

Academic year 2023-24 (תשפ"ד) (each semester – 11 weeks)

Course title (English): Syntactic Processing

Course title (Hebrew): עיבוד תחבירי

Course number: 133.10115 א סמסטר; 133.1.0125 ב סמסטר

Course slot: Annual, Tuesday

Lecturer: Dr. Irena Botwinik

Lecturer's conference hour and contact details: Tuesday, upon appointment

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Course description & objectives:

The course adopts the assumption that the Computational System (CS) underlies both the production and the processing of sentences. In other words, we will assume that the same computational tools are used in production and processing. Thus, we can use typical instances of processing breakdown to shed light on the workings of the CS. We will focus on sentences that involve processing breakdown referred to as Garden Path (e.g. 'Below the stairs collapsed'). In the first part of the course we will examine the constraints that underlie the processing of a sentence, and define in syntactic terms the processing difficulty that arises in the Garden Path sentences, namely why the processing of these sentences does not proceed automatically (as witnessed by the fact that we are aware of the difficulty). In the second part of the course we will discuss the consequences of the processing theory and its applications in the study of language acquisition, and in the study of individuals suffering from aphasia (language impairment resulting from brain damage). Finally, we will attempt to define the principles of the CS that are operative in the production and processing phenomena examined in the course.

Course requirements:

5-7 assignments (20%) (P/F)

Midcourse **assignment, graded** (after semester alef) (50%)

Final assignment, graded (at the end of the course) (30%)

Prerequisite

Introduction to Linguistics

Attendance is required (if possible)

Topics & bibliography

Semester alef

1. Introduction: Background, central terms in the study of language processing, processing limitations (center-embedded and Garden Path sentences).
2. Previous processing theories and their problems.

3. The processing guideline and the definition of difficult reanalysis, TRC (Pritchett 1992)

4. Various types of GPs and the revision of the TRC.

Semester bet

5. The consequences of the processing theory and its implications: Comprehension of relative clauses in language acquisition; GP in conductive aphasia.

6. Syntactic movement and its limitations: Islands as a diagnosis for movement; The Complement Condition.

7. The psychological reality of syntactic movement.

8. Summary of the course: The principles of the CS operative in the production and processing phenomena examined in the course.

References

Botwinik-Rotem, I. 2008. Accounting for the comprehension of Hebrew object relatives, in A. Gavarró Algueró and M. João Freitas, eds. *Language Acquisition and Development*. Cambridge Scholars Press/CSP.

Botwinik, I. 2011. Asymmetries in the processing of object relatives in child Hebrew and Italian, in Grimm, A., Müller, A., Hamann, C. & Ruigendijk, E. (eds.), *Production-comprehension asymmetries in child language*, Berlin: Mouton de Gruyter.

Friedmann, N. and A. Gvion. 2007. As far as individuals with conduction aphasia understood these sentences were ungrammatical: Garden path in conduction aphasia.

Nicol, J. and D. Swinney. 1989. The role of structure in coreference assignment during sentence comprehension. *Journal of Psycholinguistics Research*, 18(1), 5-21.

Pritchett, B. 1992. *Grammatical Competence and Parsing Performance*. Chicago University Press. (chapters 2, 3 and 4)

Reinhart, T. 1999. The Processing Cost of Reference-Set Computation: Guess Patterns in Acquisition. Uil OTS Working Papers, Utrecht Institute of Linguistics, OTS. pp. 2-4. <http://www.let.uu.nl/~tanya.reinhart/personal/>

Roberts, I. 1988. From Rules to Constraints. *Lingua e Stile*, vol 23, no 3. pp. 445-461.

Siloni, T. 2004. "Garden Path: Illicit Movement".

Slattery, T.J., P. Sturt, K., Christianson, M., Yoshida, and F. Ferreira. 2013. Lingering misinterpretations of garden path sentences arise from competing syntactic representations. *Journal of Memory and Language* 69, 104–120.

Additional reading

Botwinik, I. and A. Meltzer-Asscher. While they were studying the GP effects occurred: What processing data (in Hebrew) tell us about the merger of adjuncts (in the grammar), ms., Tel Aviv University, North Western University.

Chomsky, N. 1973. Conditions on Transformations, in Stephen Anderson & Paul Kiparsky (eds.), *A Festschrift for Morris Halle*. New York: Holt, Rinehart and Winston, pp. 232-286.

Chomsky, N. 1977. On wh-movement. In *Formal Syntax*, Culicover, Wasow and Akmajian, eds.

Kimball, J. 1973. Seven principles of surface structure parsing in natural language. *Cognition*, vol 2, no 1. pp. 15-47.

Shetreet, E., D. Palti, N. Friedmann, and U. Hadar. 2007. Cortical representation of verb processing in sentence comprehension: number of complements, subcategorization and thematic frames. *Cerebral Cortex* 17:1958-1969.

Siloni, T. 1995. On Participial Relatives & Complementizer D. *Natural Language & Linguistics Theory* 13:3.