

## Team Teaching Proposal

**From: Stewart Shapiro (Philosophy) and Craig Roberts (Linguistics)**

**Date: December 31, 2014**

We propose to team-teach a course at the “dual career” (5xxx-level). Its title is “Natural Language Metaphysics”, with special emphasis on the nature of modality. Attached is a sample syllabus.

This material is thoroughly interdisciplinary. The following passage, from Emmon Bach’s 1989 *Informal Lectures on Formal Semantics*, pp.98-99, captures this.

What exactly are we claiming when we put forward our theories about model structures for natural languages? The enterprise looks very close to metaphysics or ontology, describing what some philosophers like to call “the ultimate furniture of the world”. Do things such as properties, kinds, quantities of matter, stages, and so on really exist? I would claim that those are philosophical or scientific questions, not linguistic ones. As a linguist, I feel perfectly justified in sidestepping such questions. Consequently, I like to say that what I am doing here is not metaphysics *per se* but *natural language metaphysics*. Some philosophers claim that all metaphysical enterprise is the analysis of language (this was a prominent part of the program of logical positivists like Rudolf Carnap). But here, too, as a linguist I can be – indeed, I think I *should* be – perfectly neutral. What we are doing is simply seeking linguistic evidence for the nature of the semantic structures that we seem to need to give a good account for the meanings of natural language expressions

There are two aspects to natural language metaphysics, and we will delve into both. First, natural languages seem to presuppose that the world is a certain way. In some cases, educated speakers know that the world is not that way. In other cases, the presuppositions are at least philosophically contentious. We will explore a variety of such cases, noting the ramifications for both metaphysics and for semantics. Second, natural language metaphysics concerns the role of linguistic theorizing. Suppose, for example, that there is a bit of theory that seems to be making the right predictions concerning various linguistic data, codifying speakers’ semantic intuitions. To what extent do we have to take the parts of the theory seriously, as getting at some aspect of reality? If, say, the theory invokes possible (or impossible) worlds, then does the success of the theory provide evidence that possible (or impossible) worlds exist, and, if so, do we have some insight into what these worlds are like? This is an instance of a general form of argument for realism in the philosophy of science. Moreover, beyond ontological assumptions, many contemporary linguistic theories posit structures over the domain of models for natural languages, as crucial for explicating logical relations between expressions which denote these entities—e.g. sortal distinctions between natural kinds, the individuals which realize those kinds, and the temporal stages of those individuals; lattices which reflect the count/mass distinction and relations over entities of those sorts; and mereological relations over events or situations. To what extent do these structures over elements of the domain reflect actual structures and relations in the world? There is evidence (Francez & Koontz-Garboden 2013) that across languages there are two kinds of adjectives, which display syntactic differences in how they are predicated, one pertaining to standard

qualitative distinctions, the other class taking mass denotations, which are gradable and amenable to comparison. Does this reflect an important distinction between kinds of properties in the world?

The course will benefit students from both disciplines, philosophy and linguistics. The skills and perspective of researchers in each area will be used to shed light on the basic concerns of the other. In addition, we will examine the enterprise of semantics from the perspective of philosophy of science, dealing with the usual range of philosophical questions concerning mature sciences, issues of confirmation, realism, and instrumentalism.

A course like this can only be team taught. We will be delving into contemporary semantic theories in a deep way, utilizing the materials and skills of linguistics, and we will be examining metaphysical, ontological, and logical areas from traditional philosophy.

The form of the team-teaching is described in the syllabus. Both instructors will fully participate in each session. On some days, the philosopher will take the "lead", presenting the material and leading the discussion, with the linguist acting as a discussant. On other days, it is the other way around.

Students will prepare seminar papers, to be given to the class each session; and each such paper will be assigned a commentator. To the extent that it is feasible, we hope to have linguistics-students commenting on philosopher students, and philosophy students commenting on linguistic students. All of the student work will be read by both instructors, and will be evaluated jointly.

