# "Pedagogical Applications of Research into Embodied Grammar"

Laura A. Janda University of Tromsø

#### Overview

- What is the Role of Linguistics?
- Narrow Scope vs. Broad Scope agendas
- Three Examples of Theory and Application
  - Case meaning
  - Aspect meaning
  - Aspectual clusters of verbs
- Relevant Works in Theory and Application

### What is the Role of Linguistics?

- Pure theory science for science's sake
- Application science for other people too
  - creation of teaching materials, reference grammars, dictionaries
  - computer software: translation, language recognition, text interpretation
  - field work on languages, dialects
  - language planning/policy, intervention
- Cognitive linguistics
  - has a tradition of being accountable to other disciplines, so why not be accountable to society?
  - is transparent enough to be used in application

### Narrow Scope vs. Broad Scope

#### Different audiences, different goals

#### Narrow (theory-based)

- Scholarly publications
- Peer review
- Specific theoretical contributions

Both approaches can contribute to a research agenda

#### **Broad (application-based)**

- Pedagogical materials
- Complete coverage





## Linguistic research

Pedagogical materials



Further linguistic research



## Applications inspired by theory and theory inspired by applications

Three Examples

- Case meaning
- Aspect meaning

Aspectual clusters of verbs



In each instance, primary research served as the basis for pedagogical materials, and in turn, work on pedagogical materials led to further progress in research

### Case Meaning

#### **Main Ideas:**

- Most Slavic languages obligatorily mark all NPs with one of six or seven cases: N, A, D, G, L, I, (V)
- Each case is polysemous, with meanings arranged in a radial category, which forms a coherent whole
- Prototypical meanings are based on embodied physical experience; peripheral meanings are extended via metaphor and metonymy

## Case Meaning

#### An example:

- The Russian genitive case is used with prepositions meaning 'from' to indicate physical withdrawal and also with verbs meaning 'fear', 'be ashamed of' indicating emotional (metaphorical) withdrawal
- Physical withdrawal:

Doč' prišla iz školy
[Daughter-N came from school-G]
'My daughter has come from school'

Metaphorical withdrawal:

 Doč' bojalas'/stydilas' bednosti
 [Daughter-N feared/was ashamed poverty-G]
 'My daughter was afraid/ashamed of poverty'

### Case Meaning

#### Individual studies of case meaning:



Pragmatic & semantic (1988)
Dative & Instrumental (1993)
Genitive (1999)
Accusative (2000)

#### Pedagogical/linguistic resources:



Case Book for Russian (2002)
Case Book for Czech (2006)
Reference grammar of Czech (2000)

**DEMONSTRATIONS** 

Further case research inspired by applications



- Near-synonymy of different cases within Russian & across Slavic
- Comparison of time expressions across Czech, Polish, Russian
- MDS modeling of case across Slavic languages (Clancy 2006)
- Case as an element in construction grammar (with Solovyev)
- Use of case in attenuated agency (with Divjak)

### Aspect Meaning

#### **Main Ideas:**

- Slavic Aspect contrasts
  - Perfective vs. Imperfective
- This contrast is metaphorically motivated by embodied physical experience with
  - discrete solid objects (Perfective) vs.
  - fluid substances (Imperfective)
- This contrast is relevant at the level of event structure, discourse, and pragmatics

## Aspect Meaning

#### An example:

#### Discrete solid object:

Has shape/edges, is unique, two cannot occupy the same place

#### **Perfective event:**

Has clear beginning/ end, is unique, expresses sequences

Oleg sel v mašinu i poexal v restoran

'Oleg got into the car and drove to the restaurant'

#### Fluid substance:

Has no shape/edges, is not unique, two can be mixed in the same place

#### Imperfective event:

No clear beginning/ end, not unique, expresses simultaneity

Oleg nosil galstuk i ezdil na sportivnoj mašine

'Oleg wore a tie and drove a sportscar'

### Aspect Meaning

Perfective vs. Imperfective:

Metaphorical model (2004)

