

Annual Report for Period:09/2005 - 09/2006**Submitted on:** 08/01/2006**Principal Investigator:** Partee, Barbara H.**Award ID:** 0418311**Organization:** U of Massachusetts Amherst**Title:**

The Russian Genitive of Negation: Integration of Lexical and Compositional Semantics

Project Participants**Senior Personnel****Name:** Partee, Barbara**Worked for more than 160 Hours:** Yes**Contribution to Project:**

Centrally involved in all aspects of the project. Supported by this grant for 70% effort for 1 summer month in Moscow each year. Co-author with Borschev of most of the principal publications connected with the project. Leader of research meetings in Moscow during spring semester 2005, summer 2006. Supervisor of Research Assistants. Lead responsibility for planning and organizing of project.

Name: Borschev, Vladimir**Worked for more than 160 Hours:** Yes**Contribution to Project:**

Also centrally involved in all of the activities and results of each year. Supported by this grant 12.5% effort 4 months in Amherst (= .5 mo acad); 20% effort 4 months in Russia (= .8 mo acad); and 70% effort 1 month summer in Russia (= .7 mo summer). Co-author with Partee of most of the principal publications connected with the project.

Post-doc**Graduate Student****Name:** Jeschull, Liane**Worked for more than 160 Hours:** Yes**Contribution to Project:**

Liane Jeschull, a visiting graduate student from the University of Leipzig spending 2004-05 at the University of Massachusetts, was a Research Assistant on the project for 300 hours in the Spring Semester of 2005. Approximately half her time was spent assisting the PI with bibliographic work, with communication between Amherst and Moscow, and with other related assistance to the PI. The other half of her time was spent carrying out research on the relationship between the Russian Genitive of Negation construction and the semantics of verbal aspect in transitive predicates. See Activities.

Name: Verbuk, Anna**Worked for more than 160 Hours:** Yes**Contribution to Project:**

Anna Verbuk, a Ph.D. student at the University of Massachusetts, Amherst, served as a Research Assistant on the project for 80 hours in the Summer of 2005 and for 380 hours in the Spring semester of 2006. In the Summer of 2005 approximately half her time was spent assisting the PI and co-PI with bibliographic work, checking Russian data, and other related assistance, and half on a research project on the acquisition of the semantics of Russian ili 'or' in positions under the scope of negation. She also spent 13 days in Moscow during Spring semester 2005, where she presented a paper in a grant-related workshop and consulted with Russian linguists and native speakers on several topics in Russian syntax and semantics. In the Spring of 2006, she spent about 25% of her time assisting the PI and co-PI long-distance during their semester in New Zealand, and about 75% of her time on completing and writing up her project on Russian ili. See more under Activities and Findings.

Name: Moulton, Keir**Worked for more than 160 Hours:** No**Contribution to Project:**

Keir Moulton, a Ph.D. student at the University of Massachusetts, Amherst, served as a Research Assistant on the project for 80 hours in the Summer of 2005 and 40 hours in the Summer of 2006. In Year 1, his principal contribution was to help the PI and

co-PI investigate the hypothesis that the Genitive of Negation construction involves a 'weakening' of the semantics of the Genitive-marked NP, in comparison to corresponding Nominative and Accusative-marked NPs, by searching for work on analogous phenomena in other languages. Part of his time was spent on his own related research on the semantics of intensional-object constructions. In Year 2, he has assisted the PI with grant-related administrative duties. He is pursuing research on the interaction between the lexical semantics and syntax of inherently reflexive verbs (Reinhart and Reuland 1996), concentrating on self-action predicates (Klaiman 1991). He is testing a hypothesis that the semantics of such predicates is not derived compositionally (contra Reinhart and Siloni 2005) but a property of certain verb roots. He is currently investigating why such lexical properties of roots (sometimes) leads to certain syntactic properties shown by reflexive constructions, such as unaccusativity.

Name: Zabbal, Youri

Worked for more than 160 Hours: No

Contribution to Project:

Youri Zabbal, a Ph.D. student at the University of Massachusetts, Amherst, served as a Research Assistant on the project for 80 hours in the Summer of 2005. Approximately half of his time has been spent helping the PI and co-PI develop a website for the project. The other part of his time has been spent on his own related research on the semantics of proper names when they are coerced into 'weak' readings in various constructions in various languages, something which seems to happen in the Genitive of Negation construction, where it constitutes an unsolved problem for most theories of the semantics of Genitive of Negation. See more under Activities.

Name: Schwarz, Florian

Worked for more than 160 Hours: Yes

Contribution to Project:

Florian Schwarz, a Ph.D. student at the University of Massachusetts, Amherst, served as a Research Assistant on the project for 380 hours in the Fall of 2005. He helped to organize the NSF project meetings held in Fall 2005 at UMass and assisted the PI in bibliographic and other research-related matters. His principal contribution has been a study of intensional transitive verbs, which may directly relate to the Genitive of Negation construction, as proposed by Neidle and most recently in Olga Kagan's work. He presented this work at SALT 16 in Tokyo, Japan, and at the Milan Meeting 2006. See more under Activities and Findings.

Name: Deal, Amy Rose

Worked for more than 160 Hours: No

Contribution to Project:

Amy Rose Deal, a Ph.D. student at the University of Massachusetts, Amherst, served as a Research Assistant on the project for 80 hours in the Summer of 2006. Her main contribution to the project was an investigation of 'weak' objects in the so-called antipassive construction in Nez Perce, an endangered Penutian language. This research involved both work from grammars and corpora and a field trip to obtain more nuanced semantic data in July 2006. Similarities between antipassive constructions and the Russian Genitive of Negation have been argued for by Bittner (p.c. to P.I.), whose work on antipassives in Greenlandic Eskimo was discussed in a Fall 2005 project meeting at UMass (see Activities section).

Name: Rubinstein, Aynat

Worked for more than 160 Hours: No

Contribution to Project:

Aynat Rubinstein, a Ph.D. student at the University of Massachusetts, Amherst, served as a Research Assistant on the project for 45 hours in the Summer of 2006. Approximately one quarter of her time was spent on assisting the PI with grant-related administrative duties. The majority of her time was dedicated to her own related research on lexical and compositional aspects of the semantics of reciprocal verbs. At the heart of this project lies the alternation that relates non-reciprocal transitive verbs to two reciprocal constructions in Russian, English, and other languages. She is currently investigating the properties of comitative phrases in reciprocal constructions, and testing their relationship to the event semantics of high applicatives (Pylkkönen 2002).

Undergraduate Student

Name: Lastovkina, Galina

Worked for more than 160 Hours: No

Contribution to Project:

In the Fall semester of Year 1, Galina Lastovkina helped the PI and co-PI with some exploratory corpus searches of several Russian corpora, studying the alternation of Genitive and Nominative and of Genitive and Accusative with various classes of verbs and with variation of several other relevant parameters.

Research experience for undergraduates was not a planned part of this project, but it happened that one of Partee's very good undergraduate students from her 'mathematics for linguists' course who happens to be a native speaker of Russian, Galina Lastovkina, inquired of Partee (and other faculty) at the start of the Fall semester 2004 whether we had any possible research projects that she might help us with and earn a little money at the same time. It was serendipitous timing, and we happily took her on to help us with some initial trial 'Google' searches for certain kinds of Genitive of Negation sentences that we were then working on. Her first assignment was to read about our project in the grant proposal and several key articles and discuss with us some of the key ideas that were new to her. Her second assignment was to learn something about existing Russian corpora and to compare some trial searches on existing corpora with trial searches on Google. As the semester progressed, she became proficient and was able to begin developing some hypotheses of her own to test further. She was away on exchange study in Year 2 of the project, but we hope to employ her again in Year 3, with responsibilities increasing as her research skills and linguistic sophistication increase.

Technician, Programmer

Other Participant

Name: Paducheva, Elena

Worked for more than 160 Hours: Yes

Contribution to Project:

180 hours consulting during spring semester in Moscow in Year 1, also 180 hours during January and summer Year 2. Active participation in research meetings in Moscow, presentation of papers at conferences, co-author with P.I.s of one paper, author of several others on project topics. A crucial member of the research team. Has contributed original ideas concerning the lexical and compositional semantics of the Genitive of Negation construction and related constructions in Russian, and critical comparative evaluation of American and Russian theoretical work on synthesis of lexical and formal semantics. See Activities, Findings. Paducheva is a senior and highly respected Russian semanticist and an expert on this construction in particular, and her participation is central in building ties between Russian and Western semantics.

Name: Rakhilina, Ekaterina

Worked for more than 160 Hours: Yes

Contribution to Project:

180 hours consulting during spring semester in Moscow in Year 1, also 180 hours during January and summer Year 2. Active participation in research meetings in Moscow, presentation of papers at conferences. She is playing a leading role in studying previous corpus-based work on the Russian Genitive of Negation by Mustajoki and others, and is planning new corpus work with the Russian National Corpus, of which she is one of the developers. Rakhilina, Head of the Department of Linguistic Research of VINITI (the institute of the Russian Academy of Sciences where Paducheva and Borschev also work), is a senior and highly respected Russian semanticist with close ties to the Cognitive Linguistics community in France and Europe, and active in the mentoring of the next generation of Russian semanticists; her participation is also central in building ties between Russian and Western semantics. Taught a seminar on Genitive of Negation at Russian State Humanities University (RGGU) in Year 2. See Activities, Findings.

Name: Testelet, Yakov

Worked for more than 160 Hours: Yes

Contribution to Project:

180 hours consulting during spring semester in Moscow in Year 1, also 180 hours during January and summer Year 2. Active participation in research meetings in Moscow, presentation of papers at conferences, co-author with P.I.s of one paper. He is a leading Russian syntactician, typologist, and field linguist, and has helped to introduce the younger generation of Russian linguists to contemporary generative grammar, while pointing out problems for current theories posed by facts of Slavic, Caucasian, and other language families. He is the most senior syntactician on our project, and has been crucial in helping us to evaluate competing approaches to the syntax-semantics interface for the Genitive of Negation construction and related constructions. See Activities, Findings.

Name: Yanovich, Igor

Worked for more than 160 Hours: No

Contribution to Project:

8 days consulting during spring semester in Moscow in Year 1, 8 days summer Year 2. Yanovich is a young Moscow linguist

specializing in semantics and syntax. He played a leading role in developing the new arguments concerning constituent vs. sentential negation in our group's 5-authored presentation for FASL 14, and was also one of the main founders and organizers both of the Fall 2004 Semester semantics reading group in Moscow and of the annual workshop Formal Semantics in Moscow, held in Spring 2005 and Spring 2006. (see Activities, Findings sections).

Research Experience for Undergraduates

Organizational Partners

Russian Academy of Sciences

The co-P.I. (Borschev) and two of the main Russian consultants on the project (Paducheva and Rakhilina) are all full-time research scientists at the Russian Institute for Scientific and Technical Information (VINITI) of the Russian Academy of Sciences. Rakhilina is the Head of their department, the Department of Linguistic Research.

During the 7 months of year 1 and the 4 months of year 2 when the P.I. was in Moscow, almost all of the weekly research meetings were held at VINITI.

(No official organizational partnership; VINITI bureaucracy not involved.)