Linguistics 5xxx/Philosophy 5xxx  
**Natural Language Metaphysics**  
OSU Spring 2015

Instructors: Craig Roberts (Linguistics)  
roberts.21@osu.edu

Stewart Shapiro (Philosophy) Email:  
shapiro.4@osu.edu Office hours:

Course description:

Many philosophers of language and metaphysicians make assumptions about what language can tell us about the nature of the world we live in. But this raises the general question of what Emmon Bach (1986) and others have called *natural language metaphysics*: What can the semantics of natural language tell us about the nature of the world itself, which we so effectively navigate with the aid of the linguistic descriptions we share? P. F. Strawson (1959) was interested in what we take to be a closely related issue, which he called *descriptive metaphysics*, pertaining to “the most general features of our conceptual structure”. We take it that *inter alia* he meant to address a question something like the following: Given the independently motivated systematic features of natural language semantics across languages and the structures arguably found over the elements of the domain of an empirically adequate semantic model for natural language, what conclusions can we draw about the corresponding conceptual structures, those involved in conceptualizing the world in which we interact and about which we so effectively share information via our use of language?

In this seminar we'll look at some specific sub-domains in semantics which are of special interest from the point of view of natural language semantics and descriptive metaphysics. After some general introductory discussion, we will spend time considering relevant aspects of the semantics of number; the semantics of plurals, mass and count; the semantics of events (eventualities) and aktionsarten; the relationships between the mass/count domains and those of the atelic/telic eventualities; the semantics of cardinal numbers; and the semantics of gradability. In the course of this investigation, we'll spend some time establishing the fundamental results in these domains from the literature in the tradition of compositional, truth conditional semantics in generative grammar. And in each, we'll then consider how various philosophers and semanticists have attempted to bring the semantic analyses to bear on metaphysical and ontological questions, always grounding these explorations in concrete linguistic data. To the extent possible, we'll aim to distinguish those conclusions which are warranted from the point of view of descriptive metaphysics from those which are more properly metaphysical *simpliciter*, a distinction which has not always been adequately observed in the literature—either in linguistics (e.g., from enthusiasts of the Sapir-Whorf Hypothesis) or philosophy (various metaphysical claims purported based on linguistic data).

There is another angle on this question to which we will pay particular attention at the outset, and will return to throughout our discussions. Word meaning is often conceived of in sharp terms—wherein the meaning of a word (or word-stem) is assumed to be amenable to clear definition, so that, e.g., the extensions of predicates can be clearly characterized. This was deemed a desideratum of an adequate language for science by the logical positivists and logicians like Russell and Carnap, and it is often implicitly presupposed by semantic theories which base their compositional interpretation of a constituent on the meanings of the words in that constituent and its syntactic structure. But in non-logical—what Waismann (1945) calls *empirical terminology*—this is arguably not an accurate characterization of meaning. Instead, (a) non-logical predicates have what Waismann calls *open texture*, areas at the edges of their applicability where it is indeterminate, just as there is an incompleteness about empirical concepts themselves, so that the corresponding terminology is not always well-defined in the logical sense wherein we can give both necessary and sufficient conditions for its use. And (b) correspondingly, this is arguably not a defect (as the logicians have had it) but a feature: The lexicon is itself in fact *generative* (Pustejovsky 1995), in that it is designed so that existent terminology can be extended in regular ways to address new semantic requirements, both by type-shifting and by semantic extension, both in nonce usages and in semantic change.

#### Course Requirements:

Each student is responsible to read all assigned papers *prior* to the class meeting on which it is discussed. In addition, by noon of the day before each meeting, each student must post a question or comment on Carmen for each of the papers marked with a \*, to be discussed in class that day.

