Cognitive Linguistics Day

Basis II, 2012

Aalborg University

Cognitive Linguistics Day

The speakers

Yoshikata Shibuya
Kyoto University of Foreign Studies

Kim Ebensgaard Jensen
Aalborg University

Cognitive Linguistics Day

- Lecture 1: Introduction to cognitive linguistics

  9.00-10:20

- Break

  10.20-10.40

- Cognitive semantics and the theory of embodiment

  10.40-12.00

- Syntax in cognitive linguistics

  13.00-14.20

- Break

  14.20-14.40

- Empiricism in Cognitive Linguistics
- 14.40-16.00

Lunch 12.00-13.00

What is cognitive linguistics?

Outline

- Some definitions
- The history of CL
- The main principles of CL
- The generalization commitment and the cognitive commitment
- Cognitive linguistics as a scientific discipline

What is cognitive linguistics?

Some definitions:

- CL is “the study of language in its cognitive function” (Geeraerts 1997: 9)
- CL aims “for a cognitively plausible account of what it means to know a language, how languages are acquired, and how they are used” (Taylor 2002: 4)
- CL is a subfield of cognitive science concerned with “everyday conceptualization, reasoning, and language.” (Lakoff 2002: 3)

What is cognitive linguistics?

CL in the 1970s

- CL emerged in the late 70s as a reaction against Chomskian linguistics – especially against the principles that:
  - The **isolationist** view: language is an autonomous module, separate from other aspects of cognition.
  - The **syntactophilia** of Chomskian linguistics: semantics/meaning is unimportant in linguistic descriptions.
  - The **ideal speaker-hearer** idea and the distinction between **competence** and **performance**: language competence and language performance are distinct, with competence being prioritized and performance being considered irrelevant to the description of language, because language performance is a degenerated version of language competence.

What is cognitive linguistics?

CL in the 1970s

- 1970s CL drew on findings in the cognitive sciences:
  - Prototype theory (e.g. Berlin and Kay 1969, Rosch 1973)
  - Gestalt theory & theories of perception (e.g. Rubin 1915, Koffka 1935, Köhler 1947)
  - Encyclopedic knowledge theories (e.g. Schank & Abelson 1977)
- Elements from these, and other, theories within the cognitive sciences figured prominently in early CL research and publications, which also questioned the principles of Chomskian linguistics.

What is cognitive linguistics?

CL in the 1970s

- Some early CL and pre-CL publications from this era are:
  - Fillmore, Charles J. (1977): 'Scenes-and-frames semantics'
  - Lakoff, George (1977): 'Linguistic gestalts'
  - Langacker, Ronald (1976): ‘Semantic representations and the Linguistic Relativity Hypothesis’
  - Talmy, Leonard (1976): ‘Semantic causative types’
  - Talmy, Leonard (1977). ‘Rubber sheet cognition in language’
  - Talmy, Leonard (1978). ‘The relation of grammar to cognition: a synopsis’.

What is cognitive linguistics?

CL in the 1980s

- The 1980s saw the establishment of CL as a theoretical framework, and the development of several theories within this framework, such as:
  - Embodiment theory (Johnson 1987)
  - Conceptual metaphor theory (Lakoff & Johnson 1980)
  - Prototype semantics (Lakoff 1987)
  - Frame semantics (Fillmore 1982)
  - Cognitive semantics (Talmy 1983, 1988a, 1988b)
  - Cognitive grammar (Langacker 1987, 1991)
  - Construction grammar (Fillmore et al. 1988)
- The 1980s also saw the publication of several important CL-based or CL-oriented monographs such as Lakoff & Johnson (1980), Lakoff (1987), Johnson (1987), Langacker (1987), Wierzbicka (1988), Lakoff & Turner (1989)

What is cognitive linguistics?

CL in the 1980s

- Important issues in this era were:
  - metaphors in language and thought
  - prototype categorization and lexical semantics
  - polysemy
  - psychological processes in lexical and grammatical semantics
  - the relation between lexical semantics and encyclopedic knowledge

What is cognitive linguistics?

CL in the 1990s

- With the establishment of several scientific journals, *Cognitive Linguistics* (established 1990) being the most important one, and the publication of numerous anthologies and monographs, CL became widely recognized as an influential subfield of linguistics and cognitive science.

What is cognitive linguistics?

CL in the 1990s

- The cognitive linguists of this era continued to explore the issues that were significant in the 1980s. In addition cognitive linguists turned their attention toward topics such as:
  - Language change
    - Change of lexical semantics (e.g. Geeraerts 1997)
    - Grammaticalization (e.g. Heine 1994)
  - Syntactic constructions and the organization of grammar (e.g. Goldberg 1995)
  - The role of performance/use in the forming of language competence (e.g. Hopper 1991, 1998)
  - The development of human cognition and the role of language therein (Tomasello 1999)

What is cognitive linguistics?