Other Collaborators or Contacts

1. Informal collaboration with other faculty, graduate students, and visitors at the University of Massachusetts. UMass linguists are familiar with our research in this area through prior colloquia, discussions, and our early papers on this topic.
2. The co-PI and two of the three official consultants are senior researchers at VINITI, the All-Russian Institute of Scientific and Technical Information, an Institute of the Russian Academy of Sciences in Moscow; most of the scientific seminar meetings that we have held in 2005 and 2006 and have taken place there. In addition to these regular meetings, we have had informal discussions on this and related topics with other Russian colleagues in Moscow, some of whom have become more actively involved in the project, especially Igor Yanovich.
3. In Year 1, Partee interacted with students and faculty attending her Fulbright lectures at Moscow State University and Russian State University for the Humanities, where she included in both courses a number of lectures relating to negation, diathesis shift, negative polarity phenomena, and the Genitive of Negation. Partee and Borschev interacted for two weeks with students and faculty attending the New York Institute in Cognitive and Cultural Studies at the University of St. Petersburg in July of 2005. In both places we had opportunities to discuss our work on the Genitive of Negation and our perspectives on the potential for integration of western formal semantics with Russian lexical semantics. We also had further interesting interactions with the American syntactician John Bailyn in St Petersburg; Bailyn is one of the main specialists on the syntax of the construction, and we are working on its semantics; we have learned quite a lot from each other.
4. In Year 1, during the Partee's participation in the KNAW workshop in Amsterdam, she had a chance to interact with David Beaver, who has recently been working on existential sentences in a number of languages and who had interesting reactions to our work on Genitive of Negation. She also had a chance to learn more about Optimality-Theoretic work in semantics, which could prove very relevant to this problem area. In Year 2, Partee corresponded and exchanged papers with Dmitry Levinson, a Russian graduate student at Stanford working with Beaver and Paul Kiparsky on topics that include the Genitive of Negation.
5. In Year 1, during Partee and Borschev's two-week lecture series trip to Spain, we consulted with Louise McNally at the University of Pompeu Fabra in Barcelona. Her work on property-type interpretations of weak NPs in existential sentences and elsewhere has been one important source of ideas for our work on weak interpretations of Gen-Neg NPs in Russian.
6. In Year 1, during the conference participation by Partee, Borschev, and Paducheva in Israel reported in the Activities section, we had a chance to consult further with colleagues Hana Filip, Hans-Robert Mehlhig, Susan Rothstein, and Malka Rappaport Hovav, all of whom have worked on topics that intersect with the problems of the Genitive of Negation. Interactions with these colleagues continued in Year 2 as we prepared our papers for the conference volume and critiqued and commented on one another's papers.
7. In Year 2, Partee and Borschev interacted with colleagues in Georgia (the country) and other international participants at a conference on Logic and Language in Batumi, where we presented a paper on our work on this project. This was Partee's third visit to Georgia, and our relations with a number of colleagues there have become quite close. Partee has on a number of occasions in years 1 and 2 found ways to help with the professional development of formal linguistics in Georgia and with the international recognition of some of the leading Georgian linguists (including the election of the President of the Georgian Academy of Sciences, the linguist Thomas Gamkrelidze, as a foreign honorary member of the National Academy of Sciences, nominated by Partee and elected in 2006.)

Activities and Findings

Research and Education Activities: (See PDF version submitted by PI at the end of the report)

See separate Activities pdf file.

Findings: (See PDF version submitted by PI at the end of the report)

See separate Findings pdf file.

Training and Development:

The project makes a direct contribution to professional development of the Research Assistants, who work with the P.I. and also have opportunities to develop subprojects of their own which in a number of cases lead to conference presentations and publications.

International training and development were promoted by our (Partee and Borschev) associated lecture series on the topic of the project in Spain and our two-week short course in a summer school in Cognitive Science and Cultural Studies organized by John Bailyn and Russian colleagues in St. Petersburg in Year 1.

Partee has taught formal semantics at RGGU in Moscow during spring semesters since 1998, and both at RGGU and MGU (under a Fulbright grant) in Spring 2005. The research of the grant has figured in these courses, including during the three years when the proposal was being written and revised, and students have contributed useful ideas on a number of occasions. As part of her activities in Moscow, Partee has been helping advanced students and young faculty make increased contact with western colleagues and gain greater access to western linguistic literature, and has helped Russian colleagues and students with the art of writing abstracts for western conferences, and with editing the English versions of their handouts and papers. The student-organized Formal Semantics Reading Group in Moscow in Fall 2004 and the First and Second Annual Workshops on Formal Semantics in Moscow in April 2005 and April 2006 (described in 'Activities') attest to the increasing numbers of students in Russia who are becoming well-versed in formal semantics, and more generally familiar with contemporary Western as well as Russian work in linguistics. At the May 2005 meeting of Formal Approaches to Slavic Linguistics (FASL 14) in Princeton, a record number of young Russian linguists were authors or co-authors of presented papers, and most of those had been students in Partee's Moscow classes at some time or had to some degree been mentored by Partee.

One young Moscow linguist, Igor Yanovich, came up with one of the main ideas that led to our 5-author FASL paper, Borschev et al (in progress), and became a junior consultant on our grant. Yanovich reports on the value of the grant-related work for his professional development as follows: 'The work on Genitive of Negation, numerous discussions on problematic issues, and especially the work on the joint paper Borschev et al. (2005) with the four co-authors and the international interaction by correspondence with senior researchers as Laurence Horn (Yale) and Kai von Stechow (MIT) on the problems addressed in this paper has broadened my linguistic interests and has increased my qualification as a researcher. Moreover, since the five authors assume rather different frameworks and theoretical systems, the work on the paper was a great experience of integrating insights formulated in such different traditions as, for instance, that of Russian semantics and of Western formal semantics, into a single analysis. If not for the grant support (consulting and travel money), I would not have the possibility to visit SALT 15 at UCLA and FASL 14 at Princeton. These conferences have given me an opportunity to present my findings, as well as to learn about recent findings of other researchers in the field and to get acquainted with fellow scientists from all over the world.' Yanovich is a promising young scholar, and the grant is simultaneously benefiting his development and helping to increase the dissemination of his valuable research results to the broader research community.

In Year 2, Partee's teaching at the University of Canterbury in New Zealand brought formal semantics to a new audience of students and auditing faculty, and the topics of both the current grant project and our previous project on the semantics of possessives figured prominently in the syllabus.

Also in Year 2, Rakhilina's seminar on the Genitive of Negation at RGGU (see Educational Activities) offered good training to her students in how to carry out and present original research; in their workshop presentation to the project group, it was clear that for some of them it was their first experience in preparing a handout for a public lecture, and the admirable professionalism of the most advanced of them provided an excellent model for the novices.

The grant also helps the three Russian consultants attend conferences in Europe and/or the U.S, primarily for the purpose of disseminating the work of the project. But in addition, the contacts and ideas they gain at such conferences enrich their teaching and mentoring of Russian students and young colleagues. Interactions between Russian and Western researchers and advanced students are becoming steadily more common, and have clearly been helped by the previous grant to Borschev and Partee (990578) and by the present one.

Outreach Activities:

The project contributes to US-Russian scientific understanding and cooperation through the participation of the Russian consultants on the project, the increasing interaction among Russian and Western scholars described in other parts of this report, and the scientific activities of the P.I. and co-P.I. in Moscow for part of every year.

Journal Publications

Paducheva, Elena V., "Effekty snjatoj utverditel'nosti: global'noe otricanie. (Effects of weakened assertiveness: global negation.)", *Russkij Jazyk v Nauchnom Osveshchenii*, p. 17, vol. 10.2, (2005). Published

Paducheva, Elena V., "Eshche raz o genitive sub"jekta pri otricanii (Once more about Genitive of Subject under Negation)", *Voprosy Jazykoznanija*, p. 84, vol. 2005.5, (2005). Published

Testelefs, Yakov G., "Review of Karimi S., ed., *Word Order and Scrambling*, 2003. Oxford:Blackwell", *Voprosy jazykoznanija*, p. 121, vol. 2005.4, (2005). Published

Paducheva, Elena V., "Genitiv dopolnenija v otricatel'nom predlozhenii. (Genitive of Object in negative sentences)", *Voprosy Jazykoznanija*, p. , vol. 2006.5, (). Accepted

Borschev, Vladimir, "Nacional'nyj korpus russkogo jazyka - komu eto nuzhno? [Russian national corpus - who needs it?]", *Nauchno-Tekhnicheskaja Informacija, Seria 2* [Scientific and Technical Information, Series 2], p. , vol. 40.11, (2006). Accepted

Books or Other One-time Publications

Fedorova, O. and I. Yanovich, "Early preferences in relative clause attachment: The effect of working memory differences", (2006). article in book, Published

Editor(s): James Lavine, Steven L. Franks, Mila Tasseva-Kurktchieva and Hana Filip
Collection: *Formal Approaches to Slavic Linguistics: The Princeton Meeting 2005 (FASL 14)*
Bibliography: Michigan Slavic Publications, Ann Arbor, pp 113-128

Paducheva, Elena V. and Mati Pentus, "Formal and informal semantics of telicity", (). article in book, Accepted

Editor(s): Susan Rothstein
Collection: *Theoretical and Cross-linguistic Approaches to the Semantics of Aspect*
Bibliography: Amsterdam: John Benjamins

Partee, Barbara H., "Negation, Intensionality, and Aspect: Interaction with NP Semantics", (). Chapter in book, Accepted

Editor(s): Susan Rothstein
Collection: *Theoretical and Cross-linguistic Approaches to the Semantics of Aspect*
Bibliography: Amsterdam: John Benjamins

Partee, Barbara H. and Vladimir Borschev, "The semantics of Russian Genitive of Negation: The nature and role of Perspectival Structure", (2004). Chapter in book, Published

Editor(s): Kazuha Watanabe and Robert B. Young
Collection: *Proceedings of Semantics and Linguistic Theory (SALT) 14*
Bibliography: Ithaca, NY: CLC Publications. 212-34.

Partee, Barbara H. and Vladimir Borschev, "Existential sentences, be, and the Genitive of Negation in Russian", (). Chapter in book, Accepted

Editor(s): Ileana Comorovski and Klaus von Heusinger
Collection: *Existence: Semantics and Syntax*
Bibliography: Dordrecht: Kluwer/Springer

Partee, Barbara H., "A note on Mandarin possessives, demonstratives, and definiteness", (). Chapter in book, Accepted

Editor(s): Gregory Ward and Betty Birner
Collection: *Drawing the Boundaries of Meaning: Neo-Gricean Studies in Pragmatics and Semantics in Honor of Laurence R. Horn*
Bibliography: Amsterdam: John Benjamins, pp 269-286

Partee, Barbara H., "Compositionality and coercion in semantics. Case study: The dynamics of adjective meaning", (). Chapter in book, Accepted

Editor(s): Gerlof Bouma, Irene Kraemer and Joost Zwarts
 Collection: Proceedings of the Colloquium "Cognitive Foundations of Interpretation"
 Bibliography: Amsterdam

Verbuk, Anna, "Russian Predicate Clefts as S-Topic Constructions", (2006). Chapter in book, Published
 Editor(s): James Lavine, Steven L. Franks, Mila Tasseva-Kurktchieva and Hana Filip
 Collection: Formal Approaches to Slavic Linguistics: The Princeton Meeting 2005 (FASL 14)
 Bibliography: Ann Arbor: Michigan Slavic Publications, pp. 394-408

Borschev, Vladimir, Elena V. Paducheva, Barbara H. Partee, Yakov G. Testeleets, Igor Yanovich, "Sentential and Constituent Negation in Russian BE-sentences Revisited", (2006). Chapter in book, Published
 Editor(s): James Lavine, Steven L. Franks, Mila Tasseva-Kurktchieva and Hana Filip
 Collection: Formal Approaches to Slavic Linguistics (FASL) 14
 Bibliography: Michigan Slavic Publications, Ann Arbor, pp 50-65

Yanovich, Igor, "Choice-functional series of indefinites and Hamblin semantics", (2006). Chapter in book, Published
 Editor(s): Effi Georgala and Jonathan Howell
 Collection: Proceedings of Semantics and Linguistic Theory (SALT) 15
 Bibliography: Ithaca, NY: CLC Publications, pp.309-326

Borschev, Vladimir, "Okrestnostnyje grammatiki i Model-Theoretic Syntax [Neighborhood grammars and model-theoretic syntax]", (2005). Chapter in book, Published
 Editor(s): I.M. Kobozeva, A.S. Narin'yani and V.P. Selegey
 Collection: Computational Linguistics and Intellectual Technologies: Proceedings of International Conference DIALOG 2005, Zvenigorod, June 1-6 2005
 Bibliography: Moscow, Nauka, 71-76

Partee, Barbara H., "Weak noun phrases: Semantics and syntax", (2005). Chapter in book, Published
 Editor(s): I.M. Kobozeva, A.S. Narin'yani and V.P. Selegey
 Collection: Computational Linguistics and Intellectual Technologies: Proceedings of International Conference DIALOG 2005, Zvenigorod, June 1-6 2005
 Bibliography: Moscow, Nauka, 574 -580

Partee, Barbara H., "Diathesis alternations and NP semantics", (2005). Chapter in book, Published
 Editor(s): Ju. D. Apresjan and L.L. Iomdin
 Collection: East West Encounter: Second International Conference on Meaning <=> Text Theory
 Bibliography: Moscow: Jazyki Slavjanskoj Kultury. 361-373.

Plungian, V., and Rakhilina, E. V., "Prizemlit'sja i promaxnut'sja: semanticheskie mexanizmy sintaksicheskix ogranichenij [Prizemlit'sja and promaxnut'sja: semantic mechanisms for syntactic constraints].", (2005). Chapter in book, Published
 Editor(s): Ju. D. Apresjan and L.L. Iomdin
 Collection: East West Encounter: Second International Conference on Meaning <=> Text Theory
 Bibliography: Moscow: Jazyki Slavjanskoj Kultury, 374-382.

