

Maria A. Babyonyshev In Memoriam*

Maria Babyonyshev died on Friday, March 18, 2011, at the shockingly untimely age of 44, from complications of a devastating 2006 car accident caused by an out-of-control motorcyclist.

Masha received her undergraduate degree in linguistics from MIT in 1990, where she completed a major in “Language and Mind,” which combined linguistics with cognitive science. (She was elected to Phi Beta Kappa in recognition of her academic achievements.) After a year in the graduate program at Brandeis, she returned to MIT as a graduate student in linguistics. There she received her Ph.D. in 1996, with a dissertation entitled *Structural connections in syntax and processing: Studies in Russian and Japanese* (Babyonyshev 1997). Ted Gibson and I were privileged to co-advise this dissertation, as part of an unusually large interdisciplinary dissertation committee that also included Alec Marantz, Shigeru Miyagawa, and Ken Wexler. As it happens, the phrase “structural connections” in her dissertation title describes Masha’s varied and influential career with singular aptness. Over the scant decade or so in which Masha participated fully in linguistic research, she explored a multitude of links between linguistic theory, language acquisition, and processing—while simultaneously exploring many other links between the structure of her native language, Russian, and other languages of the world.

After completing her Ph.D., Masha taught linguistics at Harvard and conducted post-doctoral research on language acquisition in Ken Wexler’s lab at MIT. In 2000, she took up a position as Assistant Professor of Linguistics at Yale, where she taught, conducted her research, and advised a growing group of graduate students.

The quality, quantity, and diversity of Masha’s contributions during her short career is nothing short of remarkable. They include significant novel discoveries about the structure of Russian, empirical contributions to debates about language acquisition, and the very first

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steps towards the understanding of the manifestations of Specific Language Impairment among speakers of Russian. Highly regarded as a perceptive and creative syntactician, many of Masha's most important contributions concerned semantics. Though the structure of Russian was her most abiding interest, some of her most interesting work concerned Japanese. A crackerjack theoretician, she was also a pioneer in the integration of developmental and psycholinguistic research with linguistic theory.

By the time of the 2006 accident, Masha was focusing quite intensely on argument structure and argument-changing operations in Russian from a developmental perspective (while continuing to make side contributions in a variety of related and unrelated areas)—and had embarked on an extraordinary investigation of Specific Language Impairment (SLI) among Russian speakers that promised to shed unusual light on these topics. This research program developed themes already detectable in her MIT dissertation. To appreciate Masha's achievement, it is worth tracing the thread in her research that led to the SLI project.

Her dissertation contained two sections: one devoted to theoretical syntax, and one devoted to sentence processing. The theoretical section was an extended investigation of the so-called "EPP" (Extended Projection Principle) requirement on clauses and its status in Russian. The central case of the EPP cross-linguistically is the requirement that "subject position" (the specifier position of the clause) must be filled—a controversial issue for Russian. In her dissertation, Babyonyshev concerned herself with both syntactic and semantic consequences of this requirement, devoting particular attention to its interaction with case and agreement in the Russian Genitive of Negation construction—which, she argued, supported the idea that the EPP is indeed active in Russian, contrary to appearances.

As most readers of this journal will know, the use of genitive rather than nominative or accusative case in this construction has complex consequences for its semantics. Babyonyshev argued that these consequences could be explained on the basis of independently motivated syntactic and semantic proposals if we view the genitive nominals in this construction as *caseless*, in contrast to their nominative and accusative counterparts. Though case-marked nominals can and must move out of the verb phrase during the course of the derivation, Babyonyshev argued, caseless nominals do not—or at least may not do

so in the same fashion. (Babyonyshev argued that even when a genitive nominal in a negative sentence is preverbal, it does not occupy the canonical subject position.) Following Diesing (1990, 1992), a nominal that remains inside the verb phrase at the point of semantic interpretation is expected to receive a weak, non-specific reading as a general rule, while a nominal that exits the verb phrase is not—thus explaining observed correlations between case-marking and interpretation.

Consider now the consequences of this view for the syntax of a negative unaccusative sentence in which the argument that would otherwise satisfy the EPP by raising to subject position is genitive—and therefore remains inside the verb phrase, if Babyonyshev’s proposals are correct. If Russian has an EPP requirement, some other “non-canonical” element must satisfy it in such constructions. Thus, the discovery that this is the case would simultaneously support Masha’s analysis of the genitive of negation and the proposition that Russian has an EPP requirement in the first place. In a deep and intricate study of a range of Russian “non-canonical subject” constructions (most notably Locative Inversion) Babyonyshev argued that these twin proposals are indeed correct.