CL in the new millennium

- In the post-2000 era, cognitive linguistics has continually expanded as a framework of research into language and cognition, further exploring the previously mentioned areas, and applying the principles of cognitive linguistics to an increasing number of aspects of language, such as:
  - Language typology and language universals (e.g. Croft 2001)
  - Language acquisition (e.g. Tomasello 2003)
  - Language variation (e.g. Geeraerts et al. 2010)
  - The social and interpersonal reality of language (e.g. Croft 2009)
  - Language and culture (e.g. Verhagen 2004)

What is cognitive linguistics?

CL in the new millennium

- Furthermore the 2000s have seen:
  - A rapid development of construction grammar (e.g. Croft 2001, Boas 2003, Francis & Michaelis 2003, Bergen & Chang 2005)
  - The development of usage-based models of language competence and language acquisition (e.g. Tomasello 2003, Bybee 2006, Fried & Ostman 2006, Jensen 2012)
  - The development of empirical methodologies in CL drawing on, for instance, corpus linguistics (e.g. Gries 2003, Stefanowitsch & Gries 2004, Tummers et al. 2006)

What is cognitive linguistics?

Main principles of CL

- Croft & Cruse's (2004: 1) three principles/hypotheses that guide CL-research:
  - language is not an autonomous cognitive faculty
  - grammar is conceptualization
  - knowledge of language emerges from language use

What is cognitive linguistics?

Main principles of CL

- language is not an autonomous cognitive faculty:
  - language is subject to the same processes as general human cognition
  - language is subject to the same organizational principles as general human cognition
  - linguistic knowledge is conceptual knowledge (just like all other types of knowledge)
- This position is not a rejection of an innate human capacity for language; it is **a rejection of language as an autonomous special-purpose innate capacity**:

> Language is a distinct human cognitive ability, to be sure. From a cognitive perspective, language is the real-time perception and production of a temporal sequence of discrete, structured symbolic units. This particular configuration of cognitive abilities is probably unique to language, but the component cognitive skills required are not. (Croft & Cruse 2004: 2)

What is cognitive linguistics?

Main principles of CL

- grammar is conceptualization (Langacker 1987, 1991)
  - Conceptual structure cannot be reduced to truth-conditional correspondences with the world. Conceptual structure is experientially based (or embodied) and subject to construal and cognitive manipulation. Linguistic structure plays a role in the construal and organization of conceptual structure:
    - Large scale organization of encyclopedic knowledge
    - Small scale construal/conceptualization of the “experience to be communicated” (Croft & Cruse 2004: 3)
  - Conversely, conceptual structure influences language, such that linguistic structure reflects the categories and models that constitute encyclopedic knowledge.
- **Semiological** vs. **interactive** function of language (Langacker 1998: 1)
  - semiological function: "allowing thoughts to be symbolized by means of sounds, gesture, or writing“
  - interactive function: "embracing communication, expressiveness, manipulation, and social communion".

What is cognitive linguistics?

Main principles of CL

- knowledge of language emerges from language use:
  - linguistic competence is experientially based.
  - the system of a language is established, maintained, and changed through use.
  - language acquisition is **inductive**: the abstract and schematic categories and structures in the language system are generalizations of specific instances of use.

    “That is, categories and structures in semantics, syntax, morphology and phonology are built up from our cognition of specific utterances on specific occasions of use. This inductive process of abstraction and schematization does not lose the conventionalized subtleties and differences found among even highly specific grammatical constructions and word meanings.” (Croft & Cruse 2004: 3-4)

What is cognitive linguistics?

The main principles of CL

- The principles reflected in CL research and theory:
  - description of semantics in terms of conceptual structure
    - prototype categories
    - cognitive models & semantic frames
    - conceptual metaphors
    - figure-ground alignment
    - etc.
  - the application of psychological processes of conceptualization and perception in the description of semantics and meaning construction.
  - cognition-based theories of language competence:
    - language systems described as knowledge networks
    - usage-based models of language
  - the treatment of syntactic structures as meaningful and cognitively relevant

Two important commitments

- According to Lakoff (1990), CL is characterized by two primary commitments:
  - **Generalization commitment**: “a commitment to characterizing the general principles governing all aspects of human language. I see this as the commitment to undertake linguistics as a scientific endeavour.” (Lakoff 1990: 40)
  - **Cognitive commitment**: “a commitment to make one's account of human language accord with what is generally known about the mind and the brain, from other disciplines as well as our own.” (Lakoff 1990: 40)

Two important commitments

The generalization commitment

- The generalization commitment calls for phenomenological characterizations of aspect of language, or subfields of linguistics, in the form of scientific generalizations.