Fedorova, O. and I. Yanovich, "Lexically modifying binding restrictions: Case for a variable-free binding theory", (). Chapter in electronic Proceedings, Accepted
 Editor(s): O. Bonami and P. Cabredo-Hofherr
 Collection: Empirical Issues in Syntax and Semantics 6 (Proceedings of CSSP 2005).
 Bibliography: Electronic publication, <http://www.cssp.cnrs.fr/> (ISSN 1769-7158)

Fedorova, O. and I. Yanovich, "Emergence of Principle B: a variable-free approach", (). Chapter in book, Accepted
 Editor(s): A. Beletti et al.
 Collection: Language Acquisition and Development. Proceedings of GALA 2005.
 Bibliography: Cambridge
 Scholars Press, Cambridge, UK.

Paducheva, Elena V. and Yakov G. Testelefs, "Genitiv otricanija v kvantificirovannyx imennyx gruppax. (Genitive of negation in quantified noun phrases)", (). article in book, Accepted

Collection: Festschrift for Marguerite Guiraud-Weber

Bibliography: to be determined

Partee, Barbara H., and Borschev, Vladimir, "Pros and cons of a type-shifting approach to Russian Genitive of Negation", (). Chapter in book, Accepted

Editor(s): Balder ten Cate and Henk Zeevat

Collection: Proceedings of the Sixth International Tbilisi Symposium on Language, Logic and Computation (Batumi 2005)

Bibliography: Berlin: Springer

Schwarz, Florian, "On NEEDING Propositions and LOOKING FOR Properties", (). Chapter in book, Accepted

Editor(s): Masayuki Gibson and Jonathan Howell

Collection: Proceedings of Semantics and Linguistic Theory (SALT) 16

Bibliography: Ithaca, NY: CLC Publications

Partee, Barbara H., "Do we need two basic types?", (2006). chapter in web-based festschrift, Published

Editor(s): Hans-Martin Gaertner, Sigrid Beck, Regine Eckardt, Renate Musan & Barbara Stiebels

Collection: Between 40 and 60 Puzzles for Krifka

Bibliography: <http://www.zas.gwz-berlin.de/40-60-puzzles-for-krifka/>

Deal, Amy Rose, "Case-marking and the interpretation of objects in Nez Perce", (). Article in Book, In preparation

Collection: Papers from the 42nd Meeting of the Chicago Linguistics Society (CLS 42)

Bibliography: Chicago: Chicago Linguistics Society

Verbuk, Anna, "Russian Predicate Clefts: Tension between the semantics and pragmatics", (2006). article in book, Published

Editor(s): Christian Ebert & Cornelia Endriss

Collection: Proceedings of Sinn und Bedeutung 10

Bibliography: ZAS Papers in Linguistics 44, Berlin. pp 389-403

Borschev, Vladimir and Barbara H. Partee, "Genitiv mery v russkom jazyke: tipy i sorta [Russian Genitive of Measure: types and sorts]", (). Chapter in book, Accepted

Editor(s): Yury Lander, Ji-Yung Kim and Barbara H. Partee

Collection: Possessivnye konstrukcii: Semantika i sintaksis. [Possessive Constructions: Semantics and Syntax]

Bibliography: Moscow: Gnozis

Web/Internet Site

URL(s):

http://people.umass.edu/partee/Gen_Neg/

Description:

This project site, connected to Partee's home page at the University of Massachusetts, was constructed by Youri Zabbal in the summer of Year 1 of the project and will be further expanded at the end of Year 2 and in Year 3. Currently it includes a description of the project and of the project personnel, lists of publications and presentations, and a bibliography of relevant work. To be added: downloadable versions of papers and handouts, links to sites where related research and educational materials can be found, invitations for feedback and interaction.

Other Specific Products

Contributions

Contributions within Discipline:

1. We have contributed to the understanding of the semantics of negation by showing that the relationship between 'syntactic sentential negation' and 'semantic propositional negation' is non-trivial and is not the same in Russian and English. (Borschev et al, FASL-14 paper).

2. We have also contributed to the understanding of the interpretation of negation by elucidating the interplay of syntactic, semantic and pragmatic factors underlying judgments that a given sentence is 'the negation of' another given sentence, and have used these insights to make progress on some much-debated negative 'BE'-sentences in Russian. (Borschev et al, FASL-14 paper, and Partee and Borschev in press in Comorovski and von Heusinger volume.)
3. We have contributed to recent work on the morphology, syntax and semantics of diathesis alternation by relating the Nominative/Genitive and Accusative/Genitive alternation under negation in Russian to other cases of diathesis alternation correlated with shifts in certain semantic entailments. This work is emerging as one of our main new directions and has attracted interest and attention from colleagues working on related problems in other languages.
4. We have brought to the attention of both Russian and western scholars the interesting observation that most Western work on diathesis alternation is 'syntax-centered' while most Russian work on that topic (where the notion of 'diathesis' in its current sense originated) is 'verb-centered'. These differences in theory appear to reflect real differences in how English vs. Russian pattern, and we hope to contribute both theoretical and typological advances as we work on integrating the two approaches.
5. Our work on the 'referential status' of Genitive NPs under negation, heavily influenced by the work of Elena Paducheva, is offering a useful counterbalance to prior exclusive reliance on scope of negation as an explanatory principle for the semantics of the construction. The two notions are not mutually exclusive, and our work may lead to a better understanding of their interaction.
6. Rakhilina's examination of the advantages and limitations of corpus-based studies of the factors contributing to the distribution of Accusative vs. Genitive under negation in Russian is contributing to a better understanding of the relative advantages of the Russian methodology of basing argumentation on attested examples and the Western methodology of basing argumentation on constructed examples and the linguist's native intuitions about them. It is becoming clear that the two kinds of methodologies are best used to supplement one another: the former does not usually yield minimal pairs, which are often crucial, and the latter may too easily lead to biased or unreliable judgments.
7. The work on the semantics of Object Genitive of Negation carried out in Year 2 by Paducheva, by Rakhilina and her students, and augmented by discussion within our project, has begun to uncover second-order semantic generalizations about the semantic contrasts involved in the Accusative vs. Genitive choice, in a way that increases the importance of looking at lexical and compositional semantics together. The fact that different kinds of Perspectival Structure and different kinds of presuppositions are important for different verbs, in ways intimately connected to the meanings of the verbs, may hold the key to making sense of the apparent non-uniformity of semantics effects of Object Genitive of Negation, one of the most difficult puzzles we have contended with. See the discussion of the findings of Beljaeva and Letuchij in the Findings section and of the follow-up research activities and findings of Rakhilina and Paducheva in the Research Activities sections.
8. We have contributed to the understanding of intensionality on two fronts in year 2. On the one hand, the findings of research assistant Florian Schwarz that intensional transitive verbs fall into two families with quite distinct semantic properties will necessitate reexamination of many old arguments and conclusions, and some disputes should be resolvable once it is realized that examples from one class do not provide good arguments for hypotheses about verbs in the other class, nor a fortiori for the whole class of intensional verbs. And in a separate line, the recent work of Partee on the relationship between negation and intensionality has led to support for a conclusion we had begun to come to in Year 1, namely that 'opacity' or 'non-referentiality' or 'reduced referentiality' is not a unitary phenomenon, and that NPs may receive different kinds of 'less referential' interpretations depending on the different semantic properties of the operators or verbs under whose scope they fall.

Contributions to Other Disciplines:

For psycholinguistics and cognitive science: Negation is a universal category of thought as well as of language, and constructions that occur only in negative sentences can offer important indirect evidence concerning age-old questions (see Horn's *Natural History of Negation*) about apparent cognitive asymmetries in the understanding of affirmative vs. negative judgments. The logical tradition since Frege makes semantic negation and affirmation quite symmetrical, and this tradition has had a major influence on formal semantics. But much other work in linguistics and related fields has shown that negation in natural language is not as simple or uniform as the Fregean analysis would suggest. Our work on diathesis alternation under negation is a contribution in this direction; we are in the process of investigating similarities and differences between the semantics of 'negated verbs' (but with the semantics of sentential negation) and the semantics of intensional constructions and other cases of what Paducheva has called 'decreased assertivity' (snjataja utverditel'nost).

Anna Verbuk at the University of Massachusetts has carried out experimental work on Russian-speaking children's acquisition of the Russian ili 'or', a Positive Polarity Item, in the context of negative sentences, and her finding that young Russian children do not recognize the Positive Polarity nature of Russian 'or' but treat it as subject to the same 'de Morgan's Law' conjunction-like interpretation under negation sheds new

light on the universality of interpretation of basic logical operators. Her results call for new investigation of how and at what stage children learn that something is a Positive Polarity Item; her own planned future research on the acquisition of semantico-pragmatic competence with respect to scalar implicatures will be a step in that direction. And Igor Yanovich and Olga Fedorova in Moscow have been carrying out work on the psycholinguistic processing of various Russian constructions in ways that contribute both to theoretical arguments concerning the linguistic principles behind the constructions and to the evaluation of hypotheses concerning the universality and modularity of grammatical and processing principles, with increasing depth and breadth.

Contributions to Human Resource Development:

1. The professional development of the Research Assistants on the project is always significant in a project of this kind.
2. Especially in Moscow, and to a lesser extent in Spain and in St. Petersburg, students and young faculty in our international courses had an opportunity to learn about and participate in contemporary research problems in semantics and issues in the integration of lexical and formal semantics. The P.I. held a Senior Fulbright Lectureship at the Russian State Humanities University and Moscow State University in the spring semester of 2005, and taught an advanced topics seminar as well as an introduction to formal semantics; several students in the advanced seminar undertook independent research on the formal semantics of Russian under the supervision of the P.I. and the best of them are continuing this research with plans for public presentation and publication.
3. Our Research Assistant Anna Verbuk was able to gain further benefits from the weeks she spent in Moscow in year 1, where she established invaluable contacts with current Russian linguists and Russian linguistics undergraduate and graduate students in Moscow, and had the opportunity to present her research on Russian cleft constructions in the student-organized Workshop on Formal Semantics in Moscow. Likewise, the Russian students she met with now have the benefit of having her as one of their contacts and resources; she (and other Research Assistants on the project) and the P.I. together will continue in the coming years to respond to Russian requests for copies of papers and other materials inaccessible in Russia or on the internet.
4. The First Annual Formal Semantics Workshop in Moscow in April 2005 had training and development dimensions as one of its main foci. Students and young researchers from Moscow, St. Petersburg, Leipzig, and Amherst attended, presented their work in progress, and discussed their work in semantics with fellow students and young researchers from other institutions and sometimes different theoretical backgrounds. Those students and young researchers involved in organizing and running the workshop got particularly valuable professional experience, and received much encouraging and enthusiastic feedback from the participants. The students worked hard to make the workshop such a success. They negotiated with one another in designing and carrying out all the planning from the calls for papers and the abstract review process, to the design and adjustment of the program, securing the workshop space, and paying attention to the many dimensions of hospitality. They clearly succeeded in juggling intellectual engagement with the substance of a conference with attention to the minutiae of behind-the-scenes work that help a conference succeed. The Second Annual Formal Semantics in Moscow workshop in April 2006 carried that training and development a step further, since Partee was only an 'Honorary Mentor' that time, not being in Moscow at the time. The student organizers increased their self-confidence, had a senior invited speaker, and carried out the planning and organizing with great ease and success. For the future they plan to make it a more overtly international workshop, following the model of such student-run regional-based international conferences as those of NELS (the North East Linguistics Society) and CLS (the Chicago Linguistic Society).

Contributions to Resources for Research and Education:

The corpus-based investigations carried out by Rakhilina using the Russian National Corpus in the context of our project provided valuable feedback for the authors of the Corpus. One particular contribution was a greater understanding of the necessity for new options for the Corpus, especially the need for providing a broader context with found search items. The Corpus has been amended (as of June 2005) to provide the option of returning a broader context with search results.

The research that our research assistant Amy Rose Deal carried out in Year 2 (summer 2006) involved fieldwork on the antipassive construction in Nez Perce. Nez Perce is an endangered language (approximately 50 speakers, all in their 60s or older) and her research may enable the Nez Perce Tribe Language Program to develop pedagogical materials for antipassivization.

Contributions Beyond Science and Engineering:

The project is contributing to US-Russian scientific understanding and cooperation through the participation of the Russian consultants, the joint participation of Russian and American project members in courses and conferences on both sides of the ocean, and the publication of project findings in both Russian and English.

The work on Nez Perce by Amy Rose Deal mentioned in the previous subsection is also contributing to public welfare by contributing to help with the preservation of an endangered language; the language will probably be lost soon as a living language, but through such work, at least some part of its valuable legacy can be preserved.