#### Pedagogical/linguistic resources:



User-friendly model for instructors (2003) Aspect in Russian Media Module

**DEMONSTRATION** 

# Further aspect metaphor research inspired by applications







- Differences in metaphorical extension across Slavic
- Conversion patterns and aspectual clusters
- Semantic motivations for aspectual clusters

### Aspectual Clusters of Verbs

#### **Main Ideas:**

- Traditional "pair" model fails to account for aspectual relationships among verbs
- Four different types of Perfective verbs can be distinguished on the basis of both meaning (metaphorically motivated) and word-formation
  - Natural Perfective, Specialized Perfective, Complex Act Perfective, Single Act Perfective
- An aspectual cluster contains an Imperfective Activity verb plus 0-4 types of Perfective verbs
- An implicational hierarchy predicts the structures of existing clusters

# Aspectual Clusters of Verbs An example:

```
Activity

ščipat' 'pinch/pluck'
```

> (Natural/Specialized Perfective)

o(b)ščipat' 'pinch/pluck'/vyščipat' 'pluck out'

> Complex Act

poščipat' 'pinch/pluck a while'

> Single Act

ščipnuť 'pinch/pluck once'

### Aspectual Clusters of Verbs

Aspectual clusters and their structures:



Study using linguistic database (2007) all morphological types

Pedagogical/linguistic resources:





hi-freq textbook verbs
Cluster Types for Russian Verbs
Exploring Emptiness database
DEMONSTRATION

## Further verb clusters research inspired by applications



 Place of motion verbs in clusters model



 Place of biaspectual verbs in clusters model



 Differences in token vs. type frequency effects in verb clusters



 Conceptual overlap in so-called "empty prefixes"



## Relevant Works: primary research



## Relevant Works: applications



Relevant Works: research inspired by applications



# Relevant Works: primary research

- 1988. "Pragmatic vs. Semantic Uses of Case", in *Chicago Linguistic Society 24–I: Papers from the Twenty–Fourth Regional Meeting*, ed. by Diane Brentari et al. Chicago: U of Chicago Press, 189–202.
- 1993. A Geography of Case Semantics: The Czech Dative and the Russian Instrumental (= Cognitive Linguistics Research, v. 4). Berlin: Mouton de Gruyter.
- 1999. "Peircean semiotics and cognitive linguistics: a case study of the Russian genitive", in *The Peirce Seminar Papers*, ed. by Michael Shapiro. New York/Oxford: Berghahn Books, 441–466.
- 2000. "A cognitive model of the Russian accusative case", in Trudy meždunarodnoj konferencii Kognitivnoe modelirovanie, No. 4, part I, ed. by R. K. Potapova, V. D. Solov'ev and V. N. Poljakov. Moscow: MISIS, 20-43.
- 2004. "A metaphor in search of a source domain: the categories of Slavic aspect", Cognitive Linguistics 15:4, 471-527.
- 2007. "Aspectual clusters of Russian verbs", *Studies in Language* 31:3, 607-648.



## Relevant Works: applications

- 2000. Czech (= Languages of the World/Materials 125), coauthored with Charles E. Townsend. Munich/Newcastle: LINCOM EUROPA. Online version
- 2002. *The Case Book for Russian*. co-authored with Steven J. Clancy. Bloomington, IN: Slavica. Online exercises
- 2002. "Sémantika pádů v češtině", in *Setkání s češtinou*, ed. by Alena Krausová, Markéta Slezáková, and Zdeňka Svobodová. Prague: Ústav pro jazyk český, 29–35.
- 2003. "A user-friendly conceptualization of Aspect", *Slavic and East European Journal* 47:2, 251–281.
- 2006. *The Case Book for Czech*. co-authored with Steven J. Clancy. Bloomington, IN: Slavica. Online exercises
- Submitted. "Beyond the pair: Aspectual clusters for learners of Russian", coauthored with John J. Korba.
- 2007. "Studenty-pol'zovateli nacional'nogo korpusa russkogo jazyka", in Nacional'nyj korpus russkogo jazyka i problemy gumanitarnogo obrazovanija, edited by Nina Dobrushina, Moscow: Teis. 59-72.
- 2008. "Beyond the pair: Aspectual clusters for learners of Russian", coauthored with John J. Korba, *Slavic and East European Journal* 52:2, 254-270.
- Aspect in Russian Media Module, Cluster Types for Russian Verbs