Two important commitments

The generalization commitment

- Lakoff's (1990: 40) own examples of such generalizations are:

  "In syntax: Generalizations about the distribution of grammatical morphemes, categories, and constructions.

  In semantics: Generalizations about inferences, polysemy, semantic fields, various kinds of semantic relationships, conceptual structure, knowledge structure, and the fitting of language to what we perceive, experience, and understand.

  In pragmatics: Generalizations about speech acts, discourse, implicatures, deixis, and the use of language in context.

  And so on, for morphology, phonology, etc."

Two important commitments

The generalization commitment

- Note that, these aspects of language, or subfields of linguistics, are not considered to be isolated from each other:

  “Of course, no a priori commitment is made as to whether these are separate subfields. It is an empirical matter, and empirical considerations suggest that they are not — that, for example, generalizations about syntax depend on semantic and pragmatic considerations.” (Lakoff 1990: 40)

Two important commitments

The cognitive commitment

- The cognitive commitment calls for the inclusion of cognitively plausible generalizations into language descriptions and, consequently, ”forces one to be responsive to a wide variety of empirical results from a number of disciplines” (Lakoff 1990: 40).

- This commitment ensures that CL-based research remains cognitively relevant, if not cognitively realistic.

Two important commitments

The cognitive commitment:

- Lakoff (1990: 40-42) mentions the following examples:

  “Categorization results from cognitive psychology, developmental psychology, and anthropology that demonstrate the existence of basic-levelcategorization and prototype effects.

  Psychophysical, neurophysiological, anthropological results about the nature of color perception and categorization.

  Results from cognitive psychology concerning human imaging capacities and the association of conventional imagery with language.

  Results from cognitive neuroscience and connectionism regarding the computational mechanisms of the brain.”

Two important commitments

The cognitive commitment:

- The desciplines that Lakoff mentions are, of course, not the only ones the cognitive linguists draw on; cognitive linguists have also made use of findings from the philosophy of the mind, artificial intelligence research, pedagogical reseach, literature and poetry studies, cultural studies, sociology, and even studies of architecture.

- As a result of the cognitive commitment, CL is, while a linguistic endeavor, essentially interdisciplinary.

Two important commitments

The interplay between the two commitments

- In many cases, the two commitments mesh in the sense that the generalizations made within the spheres of both commitments support each other, and the cognitive linguist arrives at linguistic generalizations which are cognitively relevan, or cognitively realistic.

- When they do not mesh, the cognitive commitment takes priority. That is, whenever there is incongruity between the traditional linguistic types of generalization and the generalizations from cognitive science, the cognitive linguist will have to:

  a) reject the traditional linguistic apperatus of description and adopt a cognition-oriented one.

  b) adjust the descriptive apperatus from linguistics such that it conforms to the need for describing the linguistic phenomenon in question in a cognitively relevant fashion.

Two important commitments

The interplay between the two commitments

- The prioritizing of the cognitive commitment reflects two factors:
  - The ambition of describing language in its cognitive function.
  - The general rejection of non-functionalist (or formalist) theories of language, which tend to isolate syntax from the rest of language, and the rest of language from general human cognition.

