SIMON FRASER UNIVERSITY

S.85-41

MEMORANDUM

To: Senate

From: The Office of the Dean of Graduate Studies

Subject: Change of Title for Ling. 807-4

Date: September 4, 1985

Action undertaken by the Executive Committee, Senate Graduate Studies Committee, at its Meeting on May 13, 1985, gives rise to the following motion:

MOTION:

"That Senate approve and recommend approval to the Board of Governors, as set forth in the proposed title change for Ling. 807-4:

From: Computational Linguistics

To: Linguistic Theories and Computational Logic Grammars"

I am informed by Dr. T. Perry, Chairman of the D.L.L.L. Graduate Program Committee, that they wish to proceed with the proposed changes to Ling. 807-4, which were originally proposed by Dr. Hurtado. Despite Dr. Hurtado's untimely death, there is still ample expertise available in Computing Science and D.L.L.L. to offer the course.

Bruce D. Clayman

SIMON FRASER UNIVERSITY

MEMORANDUM

To: John Webster
Dean of Graduate Studies

From: Ross Saunders,
Associate Dean,
Faculty of Arts

Subject: Change of Title: LING 807

Date: May 1, 1985

The Faculty of Arts Graduate Studies Committee has approved the request of the Department of Languages, Literatures and Linguistics to change the title of LING 807-4 to Linguistic Theories and Computational Logic Grammars. Will you please place this item on the agenda of the next Senate Graduate Studies Committee.

Thank you.

R. Saunders

SR/mc
CC: T. Perry

Change of title

FROM: LING 807-4 Computational Linguistics

TO: LING 807-4 Linguistic Theories and Computational Logic Grammars
(also offered as CMPT 823)

RATIONALE: In the past, Linguistics students have taken computational linguistics by taking an appropriate Computing Science graduate course whenever offered, and receiving thereby credit for LING 807. This proposal formalizes cooperation between the departments (LING and CMPT) in this area, and introduces active participation in this area from the side of Linguistics by providing for participation of Linguistics faculty in the teaching of the retitled course. This, in turn, requires a truly interdisciplinary concept for the course involved; the present proposal addresses that need.

SIMON FRASER UNIVERSITY

MEMORANDUM

To: N.J. Lincoln

From: T. Perry, Chairman
Graduate Studies Committee

Subject: Change of title - LING 807

Date: February 1st, 1985

The attached proposal to change the title of LING 807 from "Computational Linguistics" to "Linguistic Theories and Computational Logic Grammars". Since this is being done in concert with a new course proposal, from Computing Science, I have attached somewhat more detailed information regarding the proposal than is ordinarily necessary for a change of title.

T. Perry
TP/hc

SIMON FRASER UNIVERSITY

MEMORANDUM

To: FIDS Graduate Studies Committee	From: A. Liestman
	Computing Science
Subject: New Course	Date: 19 October 1984

The Department of Computing Science Graduate Studies Committee approved the enclosed new course proposal CMPT 823/LING 807 in its meeting of October 19, 1984. This course is proposed as a joint course between the two departments and is to be taught by members of each department. It is intended that students from each department can take the course under the appropriate number when it is offered and can receive credit for only one of the two course numbers. The current course title and description of LING 807 will be changed accordingly.

The list of references has been sent to the Library to be checked for availability.

A. Liestman
Director of Graduate Programs

:ei

cc Tom Perry, Graduate
Program Chairman, DLLL

New Graduate Course Proposal Form

CALENDAR INFORMATION:

Department: Languages, Literatures and Linguistics Course Number: LING 807

Title: Linguistic Theories and Computational Logic Grammars

Description: This course describes the level of interaction between Linguistic Theories and Computational Logic Grammars. We examine some aspects of the Government-Binding theory, and we present some thoughts about the computational treatment of restriction of natural languages.