Each student will also write one commentary paper, one short response to another student's commentary, and a term paper. For the commentary paper, each will select one of the course readings, in consultation with the instructors, and prepare a 5-10pp. critical commentary (e.g., taking issue with, supporting, extending, and/or comparing with other relevant work). The commentary will be posted on the Carmen site a few days before each meeting. Another student, preferably across fields (linguist commenting on philosopher, philosopher on linguist), will be assigned to prepare a 2-3 pp. response to the commentary. Both a brief outline of the commentary and the response will usually be presented in the last portion of the class for which the reading is assigned.

In addition, each student will write a substantial term paper. It may be based in part on the commentary, but needn't be, so long as it bears on the theme of the seminar. Each student will meet with the two instructors in a group meeting scheduled during the first part of the term to discuss possible topics.

### Course Schedule:

Subject to revision. Full references for assigned readings are given in the bibliography.

1/14: Open Texture

Readings: Waismann (1945), Waismann (1949-53)

1/21: Natural Language Metaphysics

Readings: Bach (1986a)\*, Pelletier (2011)\*

1/28: Lattice structures for plurals and mass terms

Reading: Link (1983)\*

2/4: Events and aktionsarten

Readings: Davidson (1967)\*, (1970), (1977); Dowty (1987)\*

2/11: Eventualities and Time

Readings: Bach (1986b)\*; McTaggart (1908)\*, Zwarts (2005)

2/18: Cardinals

Readings: Frege (1980) *Grundlagen* §§46, 55-83\*; Hodes (1984)\*

2/25: Cardinals, cont'd

Readings: \*Hofweber (2005), \*Geurts (2006), Moltmann (2011)

3/4: Possible visit by Pelletier

Readings: \*Pelletier (1975); Quine (1960) §20

3/6-7: Workshop on the semantics of Cardinals, The Ohio Union

3/18: Natural Language Ontology

Readings: Quine (1948)\*, Moltmann (2013)\*

3/25: Vagueness

Readings: Edgington (1997)\*, Shapiro (2003)\*, Sorensen (2013), Hyde (2011), Fine (1975), Machina (1976), Shapiro (2011)

4/1: Degrees and Gradability

Kennedy & McNally (2005)\*, von Stechow (2008), Morzycki (2013)

4/8: Measurement theory, Degrees, and Vagueness Sassoon (2010)\*

4/15: Measurement theory, Degrees, and Vagueness, cont'd

Sassoon (2010)\* (continued), Lasersohn (1999), Sauerland & Stateva (2007)\*

\*\*Note that we will have to reschedule this last meeting, to avoid conflict with Passover.

### Bibliography:

All readings are available on the Carmen website for Phil8600.

Bach, Emmon (1986) Natural language metaphysics. In R. Barcan Marcus et al. (eds.) *Logic, Methodology and Philosophy of Science VII*. Elsevier, 573-595.

Bach, Emmon (1986b) The Algebra of Events. *Linguistics and Philosophy* 9:5--16.

Davidson, Donald (1967) The logical form of action sentences. In N. Rescher (ed.), *The Logic of Decision and Action*, Pittsburgh: University of Pittsburgh Press, pp. 81-120.