In the course of these investigations, Babyonyshev uncovered numerous novel puzzles that stand on their own, above and beyond their relevance to Babyonyshev’s particular goals. To cite just one striking example, she observed that only unaccusative verbs allow “first conjunct agreement” with a postverbal subject (building on observations by Crockett 1976)—thus providing the field with a new test for unaccusativity.

(1) **Unaccusative**

- a. Na stole stojali/ stojala pepel'nica i
 on table stood_{PL} stood_{F.SG} ashtray_{NOM.F.SG} and
 pustoj stakan.
 empty_{NOM.M.SG} glass_{NOM.M.SG}
 ‘On the table stood an ashtray and an empty glass.’
- b. Vo dvore stojali/ stojala Valja i Nina.
 in yard stood_{PL} stood_{F.SG} Valja_{NOM.SG} and Nina_{NOM.SG}
 ‘In the yard were standing Valentina and Nina.’

Unergative

- (1) c. Iz vse_x sobak kusajutsja/ *kusaetsja ètot pudel'
 from all dogs bite_{PL} bite_{SG} this poodle_{NOM.SG}
 i èta ovčarka.
 and this G. shepherd_{NOM.SG}
 'Out of all the dogs, (only) this poodle and this German
 shepherd bite.'
- d. V bassejne plavali/ *plaval mal'čik i devočka.
 in pool swam_{PL} swam_{SG} boy_{NOM.SG} and girl_{NOM.SG}
 'In the pool were swimming a boy and a girl.'
 (first conjunct agreement okay if verb means 'float', rather
 than 'swim')

Some of Babyonyshev's later work continued to explore these topics directly. With Dina Brun, then a Yale graduate student (Babyonyshev and Brun 2002), Babyonyshev charted a shift in the semantics of the Russian genitive of negation construction from older generation speakers (for whom the genitive signals indefiniteness) to the younger generation (for whom it signals non-specificity). Later collaborative work with Shigeru Miyagawa (Miyagawa and Babyonyshev 2004) extended Babyonyshev's ideas about the EPP in Russian to explain a series of systematic similarities and contrasts with Japanese.

While still a student, Babyonyshev was one of the leaders of a collaborative effort to understand not only the syntax of the Russian genitive of negation, but also its acquisition—a collaboration that resulted in a publication in *Linguistic inquiry* (Babyonyshev et al. 2001), a paper coauthored by Babyonyshev, myself, Ken Wexler, and Jennifer Ganger (at the time, a graduate student in Cognitive Science). The leading role in this work was played by the two (then) graduate students Babyonyshev and Ganger. The paper presented an empirical discovery that was remarkable in itself. Russian children as young as three appear to have mastered the complex syntax and semantics of the Genitive of Negation for direct objects. The discovery of that point itself required considerable ingenuity in experimental design, a task that fell to Babyonyshev and Ganger, and it was Masha who conducted the actual experiments in a Moscow day-care center. The most intriguing discovery of ours was a particular point on which the chil-

dren behaved unlike adults: the use of the Genitive of Negation with the otherwise nominative arguments of passive and unaccusative verbs. Here, we found children avoiding the genitive, even with verbs that require it in adult speech (such as the negative existential *net*). We took this as evidence that these children do not actually allow passive and unaccusative structures at all, contrary to appearances. Whenever it sounds like a young Russian-speaking child is using a verbal passive construction, the child is actually producing a homophonous adjectival passive; and when the child appears to be producing an unaccusative sentence, the verb is actually being used as an unergative.

Babyonyshev's later work took this proposal in new and unexpected directions. An outstandingly clever paper with Dina Brun (Babyonyshev and Brun 2004) builds on the fact that the homophony of verbal and adjectival passives holds only for passives of *perfective* verbs, since the passive of an imperfective verb is simply the active verb to which a reflexive clitic has been suffixed. An immediate prediction follows: children should show an asymmetry in their ability to use and produce perfective vs. imperfective passive forms, favoring the perfective, while adults should show no such imbalance. The prediction was supported by the results of an experiment that Babyonyshev and Brun carried out, thus providing strong and surprising support for an exciting but controversial hypothesis.

At this point (just a year or two before the accident that halted Babyonyshev's career so prematurely), some news reached Babyonyshev that took these results in a fascinating new direction. One prominent theory of Specific Language Impairment (Rice et al. 1995, Rice 2004) characterizes the condition as an instance of delayed linguistic maturation, with the result that certain features of language normally associated with young children—including particular difficulties with passive and other "A-chain" constructions—are preserved at much older ages. Babyonyshev learned about ongoing research in a village in the north of Russia that appeared to have a much higher than average incidence of language impairment, and developed the linguistic component of a large-scale study in this village, which, for the first time, put the "delayed maturation" theory of SLI to empirical test in a Russian context. As Babyonyshev and her colleagues noted in an early report on this project: "although the prospect of breaking new empirical ground is exciting, it is also associated with problems: there are no established facts, findings, or diagnostic procedures on which we can

rely” (Babyonyshev, Hart, and Grigorenko 2006). This was a truly pioneering effort of the first order. Among the many findings of this (still ongoing) research is the fact that the language-impaired children of this village do indeed display particular targeted deficits in the comprehension of passive sentences, as well as a fascinating array of other deviations from standardly developing children (and non-deviations) that appear to support aspects of the delayed maturation view.