Two important commitments

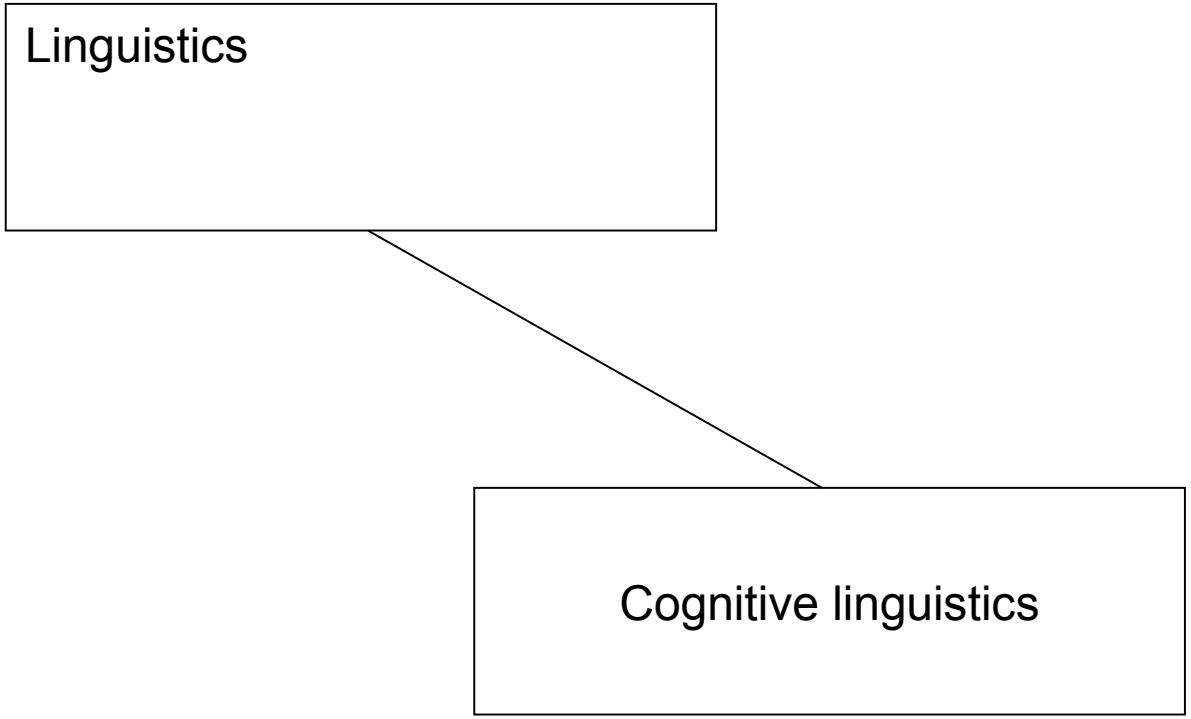
The interplay between the two commitments

- Thus, CL does not reject the validity of linguistics (as some might think); it only rejects formalist and isolating approaches to language.
- In fact, CL is largely considered a type of functional linguistics these days, because it, like other types of functional linguistics, treats language in relation to the context in which language exists.
- CL focuses on language as both a tool of interpersonal communication and as an integrated component in general human cognition.