- Davidson, Donald (1970) Mental events. In Lawrence Foster & J. W. Swanson (eds.) *Experience and Theory*, London: Duckworth.
- Davidson, Donald (1977) The method of truth in metaphysics. *Midwest Studies in Philosophy* II:244-254.
- Dowty, David (1987) Aspect and aktionsart. Ms., OSU.
- Edgington, Dorothy (1997) Vagueness by degrees. In R. Keefe & P. Smith (eds.) *Vagueness: A reader*. Cambridge, MA: MIT Press, 294-316.
- Fine, Kit (1975) Vagueness, truth and logic. *Synthese* 30.3/4:265-300.
- Frege, Gottlob (1950) *The Foundations of Arithmetic*, translation of J. L. Austin of *Die Grundlagen der Arithmetik* of 1884. Harper 2<sup>nd</sup> Revised Edition of 1980, New York.
- Geurts, Bart (2006) Take “five”: The meaning and use of a number word. In Svetlana Vogeleer & Liliane Tasmowski (eds.) *Non-definiteness and plurality*. Benjamins, Amsterdam/Philadelphia, 311-329.
- Hodes, Harold T. (1984) Logicism and the ontological commitments of arithmetic. *The Journal of Philosophy* 81,3:123-149.
- Hofweber, Thomas (2005) Number determiners, numbers, and arithmetic. *The Philosophical Review* 114.2:179-225.
- Hyde, Dominic (2011) Sorites paradox. *Stanford Encyclopedia of Philosophy*.
- Kennedy, Christopher & Louise McNally (2005) Scale structure, degree modification, and the semantics of gradable predicates. *Language* 81.2:345-381.
- Lasersohn, Peter (1999) Pragmatic halos. *Language* 75.3:522-551.
- Link, Godehard (1983) The Logical Analysis of Plurals and Mass Terms: A Lattice-theoretical approach. In Rainer Bauerle, Christoph Schwarze, and Arnim von Stechow (eds.), *Meaning, Use, and Interpretation of Language*. de Gruyter, Berlin.
- Machina, Kenton F. (1976) Truth, belief, and vagueness. *Journal of Philosophical Logic* 5.1:477-8.
- McTaggart, J. Ellis (1908) The unreality of time. *Mind* 17.68:457-474.
- Moltmann, Friederike (2011) Reference to numbers in natural language. *Philosophical Studies* 162.3:499-536.
- Moltmann, Friederike (2013) the semantics of existence. *Linguistics and Philosophy* 36:31-63.
- Morzycki, Marcin (2013) *Modification*, Chapter 3: “Vagueness, Degrees, and Gradable Predicates”. Ms. for Cambridge University Press’s series *Key Topics in Semantics and Pragmatics*.
- Pelletier, F. Jeffry (1975) Non-singular reference: Some preliminaries. *Philosophia* 5.4:451-465.
- Pelletier, Jeffry (2011) Descriptive metaphysics, natural language metaphysics, Sapir-Whorf, and all that stuff: Evidence from the mass-count distinction. *The Baltic International Yearbook of Cognition, Logic and Communication*. Vol.6: *Formal Semantics and Pragmatics*, DOI: 10.4148/biyclc.v6i0.1570. pp.1-46.
- Quine, Willard V.O. (1948) On what there is. *Review of Metaphysics* 2:21-38.
- Quine, Willard V.O. (1960) *Word and Object*. MIT Press.
- Sassoon, Galit (2010) Measurement theory in linguistics. *Synthese* 174:151-180.
- Sassoon, Galit W. (2013) *Vagueness, Gradability and Typicality*. Brill.

- Sauerland, Uli & Penka Stateva (2007) Scalar vs. Epistemic Vagueness: Evidence from approximators. *Proceedings of SALT 17*.
- Shapiro, Stewart (2003) Vagueness and conversation. In J.C. Beall & Michael Glanzberg (eds.) *Liars and Heaps*. Oxford University Press, 39-72.
- Shapiro, Stewart (2011) Vagueness and logic: Model theories for indeterminacy. Giuseppina Ronzitti (ed.) *Vagueness, a guide*. Dordrecht, Springer, 55-81.
- Sorensen, Roy (2013) Vagueness. *Stanford Encyclopedia of Philosophy*.
- von Stechow, Arnim (2008) Topics in degree semantics: 4 lectures. Handout 1: Degrees. Handouts from lectures at the École Normale Supérieure, Paris, September, 2008. Available at <http://www.sfs.uni-tuebingen.de/~astechow/Handouts/index.html>.
- Waismann, Frederick (1945) Verifiability, §II. In D.M. Mackinnon, F. Waismann & W.C. Kneale, Symposium: Verifiability. *Proceedings of the Aristotelian Society, Supplementary Volumes*, Vol. 19, Analysis and Metaphysics, pp.101-165. §II is pp.119-150. See especially pp.119-129.
- Waismann, Frederick (1949-1953) Analytic-Synthetic. *Analysis*. Part I: 10.2:25-40, 1949. Part II.11.2:25-38, 1950. Part III: 11.3:49-61, 1951. Part IV: 11.6:115-124, 1951. Part V: 13.1:1-14, 1952. Part VI: 13.4:73-89, 1953.
- Zwarts, Joost (2005) Prepositional aspect and the algebra of paths. *Linguistics and Philosophy* 28:739-779.