Special Requirements

Special reporting requirements: None

Change in Objectives or Scope: None

Unobligated funds: less than 20 percent of current funds

Animal, Human Subjects, Biohazards: None

Categories for which nothing is reported:

Any Product

Project Activities Years 1-2 (Sept. 1, 2004 - Aug. 31, 2006) NSF Grant BCS-0418311

1. Year 1

1.1. Goals and Objectives.

The long-range goal of the project is to integrate two important approaches to the study of semantics: the formal semantics tradition with ties to logic and philosophy of language and an emphasis on a compositional syntax-semantics interface, and lexical semantics with its roots in lexically and cognitively based work on semantics and semantic categorization. This project also aims to link Russian and American traditions by concentrating on the Moscow school of lexical semantics. A more specific goal is to advance the study of how lexicon and grammar interact in semantic interpretation.

The substantive focus of the project is on a family of problems connected with the Russian Genitive of Negation construction and related constructions in Slavic and other languages, including existential constructions. Issues include the following. (i) The semantics of the Subject Gen Neg construction, including re-examination of proposals of Borschev and Partee of a difference in "Perspectival Structure" linked to "demotion of the subject". Perspectival Structure distinguishes existential sentences, with Location as Perspectival Center, from predicative sentences, with subject NP as Perspectival Center. Hypothesized diathetic alternations in the verb provide the link between lexical semantics and the semantics of the construction. (ii) The notion of "scope of negation" invoked by Western Slavists as primary in the understanding of Gen Neg needs to be re-examined. (iii) The many different approaches to the "referential status" of the NP, a central factor in Gen Neg, all point to some kind of reduced referentiality for Gen NPs. (iv) One issue dividing Western from Russian researchers is the Unaccusative Hypothesis, seen by most Western Slavists as unifying Subject and Object Gen Neg. A goal of the present project is to capture both similarities and differences between Subject and Object Gen Neg by viewing both as instances of diathetic alternations, involving semantic shifts in verb meaning correlated with changes in "proto-Agent" or "proto-Patient" properties (Dowty). This hypothesis connects the "semantic bleaching" of intransitive verbs with Subject Gen Neg with the differences in referentiality of the affected NP in both constructions and possibly in affirmative Gen/Acc alternations with intensional verbs, and relates the conditioning factors noted by Ickovič and Timberlake to the transitivity properties of Hopper and Thompson. The interaction of sentential negation with verbal semantics and diathesis alternation is a key issue to be explored. Methods include collaborative seminars in Moscow (co-PIs and consultants), corpus work, and much work with native speakers and Russian linguists. Progress on the semantics of the construction will contribute to progress on basic issues of how formal and lexical semantics, mutually enriched, interact with each other and with syntax and context. For more details on the goals and objectives of the project, see the Project Description in the original project proposal, <http://people.umass.edu/partee/Project%20description%201.pdf> and the references cited therein <http://people.umass.edu/partee/References%20Cited%201.pdf>.

1.2. Research and education activities in Year 1.

1.2.1. Educational activities in Year 1.

0. Between the submission of the grant proposal in January 2004 and the start of the grant project in September 2004, Partee taught a course on Formal Semantics at the Russian State

University for the Humanities in Moscow which emphasized the integration of formal and lexical semantics, the connections between Western and Russian approaches to semantics, and topics in the semantics of indefinites and of negation and the Genitive of Negation in particular. A number of the students who participated in that course (and earlier ones) were instrumental in the student-organized activities in semantics in Moscow described in items 7 and 8 below.

1. Partee taught invited Master Classes on the integration of Formal and Lexical semantics for the Cognitive Science Program at the University of Arizona and at the Netherlands Academy of Science in Amsterdam, both in October 2004.

2. Partee was a Fulbright Senior Scholar in Moscow in spring semester 2005, teaching an Introduction to Formal Semantics at the Russian State University for the Humanities and an advanced Seminar on Formal Semantics at Moscow State University. Both courses included an emphasis on the integration of formal and lexical semantics, and both courses included sessions on the Russian Genitive of Negation and on a number of the issues that we see as related to the problems of that construction. At Moscow State University, two advanced students, Igor Yanovich and George Bronnikov, gave presentations of their own related research. Borschev gave guest lectures in both courses.

3. Partee and Borschev jointly taught a two-week course, “Formal and Lexical Semantics and Ontology”, at the New York Institute at St. Petersburg State University in July 2005, attended by undergraduate and graduate students and young faculty members from St. Petersburg, Moscow, several other Russian cities, Belorussia, and the United States. The titles of the five lectures making up the course are listed with ‘talks and presentations’ in Section 2.2.

4. Partee and Borschev met with graduate student Olga Kagan in Israel in June 2005 to consult with her on her Master’s thesis research (Hebrew University of Jerusalem, supervised by Edit Doron), which concerns the hypothesis that there is a close connection between the use of Genitive in the Genitive of Negation construction in Russian and the use of Genitive to mark objects of certain intensional verbs. This hypothesis was developed independently by Kagan (abstract, February 2005) and by Partee and Borschev (SALT 14 paper, published late 2004).

5. Partee was co-advisor with Sergej Tatevosov on the undergraduate diploma thesis of Igor Yanovich of Moscow State University: *Semantika Neopredelennyx Imennyx Grupp* [*The Semantics of Indefinite Noun Phrases*]. Elena Paducheva was the “opponent” for this thesis. The thesis was passed with honors on May 19, 2005.

6. Partee and Borschev were supervisors to Research Assistants Anna Verbuk, Keir Moulton, and Youri Zabbal, Research Fellow Liane Jeschull, and Undergraduate Assistant Galina Lastovkina.

7. In the fall semester of 2004, with advising by Partee, a group of students in Moscow, most of them students of Partee’s earlier semantics courses in Moscow, organized the Moscow

Formal Semantics Reading Group. Igor Yanovich, one of the main organizers for the group, which met weekly during the Autumn semester of 2004, wrote the following report:

There were two main purposes for organizing the reading group: first, it was intended to provide a possibility to widen the perspective on formal semantics for Moscow young semanticists (undergraduates, graduates, and younger researchers) via reading and discussing influential classical and recent papers on such major questions of the semantic theory as quantification in natural language, semantics for questions, dynamic semantic theories such as Discourse Representation Theory, implicature computing, etc.; second, the regular meetings have helped us to develop an informal semantics community in Moscow: the members of the reading group started to share their findings and comment on work by each other, as well as organize public presentations of recent semantic work of Moscow semanticists.

8. A subgroup of the reading group members, also with advising by Partee, organized a first Formal Semantics Workshop in Moscow in 2005. Here is a brief report by Igor Yanovich: “Thanks to the reading group members, it has become possible to organize the *FSiM* workshop held at MGU, Moscow, in April 2005, of which I was one of the organizers. The *Formal Semantics in Moscow* workshop has given an opportunity for young Russian and Western researchers in the field of semantics to present their recent results and to receive the feedback from their colleagues. The workshop was a success, and we received many requests from the participants for organizing *FSiM 2* next Spring.”

A report that was circulated by Partee to colleagues at UMass and on Kai von Fintel’s Semantics weblog can be found at the following site: <http://people.umass.edu/partee/docs/Report%20from%20the%20First%20FSiM%20Workshop.pdf>. Here is a brief extract:

The first annual workshop “Formal Semantics in Moscow”, organized by a team of young Russian linguists with mentoring by Barbara Partee, was held at Moscow State University on Saturday April 23. The workshop was informal and friendly, like the student-run New England Semantics workshops; there were 12 papers and attendance of about 30. Anna Verbuk of UMass gave a paper, and there were papers from Leipzig and from St. Petersburg as well as from Moscow. Everyone was delighted with the results.

The main expressed goal of the workshop was for students and young researchers to be able to present their work in an informal and supportive environment where they could share their ideas with one another and get good feedback. Another goal was to help young linguists with an interest in formal semantics to network with one another; formal semantics is relatively new in Moscow, and the fall 2004 reading group plus this workshop have really made a difference in building a sense of community. A third goal was to help strengthen bridges between “western” and “Russian” approaches to semantics; papers that contributed to that strengthening were especially encouraged, and several did that quite explicitly, either by testing western formal semantics-based analyses on challenging Russian data, or by explicitly comparing western and Russian analyses of some phenomena. Papers were not required to be explicitly “in” a formal semantics framework, and not all were. I think it is safe to say that all of the goals were met, and all the participants were very pleased with the workshop.

9. Activities of the Graduate Research Assistants and the Undergraduate Assistant included components that contributed directly to their own education and professional development, described elsewhere in this report.

1.2.2. Research Activities in Year 1.

1.2.2.1. Seminar meetings with Russian consultants.

A central research activity, starting before the grant began (and instrumental in developing the grant proposal), and ongoing during the part of Year I when Partee and Borschev were in Moscow (January - August 2005), were meetings almost every week with our Russian consultants Elena Paducheva, Ekaterina Rakhilina and Yakov Testelelets to discuss this research topic. In some meetings we were joined by younger consultant Igor Yanovich. Many of the ideas reported under “project findings” had their beginnings in these meetings, and most of them were extensively discussed there. These meetings also included discussion of related research by both Western and Russian scholars, sometimes in the form of joint critical reading of and commentary on key research articles.

A partial list of topics of discussion at our seminar meetings:

- A series of presentations over the period January – July by Rakhilina, with discussion by all, on the findings of Mustajoki (1985) and Mustajoki and Heino (1991) on corpus-based investigation of the distribution of Russian Genitive of Negation, and related corpus based work (see section 2.2.2) by Rakhilina using the Russian National Corpus.
- Discussion of the hypothesis of Olga Kagan of Hebrew University of Jerusalem concerning the relation between Genitive of Negation and Genitive objects of some intensional verbs. Partee reviewed arguments for a very similar hypothesis first presented to our Moscow seminar group in February 2004, including related ideas from Neidle’s work in the 1980’s, Zimmermann’s proposal for property-readings of objects of intensional verbs in the 1990’s, and Bailyn’s recent work; Partee’s hypothesis and these related ideas were in fact mentioned as a topic for investigation in our grant proposal in January 2004.
- Sentential vs. Constituent negation, a topic which we began discussing in January 2005 and which led to our FASL-14 contribution authored by Borschev, Paducheva, Partee, Testelelets, and Yanovich.
- The special properties of Genitive of Negation with the verb BE, a topic developed both in Partee and Borschev’s paper in press in the Comorovski and von Heusinger volume and to the FASL-14 paper mentioned above, including a presentation by Yakov Testelelets on “Difficulties with Quantifier Scope Test for Russian Zero Copula Sentences”.
- Discussions of syntactic and semantic concepts of Scope of Negation, and differences between English and Russian. Presentations by Partee and by Paducheva. Report by Paducheva on Jespersen’s concept of Nexal Negation and her own definition of ‘General’ negation.
- Comparisons between Genitive of Negation and Genitive under intensionality with respect to distribution of the Russian Subjunctive, including a presentation by Yakov Testelelets with data establishing fundamental differences in the two constructions.
- A comparison of different approaches to the syntax of Russian existential and locative sentences, with contributions particularly by Yakov Testelelets and Igor Yanovich.

- Ongoing discussion of the semantic distinctions between existential and locative sentences with *byt* 'be', and possible analyses in terms of Borschev and Partee's Perspectival Structure, Paducheva's distinctions between existential and perceptual sentences and the role of Observer, and Topic-Focus structure. Presentations by Borschev and by Paducheva, discussion by all.
- Properties of quantificational sentences with Russian *byt* 'be' and negation, and also properties of quantificational NPs as objects of negated verbs.
- Competing concepts of "weak noun phrases" (presentations by Partee and by Paducheva) and related notions of 'decreased referentiality', with applications to the interpretation of Genitive of Negation.
- Exploration of the differences between Subject Genitive of Negation and Object Genitive of Negation, and of the factors that influence the choice of Genitive objects under negation with different classes of verbs. Presentations by Paducheva and by Rakhilina, discussion by everyone, starting in part from Rakhilina's presentations of Mustajoki's findings, and in part from Paducheva's handout, "Object Genitive in negative sentences: lessons from the Genitive of Subject".
- Exploration of the differences between contexts where bare NPs can be used with Genitive of Negation and contexts where bare NPs in Genitive are excluded but NPs strengthened with *ni odin* 'not a single' can be used in the Genitive. Presentations by Paducheva.
- The role of Mel'chuk's "lexical functions" in licensing Genitive of Negation with particular strongly associated verb-object combinations, including discussion of where Genitive vs. Accusative seems only a stylistic choice and where it seems to make a semantic difference; presentation by Borschev.

1.2.2.2. Corpus work in Year 1: preliminary explorations.

Although corpus-based linguistic work is not a central part of our proposed project, we are putting some effort into educating ourselves about the potential of such work to advance our goals and about the results other researchers have obtained in areas closely related to the goals of our project, especially since our consultant Ekaterina Rakhilina has been one of the leaders in the development of the Russian National Corpus (see Contributions to Resources for Research and Education).

Our Undergraduate Assistant Galina Lastovkina and our Research Assistant Anna Verbuk did some preliminary corpus-based work for the project in Fall 2004, in consultation with Borschev and Partee, using both Google and existing Russian corpora at several locations, including the Russian National Corpus for which Rakhilina is one of the developers.

