language learning

2. Patrick Zahn
   ▶ Topic: *Modeling the Cultural Evolution of Language* (Steels 2011)
   ▶ Background: *Language Structure, Naming Game*
   ▶ Category: computational study of horizontal transmission

3. Vanessa Nadler
   ▶ Topic: *Signalling Games: Evolutionary Convergence on Optimality* (Lentz, Blutner 2009)
   ▶ Background: *Division of Pragmatic Labor, Horn Game*
   ▶ Category: computational study of evolutionary dynamics