6 January 2015

David Manderscheid, Executive Dean and Vice Provost  
College of Arts and Sciences  
CAMPUS

Dear Dean Manderscheid,

I am pleased to provide this letter of support for the interdisciplinary dual-career 5000-level course proposed by Professors Craige Roberts of Linguistics and Stewart Shapiro of Philosophy entitled, "Natural Language Metaphysics." The proposed course is an excellent example of an offering that will promote the spirit of collaboration and cooperation between our two departments, while supporting diversity of scholarship in two areas of noted strength within the college. As the proposed syllabus and course description demonstrate, the course will provide innovative teaching and learning opportunities, including assigned cross-disciplinary commentary from the students in the two disciplines on seminar papers throughout the course. The structure and value of this dual perspective will be modeled by the co-faculty in the structure of their lectures, which themselves alternate between semantic theory and philosophical approaches, each time including a faculty lecture from one discipline followed by a discussant presentation from the other perspective.

This dual-career level course will enhance both the undergraduate and graduate programs in Linguistics. For advanced undergraduates, the course will expand on the basic knowledge provided in the undergraduate major course in semantics (Ling 4400, Linguistic Meaning) to create direct connections between primary constructs available in theories of linguistic meaning and those in philosophical and broader scientific theories. For entry-level PhD students in Linguistics and for graduate students in the language departments who require foundations in linguistics, the course will provide a broader perspective on the content and development of theoretical approaches to linguistic meaning, the bounds of what can or must be accounted for in semantic and pragmatic theories, and the relation between these and the relevant aspects of the philosophy of science. The course will increase students' sophistication of understanding of basic important underpinnings for the development of theory from a philosophy of science perspective. In addition, it will maintain important existing connections and develop new bases for collaboration between the students and faculty of our two departments.

Sincerely,

Shari R. Speer  
Professor and Chair



January 6, 2014

Dear Dean Manderscheid,

I am writing to indicate the Department of Philosophy's support for the interdisciplinary 5000-level course proposed by Professors Craige Roberts of Linguistics and Stewart Shapiro of Philosophy, entitled "Natural Language Metaphysics." The topic is an excellent one for a collaborative class of this kind, and the instructors are experienced teachers and interdisciplinary thinkers who are certain to provide a valuable learning experience to both undergraduates and graduate students who take the class.

The basic idea of the class is to explore to what extent can we learn something about the nature of the world from the best theory of the languages we use to navigate it. It will consider, for instance, the relationship between abstract items, relations, and categories that figure in various models of natural language (models from linguistics, primarily), and various metaphysical (philosophical) questions about the existence of those abstracta. The instructors proposal for how to teach the class, and in particular the ways in which student presentations with commenters from different disciplines are integrated with the presentations of the different instructors, strike me as an excellent model for how to foster high quality interdisciplinary discussion and collaboration.

Our department already has regular class offerings in both philosophy of language and metaphysics at the graduate and undergraduate levels. This class will complement those classes by allowing interested students to connect these issues with concrete and richly detailed semantic theories that are grounded in empirical facts about natural language.

I very much hope the College will be able to support this proposal, which helps to extend a long history of collaboration between members of our departments.

Sincerely,

Justin D'Arms  
Professor and Chair