Partee had an opportunity to learn from David Beaver some non-documented techniques for using Google more effectively for searches when they met and shared insights on the semantics of existential sentences during the KNAW Academy Colloquium on Cognitive Foundations of Interpretation in Amsterdam in October 2004. (Some of those techniques were no longer working in the same way in August 2005, as reported by Beaver in the Language Log weblog (<http://itre.cis.upenn.edu/~myl/languageelog/archives/002373.html#more>) .)

In Moscow in the period January – July 2005, Rakhilina studied and reported on the earlier corpus-based work of Mustajoki (1985) and Mustajoki and Heino (1991) on the distribution of Russian Genitive of Negation.

Also in Year 1 Rakhilina carried out some searches using National Corpus of Russian Language (<http://ruscorpora.ru/>), which at that point contained about 54 million words, partly annotated, and is still under development, looking for evidence related to certain hypotheses concerning the choice between Genitive and Nominative or Accusative under negation.

Our corpus-based work is still in preliminary stages, and in Year 1 we have not yet reached the point of having any findings or contributions in this area.

1.2.2.3. Other research activities in Year 1

1. In Year 1, research assistant Anna Verbuk completed a project on the interpretation of Russian predicate-cleft sentences which she had begun before becoming involved in our project, which resulted in several conference presentations and two papers, and began work on a project on children's acquisition of Russian *ili* 'or', which will be carried out mainly in Year 2.

2. In Year 1, summer, research assistant Keir Moulton assisted in finding relevant sources and papers on languages with genitive-of-negation like phenomenon, such as case marking alternations which showed reduced referentiality of NPs, including Turkish and West Greenlandic.

1.2.2.4. Public lectures in Year 1

Our public lectures have given us opportunities to disseminate results and hypotheses and to receive valuable feedback and engage in fruitful discussion with colleagues in the US, Russia, and elsewhere (in year 1, in the Netherlands, Denmark, Spain, and Israel.)

Borschev, Vladimir, Elena V. Paducheva, Barbara H. Partee, Yakov G. Testelet, Igor Yanovich, May 6, 2005. "Sentential and Constituent Negation in Russian BE-sentences Revisited." Accepted conference presentation, *Formal Approaches to Slavic Linguistics (FASL)* 14, Princeton University.

Borschev, Vladimir, June 3, 2005. "Neighborhood Grammars and Model-Theoretic Syntax." Accepted paper, International Conference Dialog-2005, Russian Academy of Sciences conference center, Zvenigorod, Russia. (in Russian)

Paducheva, Elena, April 29, 2005. Argument structure and diathesis of deverbal nouns. (in Russian) Workshop on Deverbal Derivation, Institute of Oriental Studies, Russian Academy of Sciences, Moscow.

Paducheva, Elena V., June 1, 2005. "Modal'nost' kak scenarij [Modality as scenario]." Invited plenary paper, International Conference Dialog-2005, Russian Academy of Sciences conference center, Zvenigorod, Russia. (in Russian)

Paducheva, Elena, June 05, 2005. "Indeterminativeness as a semantic dominant of the Russian linguistic picture of the world." Lecture at the Department of Slavic and East European Languages and Literatures, Ohio State University, Columbus.

- Paducheva, Elena, June 29, 2005. "Incrementality and telicity: the case of delimitatives in Russian." Invited paper, Research Workshop on Theoretical and Cross-linguistic Approaches to the Semantics of Aspect, Bar-Ilan University, Ramat Gan, Israel.
- Partee, Barbara H., September 30, 2004. "Compositionality and Coercion in Semantics". Master Seminar on the Foundations of Cognitive Science, Cognitive Science Program, University of Arizona, Tucson.
- Partee, Barbara H. and Vladimir Borschev, October 1, 2004. "The Semantics of Russian Genitive of Negation: The Nature and Role of Perspectival Structure." Cognitive Science Colloquium, University of Arizona, Tucson.
- Partee, Barbara H. and Vladimir Borschev (presented by Partee), October 2004. "The Semantics of Russian Genitive of Negation: The Nature and Role of Perspectival Structure." Invited talk, KNAW Academy Colloquium – Cognitive Foundations of Interpretation, Amsterdam.
- Partee, Barbara H., October 29, 2004. "Compositionality and Coercion in Semantics". Master Class, Royal Netherlands Academy of Science (KNAW), Amsterdam.
- Partee, Barbara H., March 11, 2005. "Perspectives on Natural Language Semantics." Lecture on the occasion of the award of an Honorary Doctorate from Copenhagen Business School, Copenhagen.
- Partee, Barbara H., March 19, 2005. Boolean structure and cross-categorial conjunction in natural language. Guest lecture in V.A. Uspensky's seminar "Nekotorye Primemenija Matematicheskix Metodov v Jazykoznanii [Selected Applications of Mathematical Methods in Linguistics]", Moscow State University, Moscow.
- Partee, Barbara H. and Vladimir Borschev, April 2005. Three lecture series in Spain, supported by a combination of the Spanish Fulbright Commission (Partee) and the four participating universities (Partee and Borschev).
- Series 1. University of La Coruña, La Coruña, Spain. "Formal and Lexical Semantics: The Interpretation of Possessives"
- Lecture 1, April 5: "Possessives, Relational Nouns and the Argument-Modifier Distinction" (partly in Spanish)
- Lecture 2, April 6: "Sorts, Sort-shifting and the Role of Sorts in Patterns of Coercion" (partly in Spanish)
- Lecture 3, April 7. "Integrating Lexical and Compositional Semantics: The Dynamics of Adjective Meaning." (Partee alone; in Spanish)
- Series 2. Barcelona. "Integrating Lexical and Compositional Semantics."
- Lecture 1, April 11, University Pompeu e Fabra: "Integrating Lexical and Compositional Semantics: Existential Sentences and the Russian Genitive of Negation."
- Lecture 2, April 12, University of Barcelona: "Integrating Lexical and Compositional Semantics: The Dynamics of Adjective Meaning" (Partee alone)
- Series 3. Rovira i Virgili University, Tarragona, Spain. "Formal Semantics, Compositionality, and Type-Shifting."
- Lecture 1, April 13. "Introduction to Formal Semantics and Compositionality."
- Lecture 2, April 14. "A Fragment of English. Types and Type Shifting. More Applications of the Lambda Calculus."

Lecture 3, April 15. "Semantic Types and Type-shifting: Conjunction and Type Ambiguity. NP Interpretation and Type-Shifting Principles."

- Partee, Barbara H., June 3, 2005. "Weak Noun Phrases: Semantics and Syntax." Accepted paper, International Conference Dialog-2005, Russian Academy of Sciences conference center, Zvenigorod, Russia. (in English)
- Partee, Barbara H., June 23, 2005. "Diathesis alternations and NP semantics". Invited plenary lecture, Second International Conference on the "Meaning-Text" Theory (MTT-2005), Moscow.
- Partee, Barbara H., June 29, 2005. "Aspect, Referentiality, and Diathesis in Russian: Interacting Factors in the Genitive of Negation Construction." Invited paper, Research Workshop on Theoretical and Cross-linguistic Approaches to the Semantics of Aspect, Bar-Ilan University, Ramat Gan, Israel. (In addition, Borschev chaired a session on Slavic aspect, and Partee chaired the final day's wrap-up discussion June 30.)
- Partee, Barbara H. and Vladimir Borschev, July 18-29 2005. Invited short course (lecture series), New York Institute, St. Petersburg State University, St. Petersburg, Russia. Series Title: Formal and Lexical Semantics and Ontology
- Lecture 1. Introduction to Lexical Semantics. Meaning postulates. Types of adjective meanings.
- Lecture 2. Genitives I: The Many Meanings of 'Rodin's Lovers': Word Meaning, Phrase Meaning, and Semantic Creativity.
- Lecture 3. Genitives II: Ontology and Metonymy. Semantic Sorts and Semantic Shifts in Genitive Constructions.
- Lecture 4. The Russian Genitive of Negation I: The interaction of compositional semantics, lexical semantics, "Perspective Structure", and context in negated Existential Sentences: The sources of "semantic bleaching" in "weak verbs".
- Lecture 5. The Russian Genitive of Negation II: The genitive of negation and diathesis shift.
- Plungian, V., and Rakhilina, E. V., June 2005. *Prizemlit'sja i promaxnut'sja: semantičeskie mexanizmy sintaksičeskix ograničenij* [*Prizemlit'sja and promaxnut'sja: semantic mechanisms for syntactic constraints*]. Contributed talk in the Second International Conference on Meaning - Text Theory, (MTT-2005), Moscow.
- Rakhilina, Ekaterina, May 12-14, 2005. "Grammaire des constructions et structure de l'anecdote russe [Construction grammar and the structure of the Russian anecdote]". Colloque International Le texte dans la Russie contemporaine: Aspects linguistiques, culturels et politiques, Universite Setndal Grenoble III, Grenoble, France.
- Rakhilina, Ekaterina, January 11, 2005. "Grammatika konstrukcij i priroda kalambura [Construction Grammar and the theory of puns]". Invited lecture, seminar of the Institute of Slavistics of the Russian Academy of Sciences, Moscow.
- Testelefs, Yakov, July 18-29 2005. Invited short course (lecture series), New York Institute, St. Petersburg State University, St. Petersburg, Russia. Topic: Binding and Anaphora.
- Verbuk, Anna, May 6, 2005. "Russian Predicate Clefts as S-Topics". Accepted conference presentation, *Formal Approaches to Slavic Linguistics (FASL)* 14, Princeton University.

- Verbuk, Anna, April 15, 2005. "Acquisition of Supplementary Expressions", Poster presentation at conference "Experimental Pragmatics: Cognitive Basis of Conversation", Cambridge University, Cambridge, England.
- Verbuk, Anna, April 23, 2005. "The Semantics and Pragmatics of Russian Predicate Clefts", Accepted conference presentation, FSIM (First Annual Workshop on Formal Semantics in Moscow), Moscow, Russia.
- Yanovich, Igor, December 25, 2004. "Serija neopredelennyx mestoimenij s nulevym pokazatelem neopredelennosti" ("A series of indefinite pronouns with a null indefiniteness marker"), a talk at the Construction Grammar seminar of E.V. Rakhilina, Moscow State University, Moscow.
- Yanovich, Igor, March 13, 2005. "Choice-functional series of indefinite pronouns and Hamblin semantics", a talk at the Formal Semantics seminar of B.H. Partee, Moscow State University, Moscow.
- Yanovich, Igor, March 25, 2005. "Choice-functional series of indefinite pronouns and Hamblin semantics", a talk at Semantics and Linguistic Theory 15 (SALT 15), UCLA, Los Angeles, CA. The handout is available at <http://semanticsarchive.net/Archive/DI3ZmMxN>
- Yanovich, Igor and Olga Fedorova, May 7, 2005. "Early preferences in RC-attachment in Russian: The effect of Working Memory differences". Accepted talk at *FASL 14*, Princeton University, Princeton, NJ.

2. Year 2

2.1. Goals and objectives – no change.

2.2 Research and education activities in Year 2.

2.2.1. Educational activities in Year 2.

1. Partee was a Visiting Erskine Fellow at the University of Canterbury, New Zealand in the February-June semester 2005, teaching an undergraduate special topics course, "The Structure of Meaning". The course included an emphasis on the integration of formal and lexical semantics, and included sessions on the Russian Genitive of Negation and on a number of the issues related to the problems of that construction.

2. Partee has become co-advisor with Ekaterina Rakhilina on the undergraduate diploma thesis of Liudmila Nikolaeva of the Russian State Humanities University (RGGU) on a project to be completed during the 2006-07 academic year. Preliminary discussions have led to a probable topic related to our previous grant, NSF BCS-9905748, 1999 – 2003, "Integration of Lexical and Compositional Semantics: Genitives in English and Russian". Ms. Nikolaeva will probably work on the interaction of lexical and compositional semantics in cases where there is potential competition among constructions with a genitive modifier, an adjectival modifier, and a PP modifier expressing closely related meanings. She will include corpus work in her project, under the guidance of Ekaterina Rakhilina, our consultant on both this NSF project and the previous one and one of the developers of the Russian National Corpus.

3. Our consultant Ekaterina Rakhilina taught a course on the Russian Genitive of Negation at RGGU in the Fall semester of 2005, and her students carried out projects on various aspects of the Genitive of Negation, in many cases making use of corpus work with the Russian National Corpus and other corpora. The students made presentations to Partee, Borshev, and the other consultants on the grant in a special workshop-format session after the end of the semester, which for a number of them was their first experience in preparing a handout and giving a timed presentation as in a professional workshop. Some of the main results of the students' research are described in the Findings section, and some of the continuing research inspired by the work of the students is described below under Research Activities.