That is just one of the many threads that ran through Babyonyshev’s short career in linguistics. There are so many others. In her dissertation and several subsequent publications, Babyonyshev’s work helped develop and support Gibson’s Dependency Locality Theory of sentence processing cost, a topic in which she never lost interest (Babyonyshev and Gibson 1999; Fedorenko et al. 2004). She was also the author or co-author of numerous fascinating “one-off” studies of different corners of Russian syntax and semantics. If she was not busy explaining the contrasts in (2) as a consequence of Kayne’s (1994) principles of linearization (Babyonyshev 2005), she was joining Matushansky to observe and explain the ability of point-of-view shifting adverbs as in (3a), and in contrast to other adverbials as in (3b), to license past tense versions of the copular *èto* construction (Babyonyshev and Matushansky 2006), or joining Avrutin to discover a new characterization of the subject-oriented property of Russian anaphora (Avrutin and Babyonyshev 1997).

- (2) a. mamin portret
 mama_{POSS.NOM.M.SG} portrait_{NOM.SG}
 ‘mama’s portrait’
- b. portret mamy
 portrait_{NOM.M.SG} mama_{GEN.SG}
 ‘portrait of mama’
- c. moj portret
 my_{M.SG} portrait_{NOM.SG}
 ‘my portrait’
- d. *portret menja
 portrait_{M.SG} me_{GEN.SG}
 ‘portrait of me’

- (3) a. S točki zrenija pervyx kristijan ...
 'From the point of view of the first Christians...'
 ... jazyčniki èto byli počti čerti.
 pagans_{NOM} this were_{PL} almost devils_{NOM}
 '... the pagans were almost devils.'
- b. *V 9-om godu N.È. ...
 'In 9 A.D...'
 ... jazyčniki èto byli počti čerti.
 pagans_{NOM} this were_{PL} almost devils_{NOM}
 '... the pagans were almost devils.'

As her long-time friends and collaborators Sergey Avrutin and Darya Kavitskaya wrote in a note for colleagues and family shortly after her death, Masha was a wonderful colleague: "honest, supportive, encouraging, friendly, and creative, everything a true scientist should be." She was a superb teacher as well: "Her classes were filled with students eager to learn how to practice the difficult science of linguistics from a comprehensively qualified and uniquely talented linguist."

Masha was also important to the development of the annual conference *FASL* (Formal Approaches to Slavic Linguistics), and one of its most consistent supporters, presenting papers at *FASL* 2, 6, 9, 10, 12, 14, 16, and 17 and helping to organize *FASL* 17 at Yale in Spring 2008. In fact, she and Sergey Avrutin organized *FASL* 2 in 1993 at MIT (when they were both graduate students), and thus deserve much of the credit for establishing it as a regular event. The most recent meeting of *FASL*, which by chance returned to MIT for the first time since the meeting that Masha co-organized, was dedicated to her memory (<http://fasl.mit.edu>).

As her family obituary notes: "Most remarkably, when it turned out that she had some (mild) aphasia [as a consequence of her accident], Masha had the courage of a true scientist and tried to analyze and understand her own linguistic impairment which stemmed from a stroke that occurred in the accident." Masha also completed several courses in plant biology and genetics after her accident, pursuing a long-standing passion. Most recently, she was involved in propagating from seed the Russian Antonovka apple that she had enjoyed as a

child, work that her family has now taken on as a memorial project. As her husband recalls: “Masha was comprehensively oriented toward truth and nature, finding peace in the answers that could come from careful observation and creative reflection. Her family shares in the loss of her intellectual life.”

Despite her many difficulties in the wake of the accident, Masha continued to work with her graduate students at Yale, and participated as actively as she could in research related to Russian language acquisition and SLI. Before and after the accident, Masha also worked on ORRIA (*Ocenka Razvitija Russkogo Jazyka, Assessment of the Development of Russian Language*; Babyonyshev et al. 2007), a language assessment battery for children “aimed at comprehensively assessing the range of acquisition of Russian in the areas of phonology, morphology, syntax, logical form, and the lexicon, tapping into both active and passive linguistic knowledge” (Rakhlin et al. 2011). Masha also participated in the analysis of Russian language samples from children and adults.