The status of cognitive linguistics as a scientific discipline

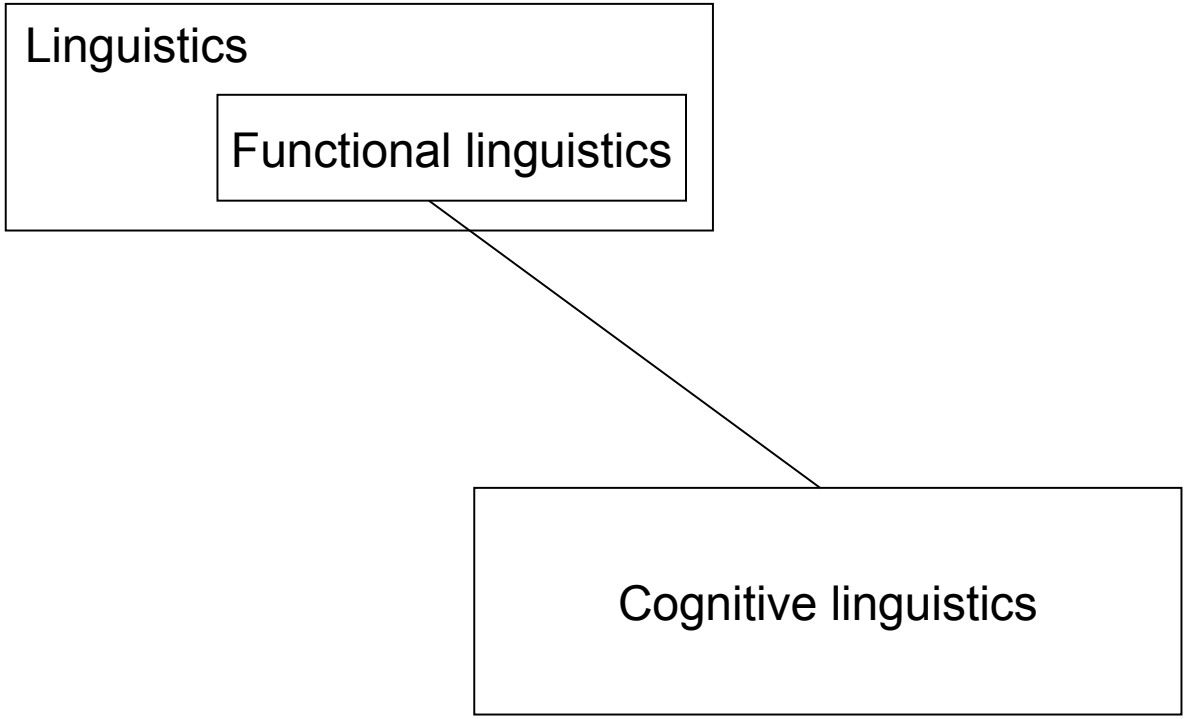
Cognitive Linguistics

The status of cognitive linguistics as a scientific discipline



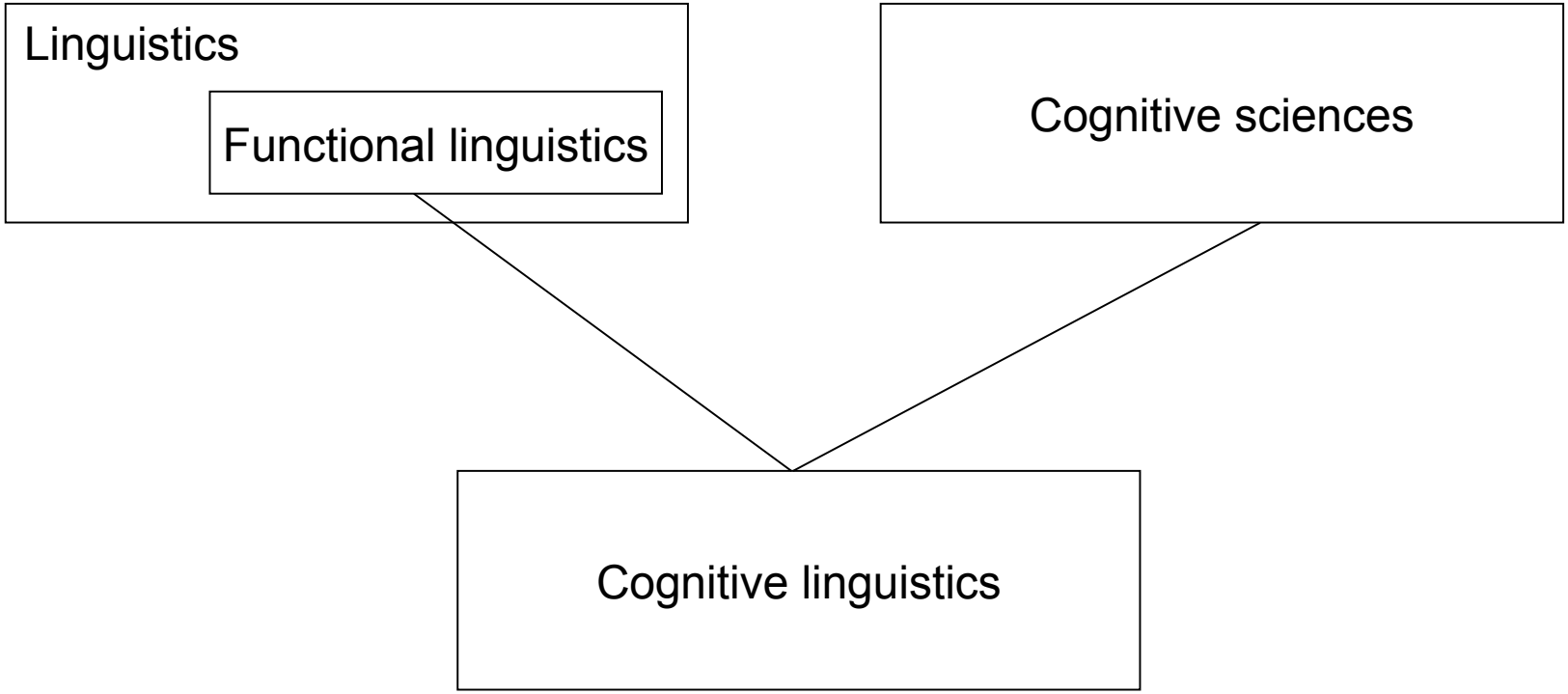
Cognitive linguistics is a linguistic discipline

The status of cognitive linguistics as a scientific discipline



Cognitive linguistics is a linguistic discipline… more specifically a functionalist linguistic discipline.

The status of cognitive linguistics as a scientific discipline



Cognitive linguistics is also a cognitive science on par with, say, cognitive anthropology, cognitive psychology, cognitive neuroscience etc.

The status of cognitive linguistics as a scientific discipline

CL as a framework

- CL is not a unified theory, or model, of language and cognition.
- CL is a collection of theories, models, approaches and methodologies all of which observe the cognitive commitment.
- CL is also a relatively new enterprise in linguistics and cognitive science, and is still very much ’under construction’.