4. During Year 2 our consultant Yakov Testelet began supervising an undergraduate thesis ("diplom") (in progress) by Maria Rozhnova at RGGU: "Typology of negative pronoun licensing". The thesis deals with the grammatical aspect of interactions between sentential negation, negative pronouns and NPI-like elements in Russian, Spanish and Dutch. The work is not yet finished, but provides some promising insights into the syntax of negation in Russian that will be of interest for our project.

5. In Year 2, Partee and Borshev were supervisors to Research Assistants Florian Schwarz, Anna Verbuk, Keir Moulton, Amy Rose Deal, and Aynat Rubinstein.

6. The Russian students who, with advising by Partee, organized the first Formal Semantics Workshop in Moscow in 2005, organized the second (now "annual") workshop Formal Semantics in Moscow on April 15, 2006. Partee, in New Zealand at the time, was listed as "Honorary Mentor" of the workshop. The three organizers this year were all students who have taken at least one of Partee's semantics courses in Moscow: Igor Yanovich, Elizaveta Bylinina of MGU, and Peter Arkadiev of RGGU, all graduate students now. This year there was one invited paper, by our consultant Elena Paducheva jointly with the logic professor Mati Pentus, who had attended Partee's semantics course at MGU in 2005 together with one of his graduate students. This was the first time Paducheva had given a paper under the rubric of "formal semantics"; the paper itself contrasts formal and non-formal approaches to certain problems in the interaction of Russian verbal aspect and nominal quantification.

Here is a brief report from Igor Yanovich about FSiM 2006: "This spring we held the Formal Semantics in Moscow 2 workshop, which was a success, as the previous one. Thus the organizing committee perceived it as a sign that the Moscow formal semantics community has developed to a degree where it needs its own annual meeting, and since FSiM became de facto such a meeting, we decided to make the workshop annual, so that Russian and Western researchers, young and more senior alike, may discuss their recent work and receive feedback from their colleagues in the friendly and informal setting of FSiM."

7. In Spring 2006, Igor Yanovich and Elizaveta Bylinina, graduate students at MGU mentored in semantics by Partee, taught a special topic undergraduate course "The Semantics of Possible and Impossible Worlds" at MGU. The course was an introduction to intensional semantics and covered such topics as foundations of intensional semantics, possible worlds analysis of attitude and modal verbs, and the problem of hyperintensionality.

8. Activities of the Graduate Research Assistants also included components that contributed directly to their own education and professional development, described elsewhere in this report.

2.2.2. Research Activities in Year 2.

2.2.2.1. Seminar meetings with Russian consultants.

There were fewer seminar meetings with Russian consultants in Year 2, in part because Partee and Borschev were in New Zealand from mid-February until early June and were in Moscow in 2006 only until early February and then from mid-June until the end of August. Because all of the consultants were already well immersed in projects connected with the grant, fewer meetings were necessary, and much of our communication took place by e-mail and through the exchange of drafts of papers. There were approximately 4 meetings in January and February, and another 5 were held or are planned in the period June-August. Partee and/or Borschev also met individually at several points in the summer with each of the consultants to discuss ongoing research of theirs and/or of our own.

2.2.2.2. Corpus work in Year 2: continuing explorations.

In Year 2, Ekaterina Rakhilina continued working on the development of the Russian National Corpus, and in the course that she taught on Genitive of Negation at RGGU in Fall 2005 (see under Educational Activities above), she encouraged her students to make use of the corpus and other search tools in researching their term paper projects on a variety of problems concerning Genitive of Negation with direct objects and with NP adverbials. We report on the results of her students' investigation in the section on "Findings", and note here that one very able student, David Ershler, made excellent and expert use of both the Russian National Corpus and other search engines in his work, while another excellent student, Aleksandr Letuchij, focused on finding explanations for some of the "exceptions" that go against some of the statistical tendencies identified in the classic corpus-based work of Mustajoki. So within that group, there were good examples both of what can be done with the help of a good searchable corpus and of what can only be done by painstaking attention to the subtleties of individual examples.

In Year 2, Borschev wrote an article about the Russian National Corpus for the scientific journal of the institute VINITI of the Russian Academy of Sciences, one of the main sites cooperating in the development of the corpus. The article was written for non-specialists – linguists, teachers, other interested scientists, to explain the nature of a searchable corpus and some of the kinds of uses to which it can be put. Examples of the usefulness and limitations of corpus work were taken from new work (Borschev and Partee, in press) on the topic of our previous NSF grant on possessives, a project that shares with this one the integration of lexical and compositional semantics and the integration of Russian and Western approaches to semantics. In the course of work on the article, Borschev found in the Russian National Corpus some new examples that led to new ideas for the Borschev and Partee article, serendipitously illustrating the kind of value of corpus work that his article discusses. The Borschev and Partee article now has a section with results of corpus work, which was not the case for any of our previous articles.

As of Year 2, we would say that while the PIs and senior consultants do not expect to achieve the mastery of corpus techniques that can be seen in some of the work of the younger

generations of linguists, corpus work is coming closer to becoming part of our standard repertoire.

2.2.2.3. Other research activities, Year 2

1. Four project meetings at UMass Amherst, Fall 2005, organized with the assistance of research assistant Florian Schwarz, attended by past, present, and prospective future RAs and by other interested faculty and students.

Meeting 1: Friday, Oct 7, 2:30-5:00. Presentation by Borschev and Partee: The Russian Genitive of Negation, Existential Sentences, and Diathesis Alternation: Interaction of Lexical and Compositional Semantics. (A modified version of what we presented at the conference in Israel in June.)

Meeting 2: Friday, October 21, 3:30 – 5:30.

1) Florian Schwarz (R.A. Fall 2005): The interpretation of NP complements of 'need' and 'want'.

Abstract:

Based on scope ambiguities involving temporal modifiers, I argue that the property analysis of intensional transitive verbs (Van Geenhoven and McNally 2005, Zimmermann 1993) can only account for one class of such verbs (e.g. 'look for'). Verbs like 'need' and 'want' require a proposition as their complement. However, the propositional complement of these verbs is not derived from an unpronounced syntactic clausal complement (as proposed by (Den Dikken et al. 1996, den Dikken et al. 1997), but has to be construed semantically in order to restrict the range of possible NP arguments for the intensional interpretation appropriately.

This work of Schwarz's became his semantics Generals Paper for that semester, and then turned into a paper for SALT 16 in Japan and a talk for a conference in Milan.

2) Keir Moulton (R.A. summer 2005): Strong Reflexivity and attitudes *de se*: Evidence from ECM

Abstract:

Based on a contrast in 'de se' interpretations in ECM constructions, the paper proposes a morpheme in the verbal projection that requires a form of inherent reflexivity for attitude verbs.

Meeting 3: Monday November 14, 4:00 – 5:30.

1) Keir Moulton, reporting on a paper of Maria Bittner's (Bittner 1987) about antipassives, and ways in which the phenomenon might be relevant to Genitive of negation. The paper is available at:

http://www.rci.rutgers.edu/~mbittner/pdf%20files%20for%20web/bittner%2087_ijal.pdf

Note: Amy Rose Deal's summer 2006 project involves investigation of antipassives in Nez Perce, which will give us an additional avenue for exploring similarities between antipassives and the Russian genitive of negation.

2) Youri Zabbal (R.A. summer 2005), reported on the distribution of French 'de/'des', in particular in existential sentences and negative existential sentences, and we discussed potential parallels and non-parallels with Russian genitive of negation. (These similarities

have in the meantime also been discussed in new work by Dmitry Levinson, a graduate student at Stanford with whom we are corresponding.)

Meeting 4: Nov 22, 11:15 – 1:00. Partee and Borschev discussed similarities and differences between intensional contexts and negative contexts in the licensing of genitives in Russian, and on ways of looking at the semantics of negation and of intensionality to try to capture the relevant similarities and differences, probably making use of "non-veridicality". We also discussed a paper by Olga Kagan, Edit Doron's student at Hebrew University who's working on this problem, and Partee's and Borschev's comments to her on it. This presentation was part of Partee's preparation for the December 1 Smith College talk, and the topic was further developed in spring and summer 2006.

2. In connection with the work of Rakhilina's students in her Fall 2005 course on the Genitive of Negation, both Rakhilina and Paducheva have followed up on some of the hypotheses and some of the most interesting examples that the students came up with. Rakhilina has been continuing to work on constructions with *poka ne* 'not yet' and their interaction with Perspectival Structure (Borschev and Partee) and the viewpoint of an implicit Observer (Paducheva) in influencing the choice of Gen Neg vs. Accusative. Paducheva has been following up on the work of Beljaeva and of Letuchij (see descriptions of their work in the Findings section) and working towards a synthesis of factors involved in the selection of Object Gen Neg, particularly those which are tied to the semantics of particular classes of verbs. While the factors are many and their interactions not simple, a not so chaotic picture of the nature and sources of these factors seems to be emerging; see Paducheva's 2006 papers on Object Genitive of Negation.

2. Research assistant Anna Verbuk completed in Year 2 a project she began in Year 1 relating to the acquisition of the semantics of Russian *ili* 'or' in positions under the scope of negation, and contrasting it to the acquisition of parallel phenomena with English *or*. The interpretation of *or* in the two languages is the same in some contexts and different in others, the main difference being that Russian *ili* is a Positive Polarity Item (PPI), as discussed in recent work by Szabolcsi. Verbuk tested young Russian-speaking children, ages 3;5 to 6;10 to see whether how they interpreted Russian sentences with *ili* in sentences analogous to English (i):

- (i) Cat did not find the key or the mirror.

It turned out that 16 of the 21 children tested consistently interpreted the Russian *ili*-sentences in the same way that English children and adults interpret (i), namely with the disjunction under the scope of the negation: Cat didn't find either one. (This is often (misleadingly) called a 'conjunctive' interpretation of the disjunction, since it can be paraphrased by the conjunction of two negative sentences, 'Cat did not find the key and Cat did not find the mirror.')

This result shows that the PPI nature of Russian *ili* must be learned; the initial hypothesis appears to be the same for Russian and English-speaking children, that disjunction can take scope *in situ* under sentential negation.

There are close connections to be made between this work and our work on Genitive of Negation, since the natural translation of English (i) into Russian would use the NPI connective *ni ... ni* 'neither ... nor' (which can occur only with accompanying clausemate

sentential negation), and the alternation between Accusative and Genitive on object NPs in negative sentences is also closely related to the scope of negation. (There is already work by Babyonyshev and colleagues on children's acquisition of the Genitive of Negation, which should be compared in future work to children's acquisition of PPI *ili* and NPI *ni ...ni*.)

Verbuk has submitted abstracts on different aspects of this experimental work to two conferences: the Western Conference on Linguistics (WECOL 06) at California State University in Fresno, California, and to FDSL 6.5 (Formal Description of Slavic Languages) at University of Nova Gorica in Nova Gorica, Slovenia.

3. In Year 2, research assistant Florian Schwarz has been studying semantic properties of intensional transitive verbs, arguing that some involve property-type objects and others do not. His work has led to talks and a paper listed in this report; see also the Findings section. The relation between intensionality and negation has been one of the foci of work in Year 2.

4. In Year 2, research assistant Keir Moulton followed up on his work in Summer 2005 on languages with genitive-of-negation like phenomenon, such as case marking alternations which showed reduced referentiality of NPs, including Turkish and West Greenlandic. He presented at grant meetings in Fall 2005 in Amherst. First, over two meetings he provided background and summary of work on the anti-passive construction in West Greenlandic pointing out similarities to Genitive of Negation, by leading a discussion of Bittner's (1988) work and more recent work on indefinites in these constructions in Inuktitutt by Wharram (2003). He also presented parts of his own work on Exceptionally Cased Marked objects of intensional (attitude) verbs in English, in particular reflexive objects of attitude verbs, relating it to our work and others' on relationships between negative contexts and intensional contexts in accounting for accusative/genitive alternations in Russian (Neidle, Kagan, Partee and Borschev).

5. In the summer of Year 2, research assistant Amy Rose Deal carried out an investigation of 'weak' objects in the so-called antipassive construction in Nez Perce, an endangered Penutian language. This research involved both work from grammars and corpora and a field trip to obtain more nuanced semantic data in July 2006. Similarities between antipassive constructions and the Russian Genitive of Negation have been argued for by Bittner (p.c. to P.I.), whose work on antipassives in Greenlandic Eskimo was discussed by Keir Moulton in a Fall 2005 project meeting at UMass and by Andrew McKenzie in a Fall 2005 semantics seminar conducted by Christopher Potts. Deal's fieldwork will add perspectives on antipassives and the 'weak object' problem from another language family.