Credit Hours: 4 Vector: 4-0-0 Prerequisite(s) if any:

ENROLLMENT AND SCHEDULING:

Estimated Enrollment: 15-20 When will the course first be offered: Summer 1985

How often will the course be offered: every summer if enrollment justifies it, else every two years.

JUSTIFICATION:

This course is unique in that it offers an integrated, interdisciplinary approach to linguistic theory and its computational applications. We expect to motivate graduate students to pursue research, possibly in the context of a project presented to the French CNRS by researchers at the University of Clermont-Ferrand, to which both Hurtado and Dahl have been invited.

RESOURCES:

Which Faculty member will normally teach the course: Dr. V. Dahl, Computing Science
Dr. Alfredo Hurtado, DLLL

What are the budgetary implications of mounting the course: no special needs

Are there sufficient Library resources (append details): most references are from articles that we can photocopy. An inquiry about book resources has been sent.

Appended: a) Outline of the Course
b) An indication of the competence of the Faculty member to give the course.
c) Library resources

Approved: Departmental Graduate Studies Committee: Thomas C. Perry Date: FEB 11, 1985

Faculty Graduate Studies Committee: R Sampson Date: 6/12/85

Faculty: Date:

Senate Graduate Studies Committee: Webb Date: 19/6/85

Senate: Date:

LINGUISTIC THEORIES AND COMPUTATIONAL LOGIC GRAMMARS

The course is conceived a series of lectures and seminar discussions on advanced issues raised by the Government-Binding Theory and the Logic-based metagrammars.

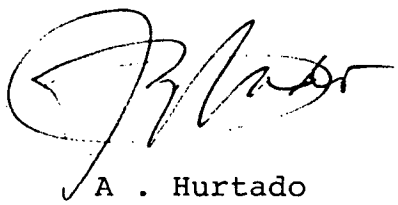
Three weeks of linguistic presentation by Hurtado.

Three weeks of Logic-based metagrammars by Dahl.

Six weeks of common presentation of specific problems, in particular , the incorporation of the θ-criterion in the computational representations.

If time allows both Hurtado and Dahl will present research in progress about quantification in natural language and some computational consequences.

Both instructors will be involved full time in the course.



A . Hurtado

LINGUISTIC THEORIES AND COMPUTATIONAL LOGIC GRAMMARS

I. Natural language representation levels: D-structure, S-structure, LF, LF'. Representing natural language through logic: LF', L3. Linguistic and computational aspects.

II. Logic-based metagrammars: a computational formalism for describing grammars. Automatic analysis of sentences. Types of logic meta-grammars and their respective expressive power: MGs, XGs, DCGs.

III. Government and Binding Theory. Realizations in computational terms: gapping grammars. The notion of Government Binding and the Theta-criterion.

IV. Quantification.

Required Reading

Radford, A. Transformational Syntax. Cambridge University Press, 1981.

Dahl, V. and Abramson, H. On Gapping Grammars. Proc. II International Conference on Logic Programming. Sweden, 1984.

Dahl, V. More on Gapping Grammars. SFU TR 84-7.

Recommended Reading

Chomsky, N. Lectures on Government & Binding, Foris, Dorchecht, 1981.

Chomsky, N. Some Concepts and Consequences of the Theory of Government and Binding, MIT Press, Cambridge, 1982.

Dahl, V. Quantification in a three-valued logic for natural language question-answering systems. Proc. IJCAI, 1979.

Dahl, V. Translating Spanish into logic through logic. American Journal of Computational Linguistics, vol. 13, pp. 149-164, 1981.

Dahl, V. and Abramson, H. Logic-based metagrammars (book in press).

Hurtado, A., 1984, "On the properties of logical form prime," in Cornell Working Papers of Linguistics.

1984, "The unagreement hypothesis," L. King and C. Maley, Selected Papers of the Thirteenth Linguistic Symposium on Romance Languages, John Benjamins, Amsterdam.

1985, "Clitic Chains" in A. Hurtado, (ed), Linguistic Theory and Spanish Syntax.