

LINGUISTIC THEORY AND ITS FOUNDATIONS

Fall 2020

(last revised: August 14, 2020)

	INSTRUCTOR	COURSE
NAME:	Brendan S. Gillon	LING 419
TIME:	OFFICE HOURS tba and by appointment	CLASS HOURS: Mn Wd Fr: 10h35–11h25
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WARNING:

This syllabus is a tentative one. First, other readings will be added. Second, the order in which the readings will be done may change.

EVALUATION:

Students will be evaluated according to the following:

- assignments (30%);
- class presentations (20%);
- final paper (50%).

All written work may be submitted either in English or in French. No late submissions will be considered, unless arranged for ahead of time or accompanied by a certified justification (e.g., a doctor's note).

AIM OF THE COURSE:

At the end of the 1950's, linguistics underwent three fundamental and related changes: the introduction of tree notation, a change in its methodological allegiance and a change in its conception of human psychology.

Although some American structuralist linguists (Zellig Harris, Charles Hockett, Rulon Wells) had used some mathematics in their work, the use of

trees, introduced in 1956 in Noam Chomsky's technical article, 'Three models for the description of language', and made widely known through his widely received book, *Syntactic Structures*, became virtually ubiquitous within a few years.

Like their colleagues in the social science, linguists have always worried about the scientific status of their discipline. However, under Chomsky's influence, American structuralist linguists came to abandon the framing of their work in accordance with methodological strictures of logical positivism and operationalism and took up instead the logical empiricist view of science as hypothesis testing.

Finally, though the linguist Leonard Bloomfield had popularized among American linguists the view that linguistics is intimately connected with human psychology, it was Noam Chomsky who, through his publication in 1958 of Chomsky's review of B. F. Skinner's *Verbal Behavior*, got American linguists to abandon the behaviorist view of psychology and adopt a what now we would call a cognitivist view, a view which he championed throughout his academic career (see, for example, *Aspects of the theory of syntax* and *Rules and representations*) and one which continues to dominate in contemporary linguistics.

In lieu of behaviorism, Chomsky has advocated what he calls mentalism, embracing so-called mental representations. Talk of representations is not only pervasive in linguistics, it is wide spread across the various disciplines encompassed under the umbrella of cognitive science. The questions which this course aims to ask are these: What are mental representations? And what role do they play in linguistic theory? Do they have any scientific legitimacy?

The first third of the course is devoted to learning about the philosophy of science. In the second third we shall learn about cognitive science, the science which most linguists regard linguistics as part of. In the last third, we shall critically consider the notion of mental representation and its role in linguistics.

No background in linguistics is required. However, some facility with notation, as for example the facility one acquires from PHIL 210, is expected. Students interested in the course with no background in linguistics should contact the instructor, Brendan Gillon, to arrange to enroll.

SCHEDULE:

WEEK 1 (2 Sep):	introduction philosophy of science	Okasha 2002 ch. 1
WEEK 2 (7 Sep):	philosophy of science philosophy of science philosophy of science	Okasha 2002 ch. 2 Okasha 2002 ch. 3 Okasha 2002 ch. 4
WEEK 3 (14 Sep):	philosophy of science philosophy of science philosophy of science	Okasha 2002 ch. 5 Okasha 2002 ch. 6 Okasha 2002 ch. 7
WEEK 4 (21 Sep):	Associationism Behaviorism Biology	Harnish 2002 ch. 1 Harnish 2002 ch. 2 Harnish 2002 ch. 3
WEEK 5 (28 Sep):	Neurology SHRDLU Architecture	Harnish 2002 ch. 4 Harnish 2002 ch. 5 Harnish 2002 ch. 6
WEEK 6 (5 Oct):	Representation DCTM DCTM	Harnish 2002 ch. 7 Harnish 2002 ch. 8.1–8.3 Harnish 2002 ch. 8.4–8.7
WEEK 7 (12 Oct):	no class Criticism of DCTM	Harnish 2002 ch. 9.1–9.4 Harnish 2002 ch. 9.5–9.8
WEEK 8 (19 Oct):	Connectionist network Connectionism	Harnish 2002 ch. 10 Harnish 2002 ch. 11.1–11.2 Harnish 2002 ch. 11.3–11.5
WEEK 9 (26 Oct):	CCTM Criticisms of CCTM What is a computer?	Harnish 2002 ch. 12 Harnish 2002 ch. 13 Harnish 2002 Coda
WEEK 10 (2 Nov):	Language and psychology language and representations computation and grammar	Chomsky 1965 ch. 1 Chomsky 1980 Stabler 1983
WEEKS 11–13:	tba	

PARTIAL BIBLIOGRAPHY:

Chomsky, Noam 1965 *Aspects of a theory of syntax*. Cambridge, Massachusetts: The MIT Press. Chapter 1.

Chomsky, Noam 1980 Rules and representations. *Behavioral and Brain Sciences*: v. 3, pp. 1–61.

Chomsky, Noam 1980 *Rules and representations*. New York, New York: Columbia University Press.

Cohen, I. Bernard 1960 *The birth of a new physics*. New York, New York: W.W. Norton (revised and updated) 1985.

Harnish, Robert M. 2002 *Minds, brains, computers: an historical introduction to the foundations of cognitive science*. Oxford, England: Blackwell Publishers.

Haugeland, John 1985 *Artificial intelligence: the very idea*. Cambridge, Massachusetts: MIT Press.

Okasha, Samir 2012 *Philosophy of Science: a very short introduction*. Oxford, England: Oxford University Press. 2nd edition 2016.

Stabler, Edward 1983 How are grammars represented? *Behavioral and Brain Sciences*: v. 6, pp. 391–421.

STATEMENT FROM THE ADMINISTRATION:

McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the code of student conduct and disciplinary procedures. (See www.mcgill.ca/integrity for more information.)

L'Université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires. (Pour de plus amples renseignements, veuillez consulter le site www.mcgill.ca/integrity.)