6. During Year 2 consultant Yakov Testelelets continued to work on problems of "null-copula" sentences that arose during our joint work on sentential and constituent negation. His results are described in the Findings section. Testelelets had planned to present the work at the FDSL conference in Fall 2005, but was unable to attend; he will present it at a conference in St. Petersburg in September 2006, and plans further work on this topic.

7. In August of Year 2 the project had a visit from Ljudmila Geist, a young Russian research scholar at the University of Stuttgart, who is proposing to start a project there on Russian Genitive of Negation, Specificity and Intensionality. She learned about our project from our

research assistant Florian Schwarz when they were both at a Sinn und Bedeutung conference in Germany in Fall 2005, and she has since become familiar with the papers of Borschev and Partee and of Yanovich, and will meet with us and with our consultants two or three times during her visit in August 2006. If she is able to get her project funded and launched, we will expect to be in close cooperation with her in the future. We know and respect her earlier work on the syntax and semantics of *be*-sentences.

2.2.2.4. Public lectures, Year 2

Our public lectures have given us opportunities to disseminate results and hypotheses and to receive valuable feedback and engage in fruitful discussion with colleagues in the US, Russia, and elsewhere (in year 2, in Italy, France, Germany, Japan, Georgia, New Zealand.)

Paducheva, Elena and Pentus, Mati, April 15, 2006, Second Annual Workshop: Formal Semantics in Moscow, invited talk: Formal'naja i neformal'naja semantika predel'nosti. 'Formal and non-formal semantics of telicity.'

Partee, Barbara H. and Vladimir Borschev, September 12--16, 2005. The Sixth International Tbilisi Symposium on Language, Logic and Computation, Batumi, Georgia. Invited lecture: Diathesis and Referentiality: Interacting Factors in the Russian Genitive of Negation Construction

Partee, Barbara H., December 1, 2005. Smith College: Sixth Annual Alice Lazerowitz/Tom Tymoczko Memorial Logic Lecture: Negation and Intensionality: A Puzzle in the Logic of Natural Language

Partee, Barbara H., Feb 17- June 9, 2006, University of Canterbury Visiting Erskine Fellowship, Christchurch, New Zealand. A special topics course in semantics for undergraduate linguistics majors: "The Structure of Meaning", with auditing by faculty and graduate students in linguistics and philosophy.

Partee, Barbara H. and Vladimir Borschev, April 3, 2006: University of Canterbury Linguistics Dept colloquium: Puzzles of Predicate Possessives.

Partee, Barbara H., May 9, 2006: University of Canterbury Philosophy Dept colloq: Negation and Intensionality: A Puzzle in the Logic of Natural Language

Partee, Barbara H. and Vladimir Borschev, May 19, 2006, Victoria University of Wellington, Linguistics Dept colloquium, Partee and Borschev: The Semantics of Russian Genitive of Negation: The Nature and Role of Perspectival Structure.

Schwarz, Florian, March 24, 2006. "On NEEDING Propositions and LOOKING FOR Properties", a talk at Semantics and Linguistic Theory 16 (SALT 16), University of Tokyo, Tokyo, Japan. The handout is available at <http://people.umass.edu/florian/SALT16FShoprint.pdf>

Schwarz, Florian, June 15, 2006. "A proposition for 'need' (and a property for 'look for')", a talk at the Milan Meeting 2006, Università degli Studi di Milano, Milan, Italy.

Verbuk, Anna, November 30-Dec 2, 2005. "Russian Predicate Clefts as a Case of S-Topic Constructions." *Formal Description of Slavic Languages* (FDSL-6), Potsdam.

Yanovich, Igor and O. Fedorova, September 29, 2005. "Lexically Modifying Binding Restrictions: Case for a Variable-free Binding Theory". Talk at Colloque de Syntaxe et Sémantique à Paris 2005, Paris, France.

Yanovich, Igor, and Olga Fedorova, September 2005. "Emergence of Principle B: A variable-free approach". Poster presentation (accepted as a paper, but authors were unable to attend, and organizers have agreed to convert it to a poster *in absentia*.) International Conference: Generative Approaches to Language Acquisition (GALA), University of Siena, Siena, Italy.

Yanovich, Igor, April 15, 2006. "Ordinary property and identifying property wh-words: two *kakoj*-s in Russian". Talk at Workshop: Formal Semantics in Moscow 2, Moscow State University, Moscow, Russia.

Future (from Year 2) lectures and lecture series:

Paducheva, Elena, September 8-10, 2006, accepted paper, Imperfective of negation in Russian. First biennial meeting of the Slavic Linguistics Society. Bloomington, Indiana.

Partee, Barbara H. and Vladimir Borschev, August 23-26, 2006, Budapest/Besenyotelek, Hungary, invited paper: "Information structure, perspectival structure, diathesis alternation, and the Russian genitive of negation" at the Ninth Symposium on Logic and Language, organized by the Research Institute for Linguistics, Hungarian Academy of Sciences.

Partee, Barbara H. and Vladimir Borschev, September 8-10, 2006, invited keynote speakers, first biennial meeting of the Slavic Linguistics Society, Bloomington, Indiana.

Partee, Barbara H. November 13, 2006, invited lecture, Humanities and Social Science division of the Royal Netherlands Academy of Arts and Sciences, Amsterdam.

Partee, Barbara H. and Vladimir Borschev, November 2006: invited lectures at Copenhagen Business School, Copenhagen, Denmark; Göteborg University, Göteborg, Sweden; Radboud University Nijmegen, the Netherlands; the last is in connection with the PIONIER project "Case cross-linguistically", directed by Helen de Hoop and colleagues, where we will serve as consultants for their project and they for ours.

Testelefs, Yakov, September 2006. Russian version of "Zero Copula and Matrix Small Clause in Russian." to be presented at the A.A. Kholodovich memorial conference in St. Petersburg to be held at the Institut lingvisticheskix issledovanij of the Russian Academy of Sciences (RAN).

Project Findings Years 1-2 (Sept. 1, 2004 – Aug. 31, 2006) NSF Grant BCS-0418311

1. Project Findings Year 1

1.1. Diagnostics for Sentential vs. Constituent Negation in Russian. A number of very puzzling cases of the Russian Genitive of Negation turn on some difficulties in distinguishing between sentential negation and constituent negation in present tense BE-sentences with null BE: the usual diagnostics involving the position of the negative morpheme relative to the verb are inapplicable in such sentences. It has been standard at least since the classic work of Babby in 1980 to equate constituent negation with contrastive negation. In the work reported in Borschev et al (in progress: our FASL-14 paper), we found clear arguments that constituent negation is not always contrastive negation, and further found several better and clearer diagnostics for distinguishing between sentential and constituent negation. One set of tests (discovered by Igor Yanovich) concerns ambiguity or lack thereof in the interaction of subject quantifiers and negation, another (discovered by Borschev) concerns the interaction of negation with certain temporal adverbials, and another particularly clear test (discovered by Testelefs) concerns the distribution of *ni ... ni* 'neither ... nor' phrases. These results were presented at the FASL meeting at Princeton in May and are being written up for publication in early 2006.

1.2. The distinction between Locative and Existential Sentences in Russian. Borschev and Partee have found that the distinction between the two sentence types in Russian corresponding to English "The cat was on the sofa" vs. "There was a cat on the sofa" is not as categorical as the corresponding distinction in English. Their paper in press for the volume edited by Comorovski and von Heusinger outlines a set of properties that cluster together in the prototypical existential or locative sentences, but which do not cluster together in certain 'mixed cases'. This finding raises new questions which will be explored in the next years, and may help to explain some cases in which there is not a straightforward one-to-one correspondence between positive and negative sentences, an issue that was also addressed and partially resolved in the paper noted in point 1.1 above.

1.3. Decreased referentiality in Genitive NPs.

So far our findings on this important issue are largely negative. We have examined some of the arguments (our own and others) for the possibility of treating Genitive NPs as property-denoting. The first thing we have uncovered is a wide range of different views on what such a hypothesis means and what consequences it would have; the ontological assumptions underlying formal semantics and those underlying Moscow school lexical semantics turn out to be more different than we had previously realized. The second thing we have discovered is that despite some tantalizing similarities between the semantics of some cases of Object Genitive of Negation and the semantics of genitive objects of intensional verbs like *zhdat'* 'expect', noted by Neidle in the 1980's and revived in recent proposals by Olga Kagan, there are many fundamental differences that argue against any straightforward semantic unification of the two uses of Genitives. These issues are discussed in Partee's talks and papers in progress for three June conferences, the Meaning-Text Conference in Moscow, the DIALOG conference outside Moscow, and the research workshop in Israel. The hypothesis Partee has suggested for subsequent exploration is that intensionality or 'reduced referentiality' is not a uniform phenomenon, but involves a number of properties that do not always co-occur.

One may note a commonality in the findings in points 1.2 and 1.3: what had seemed to be dichotomies appear on closer examination to involve constellations of properties that commonly but not invariably co-occur. Part of our future work will be aimed at identifying and analyzing these properties and their consequences in more detail.

1.4. Open problems concerning the semantics of Object Genitive of Negation.

One problem on which we have not reached any definite conclusions concerns the semantics associated with the Object Genitive of Negation construction. But on the positive side, our failure to find any simple and uniform semantic correlate for Object Gen Neg contrasts with our fairly robust understanding of the semantics of Subject Gen Neg and hence strengthens our hypothesis that the two constructions are not semantically uniform. We are not yet in a position to argue that the Unaccusative hypothesis, which unifies the two, is incorrect; we must first come to terms with some counterexamples to our treatment of Subject Genitive of Negation which arise with ‘strengthened negative’ NPs like *ni odnoj butylky* ‘not a single bottle (gen.)’, noted in the handouts to some of the recent lectures by Borschev and Partee. In fact we have made more progress than expected in Year 1 on problems connected with the scope of negation, and the semantics of negation more generally, and less progress than expected on the specific semantics of Object Genitive of Negation with different classes of verbs. The latter problem will be a high priority for Year 2.

1.5 The semantics of Russian indefinites.

Our junior consultant Igor Yanovich has made important progress in his work on the semantics of Russian indefinite pronouns, a topic that is not explicitly identified in the project proposal but one that is closely connected to the question of different sorts of ‘decreased referentiality’ noted in point 1.3 above. Russian has a particularly rich range of ‘indefinite series’, far more than English with just the *some-*, *any-*, and *no-* series. Yanovich has explored the properties of several of the Russian forms and used them to provide new arguments concerning theoretical debates among Kratzer, Reinhart, and Matthewson concerning choice-function and Hamblin-alternative analyses of indefinites. Yanovich’s work simultaneously offers new insights into the semantics of Russian indefinites and new evidence from Russian concerning theoretical issues at the forefront of current formal semantic theory. His conclusion so far is that for certain Russian indefinites, a variant of Kratzer’s ‘alternative’ account works best, but that Russian also has indefinites for which a choice-function analysis works best. The fact that Russian has quite a few bimorphemic indefinites has enabled him to find arguments for dividing up the ingredients of the semantic analysis in particular new ways so that the results can be derived compositionally; this is also an important advance for the understanding of the semantics of indefinites in a semantic- typological perspective.

2. Project findings Year 2.

2.1. Two classes of intensional transitive verbs. Our Research Assistant Florian Schwarz has investigated the properties of intensional transitive verbs, and found that there are two classes of such verbs, which differ substantially in their behavior and require distinct analyses. One, the ‘look for’-class, is best accounted for by Zimmermann’s (1993) property analysis, while the other, the ‘need’-class, requires a propositional analysis. Schwarz has developed a number of empirical tests for teasing the two apart, employing adverbial modification as well

as 'too' and 'again'. The resulting improved understanding of intensional transitive verbs should be helpful in further investigating the connections between the genitive object in Genitive of Negation constructions and intensional transitive verbs (as discussed by Neidle, in Olga Kagan's work, and in recent papers by the PI's). One of the next steps in this research is to look at the contribution of the preposition 'for' in verbs like 'look for', and compare this to the potential contribution of the genitive case in Genitive of Negation constructions.

2.2. Acquisition of Russian ‘or’. Our research assistant Anna Verbuk has investigated Russian children’s acquisition of the Positive Polarity Item (PPI) *ili* ‘or’, as described in the Activities section, and has found that the PPI nature of Russian *ili* must be learned. The large majority of Russian children tested treated *ili* as if it were just like English *or* in sentences with disjunctions like ‘the key or the mirror’ in object position under clausemate sentential negation, whereas no adult Russian speaker can interpret *ili* with scope under clausemate sentential negation. Thus the initial hypothesis appears to be the same for Russian and English-speaking children, that disjunction can take scope *in situ* under sentential negation, and further investigation is called for to see when and together with what other acquisition-relevant factors the PPI nature of *ili* is acquired.