So important and interesting are these projects that we can be sure that others will continue the work that Masha began. But her special contribution, the clever twists and deep insights she would surely have brought to the work and its development—these are things that we, sadly, will never know.

References

- Avrutin, Sergey and Maria Babyonyshev. (1997) “Obviation in subjunctive clauses and Agr: Evidence from Russian”. *Natural language and linguistic theory* 15: 229–62.
- Babyonyshev, Maria A. (1997) *Structural connection in syntax and processing: Studies in Russian and Japanese*. Ph.D. dissertation, Massachusetts Institute of Technology.
- Babyonyshev, Maria A. and Dina Brun. (2002) “Specificity matters: A new look at the new genitive of negation”. Jindřich Toman, ed. *Formal approaches to Slavic linguistics: The second Ann Arbor meeting*. Ann Arbor, MI: Michigan Slavic Publications, 47–66.
- . (2004) “The acquisition of perfective and imperfective passive constructions in Russian”. Sudha Arunachalam and Tatjana

- Scheffler, eds. *Penn working papers in linguistics 10.1*. Philadelphia: University of Pennsylvania, 17–31.
- Babyonyshev, Maria A., Jennifer Ganger, David Pesetsky, and Kenneth Wexler. (2001) "The maturation of grammatical principles: Evidence from Russian unaccusatives". *Linguistic inquiry* 32: 1–44.
- Babyonyshev, Maria A. and Edward Gibson. (1999) "The complexity of nested structures in Japanese". *Language* 75(3): 432–50.
- Babyonyshev, Maria A., Lesley Hart, and Elena L Grigorenko. (2006) "The acquisition of passive structures in Russian children with SLI". James Lavine, Steven Franks, Mila Tasseva-Kurktchieva, and Hana Filip, eds. *Formal approaches to Slavic linguistics: The Princeton meeting*. Ann Arbor, MI: Michigan Slavic Publications, 1–16.
- Babyonyshev, Maria A., Lesley Hart, Jodi Reich, Julia Kuznetsova, Robyn Rissman, and Elena L. Grigorenko. (2007) "Ocenka razvitiya russkogo jazyka". Unpublished ms., Yale University.
- Babyonyshev, Maria A. and Ora Matushansky. (2006) "Back to the past". James Lavine, Steven Franks, Mila Tasseva-Kurktchieva, and Hana Filip, eds. *Formal approaches to Slavic linguistics: The Princeton meeting*. Ann Arbor, MI: Michigan Slavic Publications, 17–34.
- Crockett, Dina B. (1976) *Agreement in contemporary standard Russian*. Cambridge, MA: Slavica Publishers.
- Diesing, Molly. (1990) *The syntactic roots of semantic partition*. Ph.D. dissertation, University of Massachusetts, Amherst.
- . (1992) *Indefinites*. Cambridge, MA: MIT Press.
- Fedorenko, Evelina, Maria Babyonyshev, and Edward Gibson. (2004) "The nature of case interference in on-line sentence processing in Russian". Keir Moulton and Matthew Wolf, eds. *Proceedings of the thirty-fourth meeting of the North East Linguistic Society*. Amherst, MA: University of Massachusetts Graduate Linguistic Student Association, 215–26.
- Kayne, Richard S. (1994) *The antisymmetry of syntax*. Cambridge, MA: MIT Press.
- Miyagawa, Shigeru and Maria Babyonyshev. (2004) "The EPP, unaccusativity, and the resultative constructions in Japanese". *Scientific approaches to languages 3*. Kanda, Japan: Kanda University of International Studies.
- Rakhlin, Natalia, Sergey A. Kornilov, Jodi Reich, Maria Babyonyshev, Roman A. Kopusov, and Elena L. Grigorenko. (2011) "The relationship between syntactic development and theory of mind: Evidence

- from a small-population study of a developmental language disorder". *Journal of neurolinguistics*. 24: 476–96.
- Rice, Mabel L. (2004) "Language growth of children with SLI and unaffected children: Timing mechanisms and linguistic distinctions". A. Brugos, L. Micciulaa and C. E. Smith, eds. *Proceedings of Boston University Child Language Development Conference (BUCLD 28)*. Somerville, MA: Cascadilla Press, 28–49.
- Rice, Mabel L., Ken Wexler, and P. L. Cleave. (1995) "Specific language impairment as a period of extended optional infinitive". *Journal of speech and hearing research* 38: 850–63.

David Pesetsky
Department of Linguistics and Philosophy
Massachusetts Institute of Technology
Cambridge, MA 02139 USA
pesetsk@mit.edu