

## LINGUISTIC THEORY AND ITS FOUNDATIONS

Fall 2017

(last revised: September 5, 2017)

	COURSE	INSTRUCTOR
NAME:	LING 419	Brendan S. Gillon
LOCATION:	1085 Docteur-Penfield rm. 002	1085 Docteur-Penfield rm. 119
TIME:	CLASS HOURS Mn Wd Fr: 9h35–10h25	OFFICE HOURS: Wd Fr: 10h35–11h25 and by appointment
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### 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. The questions we wish to ask are: what are linguistic representations? And what role do they play in linguistic theory?

Two thirds of the course is devoted to learning about the philosophy of science and about the history of the beginnings of some particular science, such as astronomy, biology, chemistry, geology or physics. (This year the science is astronomy.) In the last third, we turn our attention to the question of the role of linguistic representations in contemporary linguistic theory.

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.

#### EVALUATION:

Students will be evaluated according to the following:

- problem sets (25%);
- class participation ( 5%);
- class presentations (20%);
- final paper (50%).

All written work may be submitted either in English or in French.

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](http://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](http://www.mcgill.ca/integrity).)

## SCHEDULE:

### HISTORY OF SCIENCE:

WEEK 1 (4 Sep):	INTRODUCTION UNIVERSE OF SPHERES	no preparation Kuhn 1957 ch. 1
WEEK 2 (11 Sep):	UNIVERSE OF SPHERES: Eudoxus and Callipus Aristotle's metaphysics Aristotle's physics	Kuhn 1957 ch. 2, pp. 45–58  Kuhn 1957 ch. 3 Cohen 1960 chs. 1–2
WEEK 3 (18 Sep):	UNIVERSE OF CIRCLES: Ptolemy and predecessors MIDDLE AGES	Kuhn 1957 ch. 2, pp. 59–73 Cohen 1960 ch. 3. pp. 24–35 Kuhn 1957 ch. 4
WEEK 4 (25 Sep):	NICOLAS COPERNICUS	Kuhn 1957 ch. 5 Cohen 1960 ch. 3. pp. 35–52
WEEK 5 (2 Oct):	TYCHO BRAHE GALILEO AND ASTRONOMY	Kuhn 1957 ch. 6, pp. 185–209 Kuhn 1957 ch. 6, pp. 219–228 Cohen 1960 ch. 4, supp. 1–2
WEEK 6 (9 Oct):	THANKSGIVING GALILEO AND PHYSICS	no class Monday Cohen 1960 ch. 5 Cohen 1960 supp. 3–5, 7, 9, 10
WEEK 7 (16 Oct):	JOHANNES KEPLER  NEWTON'S THREE LAWS	Kuhn 1957 ch. 6, pp. 209–219 Cohen 1960 ch. 6 supp. 8 Kuhn 1957 ch. 7 Cohen 1960 ch. 7, supp. 11–16

PHILOSOPHY OF SCIENCE:

WEEK 8 (23 Oct):	OBSERVATION	Chalmers 1976 chs. 1–3
	TRUTH	Chalmers 1976 chs. 4–6
	THEORY	Chalmers 1976 chs. 7–8
WEEK 9 (30 Oct):	THEORY	Chalmers 1976 chs. 9–11
		Chalmers 1976 chs. 12–13
		Chalmers 1976 chs. 14–16

PSYCHOLOGY AND GRAMMAR

WEEK 10 (6 Nov):	COMPUTATION AND MIND	Haugeland 1985 ch. 1
		Haugeland 1985 ch. 2
		Haugeland 1985 ch. 3
WEEK 11 (13 Nov):	COMPUTATION AND MIND	Haugeland 1985 ch. 4
		Haugeland 1985 ch. 5
		Haugeland 1985 ch. 6
WEEK 12 (20 Nov):	INNATISM	Chomsky 1965 ch. 1
		Cowie SEP
		Bennett and Hacker 2008 ch. 7
WEEK 13 (27 Nov):	REPRESENTATION	Chomsky 1980

## BIBLIOGRAPHY:

- Bennett, M. R. and Hacker, P. M. S. 2008 *History of cognitive neuroscience*. Chichester, United Kingdom: Wiley–Blackwell.
- Chalmers, Alan F. 1976 *What is this thing called science?* Indianapolis, Indiana: Hackett Publishing, 3<sup>rd</sup> edition (1999).
- Chomsky, Noam 1965 *Aspects of a theory of syntax*. Cambridge, Massachusetts: The MIT Press. Chapters 13.
- 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.
- Cowie, Fiona 1999 *Whats within? : nativism reconsidered*. Oxford, England: Oxford University Press. See the entry in the Stanford Encyclopedia of Philosophy (online).
- Haugeland, John 1985 *Artificial intelligence: the very idea* . Cambridge, Massachusetts: MIT Press.
- Kuhn, Thomas S. 1957 *The Copernican revolution : planetary astronomy in the development of Western thought*. Cambridge, Massachusetts: Harvard University Press.