

Subject

Global Experience Study and Fieldwork-Exploring the human language system with overseas students [Spring]

Subject numbering

EXPS2410

Lecturer

Arikawa Koji

Laboratory: St. Andrew Hall 6F Room 624

Office hours: Lunch break on Mondays and Thursdays

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Number of credits

2 credit(s)

Tentative List of Topics to be Presented

Mother Nature created the human brain. The human brain produces a natural language as your mother language. Grammar rules are natural laws. Studying the laws and mechanisms of the human natural language computation is studying natural laws. This class studies the information processing system (the computational system of human natural language (CHL)) that is created by Mother Nature. The examples that we use in this class are your mother languages. The class will be held in English.

The goal is to understand why human language study is a search for natural laws. We also challenge various commonsense dogmas about language.

Review the materials that we cover in each class.

1. Introduction

Grammar study as an empirical science and human brain research

Read the syllabus and the introductory part of the textbook

2. The hypotheses of Saussure and Chomsky

3. Dogmas regarding human language

4. Dogmas regarding human language

5. Three factor for the research of computational system of human natural language (CHL)

6. Merge operation in CHL

7. Basic property of CHL

8. Basic property of CHL

9. Principle of minimal computation (MC) working in CHL

10. Error minimization algorithm (EMA) in CHL

11. EMA in CHL

12. Inertia law working in CHL and the sensorimotor system (SM)

13. Student conference

14. Student conference

15. Student conference

Evaluation

Examination: %

Report: %

Others: 100%

(1) Attend the class regularly and participate in the discussion.

(2) Select any class topic that interests you. Create a PowerPoint material (in English) for the final 5 min presentations.

The PowerPoint presentation must be divided into two parts:

(A) A summary of the class content of your interest (2 pages).

(B) Your opinion on (A) and new content ideas (3 pages); include a self-drawn illustration that expresses your idea.

Textbooks & Suggested References

[References]

Chomsky, Noam. 1995. The minimalist program. Cambridge, Mass.: MIT Press.

Jenkins, L. 2000. Biolinguistics: Exploring Biology of Language. Cambridge University Press.

Piattelli-Palmarini, Massimo & Juan Uriagereka. 2004. The immune syntax: The evolution o

Keywords

computation, geometrical structure of sentence, human natural language, natural law

Class Time

Monday 2nd period