2.3. A distinction between “null copula” and no copula. Our consultant Yakov Testelets has followed up on the problem of constructions in Russian with no overt copula, often referred to as “null copula” sentences, which have presented problems both for our own work on Genitive of Negation in existential sentences (Partee and Borschev, In Press, “Existential sentences, *be*, and the Genitive of Negation in Russian), but also for many other researchers working on copular sentences in Russian. There have been arguments about whether Russian ‘bare predicate’ sentences without overt copula are instances of sentences with a phonologically null but syntactically real copula, or whether they are matrix small clauses, a controversial hypothesis. Testelets has now shown that constructions with no overt copula in Russian fall into two classes, each conforming to one of the following two analyses: 1) genuine zero copula sentences with a nominative subject and a nominative predicate nominal, e.g. a long-form adjective, a characterizing NP or an NP of identity, and 2) matrix small clauses with no copula at all which lack at least one nominative of the two, e. g. locative, possessive, or temporal clauses.

Two analytical tests may be applied to uncover the structural difference between the two types. The first test was suggested by Igor Yanovich for Russian locative sentences like those investigated in [Borschev, Paducheva, Partee, Testelets, Yanovich 2005]. The second test involves those negative NI-expressions, including NI-NI constructions, which undergo Negative Concord with sentential negation in Slavic. Not all NI-expressions fall into this category; means for sorting out which ones are genuine instances of negative concord with sentential negation was part of the Testelets’s result.

2.4. Re-examining Kiparsky’s analogies between Finnish partitive case and Russian imperfective aspect. Beginning even before Year 1 we had discussed some very interesting work of Paul Kiparsky drawing parallels between uses of the Finnish partitive and uses of the Russian imperfective aspect; Kiparsky argued that both of those constructions could be used to mark semantic unboundedness in the verb phrase meaning, whether that unboundedness

resulted from the semantics of the direct object or that of the aspectual verb, although with different constraints on the possibilities of semantic shifts in lexical meanings depending on whether it was nominal or verbal morphology that was employed. Our project group discussed his work in several meetings in Years 1 and 2 and eventually came to the conclusion, reported in Partee's paper in press "Negation, intensionality, and aspect: interaction with NP semantics", that Kiparsky's claim about Finnish partitive is presumably correct, his claim about Russian imperfective aspect is too strong: the native speakers in our group uniformly rejected interpretations of imperfect-aspect examples involving a bounded (completed action) reading for the verb and an unbounded reading only for the object. We have communicated this result to Kiparsky and look forward to further discussions to see whether some variant of the hypothesis can be maintained, since it is certainly an attractive one.

2.5. Some results concerning Object Genitive of Negation and related problems.

We have, as hoped, made some substantial progress on understanding the Object Genitive of Negation in Year 2, largely through the work of two of our consultants, Elena Paducheva and Ekaterina Rakhilina, and also through the work of a group of students taught by Rakhilina.

In Fall semester 2005, Ekaterina Rakhilina taught a seminar on the semantics of the Genitive of Negation at RGGU. In January 2006, after the close of the semester, she organized a workshop presentation by some of her students (several of whom had studied semantics with Partee in earlier years) for our NSF project group. The findings reported in the three most interesting of the presentations are summarized here.

1. David Ershler, O vybore padezha u imennyx grupp-sirkonstantov so znacheniem protjazhennosti pri otricanie: opyt korpusnogo issledovanija [On the choice of case in adverbial NPs of extent under negation: an experiment in corpus research]

The study concerned Russian NP-adverbials of temporal or spatial extent, such as *dva kilometra* 'two kilometers', *tri chasa* 'three hours', in negative sentences, in uses in which they occur as quasi-complements in the Accusative in positive sentences. The study investigated factors influencing the choice of Accusative or Genitive under negation, making use of corpus searches both in the Russian National Corpus and with standard search engines, limiting the data to sources from 1960 or later. The main result was the discovery of semantic invariants which could explain all cases (excluding certain idiomatic or strongly lexicalized phrases) in which the use of Genitive is obligatory or possible.

Overall, Accusative is the default choice for NP adverbials of extent in negative sentences just as in positive sentences. Whenever Genitive is used, there is semantic motivation for it. One special case, which relates to many uses of Gen Neg, is that Genitive is *obligatory* in case either of the emphatic particles *i* or *ni* precedes the NP; with *ni* 'not even', the NP must be a bare unit-measure noun, as in 'He didn't sleep even an hour', while with *i* 'even', it can be either bare or cardinally quantified. The use of Genitive is optional, and semantically significant, in cases where the adverbial X contributes to the meaning "The situation continued for a certain interval of time or space, but ended (a) in the case of an unbounded process: before an interval denoted by X had elapsed, or (b) in the case of a bounded process:

when an interval denoted by *X* still remained before completion.” The use of the Genitive in these cases can be characterized semantically as indicating “partitivity of action”. In all other cases, Accusative is obligatory.

The report included more interesting details, including the prevalence of certain prefixes, and often certain accompanying PPs with cognate prepositions, conveying temporal extent on the verbs used with Genitive. It would be worthwhile to relate this work to other discussions in the literature concerning the connection between Genitive expressing partitive and Genitive of Negation (Franks and Dziwirek, Dmitry Levinson, Kiparsky, Paducheva.)

2. Anna Belyaeva, Padezhnaja markirovanie ob’ekta pri possessivnyx glagolax [Object case-marking with possessive verbs]

Belyaeva’s project began with the hypothesis that transitive verbs relating to possession (give, receive, get, take, borrow, return, buy, sell, lose, find, steal, etc.) would fall into two classes, differing with respect to whether or not the direct object was ‘new’ to the subject of the sentence, coming into his possession or field of perception in the course of the denoted action. This hypothesis was inspired in part by the behavior of such verbs in the Caucasian languages Adyghe and Komi, where the verbs with ‘new’ objects take objects with unmarked case (and accordingly ‘lower referentiality’) and those with ‘familiar-to-the-subject’ take case-marked, and hence referential, objects.

In order to focus on the contribution of the verb, only sentences with ‘concrete’ rather than ‘abstract’ objects were considered, since it is well-known that the concrete-abstract distinction also influences Acc/Gen choice.

One incidentally interesting factor that turned up was that when the negative sentences included the expression *poka ne* (‘not yet’ or ‘so far not’, or sometimes ‘until’), the use of that adverbial had a strong influence on the choice of Acc/Gen, different choices depending on its meaning in the sentence. This is an interesting factor which Rakhilina has taken up and continued to pursue during Year 2.

The study included corpus searches, and in the presentation many attested examples were given, but no statistics, just impressionistic estimates of greater and lesser frequency.

The hypothesis was confirmed as a factor in the Acc/Gen choice, although not a uniquely determinative one. Other factors such as emphatic negation, the degree of referentiality of the NP and the choice of singular vs. plural, and the aspect of the verb, also play a role in the choice in such sentences. And as usual, Accusative is possible in a wider range of contexts; in some cases Accusative is obligatory or nearly obligatory, whereas Genitive can almost always be replaced by Accusative. Only two of the studied verbs tended to strongly prefer Genitive over Accusative under negation, *darit* ‘to give as a gift’ and *naxodit* ‘to find (impf.)’. But with these caveats, the hypothesis was indeed confirmed: where the object was “new” for the subject, Genitive under negation was much more likely to be found than where it was “old”. An interesting wrinkle arose for verbs with an additional participant, such as *buy*, *sell*, *borrow*, *lend*: in those cases the entity denoted by the direct object was likely to be “new” for one of the human actants and “old” for the other; in these cases it seems that it may make a difference from whose “point of view” the situation is being described. Further investigation of this last point is required, since it is not always straightforward to determine the point of view; one line of investigation would involve looking at sentences with one first-person actant

and one third-person actant, on the assumption that point-of-view tends to be preferentially associated with a first-person actant when there is one. And as further confirmation of the hypothesis seems that the Genitive-preferring verb *darit* 'give as a gift' seems to lexically prefer the point of view of the receiver, for whom the object is new; it is very often used with an unspecified subject. And when the sentence clearly presents the point of view of the giver, the choice is much more likely to be Accusative.

A further result was that with some verbs such as *naxodit*/*najti* 'find impf/pf', a negated sentence with an indefinite object strongly suggests non-existence of the object, and in such cases the use of Gen Neg is very high, much as in negated existential sentences of the sort studied by Babby, by Borschev and Partee, and others.

3. Aleksandr Letuchij, *Glagoly, sil'no trebuyushchie genitiva/akkuzativa i iskljuchnija iz pravil* [Verbs strongly selecting Genitive/Accusative and exceptions to the rules]

Letuchij focused on three classes of transitive verbs: (a) verbs expressing actions strongly affecting the patient (*ubit* 'kill', *bit* 'beat', *udarit* 'hit'), (b) verbs of emotional perception or experience (three kinds of 'feel'), (c) verbs of speech (three kinds of 'say' or 'tell'). The goal was to determine for which verbs, under sentential negation, Genitive is characteristic, and for which Accusative, and why.

Statistically, overall the predictions of Mustajoki and of Timberlake were confirmed: verbs of class (a) tend to take Accusative, and those of class (b) Genitive. And Mustajoki's data indicating that verbs of speech are strongly Genitive-selecting were also confirmed. But in all cases there were exceptions, and this study attempted to identify and explain the relevant characteristics of the exceptions.

For example, the verb *ubivat* 'kill (impf.)' regularly takes Gen Neg when used in a secondary meaning, as in to kill hope, to kill a friendship. This generalization is practically without exception. And *ubivat* sometimes takes genitive even in its primary sense, if the object is indefinite ('I never killed a woman'). With the perfective form *ubit* there are no such exceptions. With the imperfective *ubivat* there are even uses of Genitive with a known referential object: an attested example involves denial of a criminal charge: "X swears that he did not kill his mother". Letuchij argues that in this case there is no suggestion of lack of presupposition of the existence of the mother, but rather the identity of the mother is not important for the speaker, only the denial that there was a killing. Probably not coincidentally, he notes, *ubivat* can be used without an object more easily than the other verbs of strong action.

Letuchij goes equally carefully and thoughtfully through several sets of examples, identifying the factors that play a role in exceptions to the statistical tendencies, and supporting his arguments with near-minimal pairs including both attested and constructed examples. He identifies factors that promote the use of Genitive with the strong-action verbs and other factors that promote the use of Accusative with the Genitive-preferring verbs of perception.

He notes that both in the 'exceptional' cases of object Gen Neg with *ubivat* and the normal use of object Gen Neg with perception/feeling verbs, there is some similarity with the use of subject Gen Neg in existential sentences: *ubivat* in its derived sense has a meaning

close to “cause to not exist”, and for a subject to feel shame is for shame to exist for the feeling subject.

Letuchij examines the generalization that seems to hold for most cases, that when Accusative is used, the verb and the object are not both in the scope of negation; this fits Babby’s original observation. He also examines the hypothesis that a presupposition of existence of the object is crucial, and finds (as has been claimed by others as well) that the presence or absence of presupposition of existence, while clearly a significant factor, does not always determine the choice of Accusative vs. Genitive. He looks also at Given/New and at Perspectival Structure, and particularly at issues of “competition” for the role of Given or Topic or Perspectival Center between the NP in question and other participants in the actant structure, including primarily Subject in the case of object Gen Neg and Location in the case of subject Gen Neg.

His main conclusions are summarized as follows. For the use of Genitive vs. Accusative, it is significant whether the object is included in a presupposition. But this need not always be a presupposition of existence (otherwise one could not explain the use of Genitive in “he did not feel the injection.Gen”), and not always existence in one’s personal sphere or location (otherwise we could not account for the possibility of Accusative in ‘He didn’t tell that story’, where it may be that he did not know that story at all). It would appear that which of these kinds of presuppositions is important varies from verb to verb in ways predictable from the meaning of the verb: in the case of verbs of personal perception or feeling, existence within the personal sphere is what’s crucial, where as for verbs of speech, simple existence is what matters. And complicating the picture, a lesser though still significant factor is the extent to which the direct object matters to the main assertion.

Along the way, he notes, as did Beljaeva, that the presence of *poka ne* ‘not yet’, ‘still not’, or ‘until’, may sometimes override other factors in determining Genitive/ Accusative choice, but which is preferred depends on the scope of that phrase relative to other parts of the sentence, which is why *poka ne* doesn’t emerge as a ‘strong factor’ in simple co-occurrence statistics such as Mustajoki’s.

Letuchij’s work is a good example of the use of close analysis of individual examples to balance statistical corpus studies; he has made good progress in identifying some of the important factors that lie behind both the gross generalizations and their exceptions.

Both Elena Paducheva and Ekaterina Rakhilina followed up on this topic in Year 2, as discussed in the Activities section. Aspects of the broader significance of these findings are discussed under Contributions.