## Relevant Works: research inspired by applications

- 2002. "Cases in collision, cases in collusion: the semantic space of case in Czech and Russian", in Where One's Tongue Rules Well: A Festschrift for Charles E. Townsend, ed. by Laura A. Janda, Steven Franks, and Ronald Feldstein. Columbus, Ohio: Slavica, 43-61.
- 2002. "Cognitive hot spots in the Russian case system", in Michael Shapiro, ed. *Peircean Semiotics: The State of the Art* (= *The Peirce Seminar Papers* 5). New York: Berghahn Books, 165–188.
- 2002. "The conceptualization of events and their relationship to time in Russian", in *Glossos* 2 at <a href="http://www.seelrc.org/glossos/">http://www.seelrc.org/glossos/</a>.
- 2002. "The Case for Competing Conceptual Systems", in Cognitive
   Linguistics Today (= Łódź Studies in Language 6), ed. by Barbara
   Lewandowska-Tomaszczyk and Kamila Turewicz, Frankfurt: Peter Lang,
   355-374.
- 2002. "Concepts of Case and Time in Slavic", in *Glossos* 3 at <a href="http://www.seelrc.org/glossos/">http://www.seelrc.org/glossos/</a>.
- 2004. "Border zones in the Russian case system", in *Sokrovennye smysly* (a festschrift for Nina D. Arutjunova), ed. by Ju. D. Apresjan. Moscow: Jazyki slavjanskoj kul'tury, 378–398.
- 2004. "The Dative Case in Czech: What it Means and How si Fits in", in the published proceedings of the annual meeting of the Společnost pro vědy a umění 2003, published in 2004 at: <a href="http://www.svu2000.org/conferences/papers.htm">http://www.svu2000.org/conferences/papers.htm</a>.



## Relevant Works: research inspired by applications

- 2006. "A Metaphor for Aspect in Slavic", *Henrik Birnbaum in Memoriam* (=International Journal of Slavic Linguistics and Poetics 44-45, 249-60.
- Clancy, Steven J. 2006. "The Topology of Slavic Case: Semantic Maps and Multidimensional Scaling", in Glossos 6, at <a href="http://seelrc.org/glossos/issues/7/">http://seelrc.org/glossos/issues/7/</a>.
- 2007. "What makes Russian Bi-aspectual verbs Special", in: Dagmar Divjak and Agata Kochanska, eds. *Cognitive Paths into the Slavic Domain. Cognitive Linguistics Research.* Berlin/New York: Mouton de Gruyter. 83-109.
- 2008. "From Cognitive Linguistics to Cultural Linguistics", *Slovo a smysl/Word and Sense* 8 (2008), pp. 48-68.
- 2008. "Semantic Motivations for Aspectual Clusters of Russian Verbs". In Christina Y. Bethin, ed. *American Contributions to the 14th International Congress of Slavists, Ohrid, September 2008.* Bloomington, IN: Slavica Publishers. pp. 181–196.
- 2008. "Ways of attenuating agency in Russian", coauthored with Dagmar Divjak. Impersonal Constructions in Grammatical Theory, edited by Anna Siewierska, a special issue of Transactions of the Philological Society (v. 106), 138–179.
- 2008. "Transitivity in Russian from a Cognitive Perspective", in *Dinamičeskie modeli: Slovo. Predloženie. Tekst. Sbornik statej v čest' E. V. Padučevoj*, edited by Galina Kustova. Moscow: Jazyki slavjanskoj kul'tury. 2008. pp. 970–988.
- 2009. "Totally normal chaos: The aspectual behavior of Russian motion verbs", Harvard Ukrainian Studies vol. 28, 183-193.
- ...And many more forthcoming

## The end

