





Ýòìò ÿçúê ïïýòãí è ÷ãéíããéò, è èñïüðòãðò. Á íãñòíýùãã äðãíý Attempto Controlled English ïãããðæãããòñý ðýãñ ïãöèãèçèðíããííúò èíñòðòíãíòíã [Attempto Project]: ñéíòãèñè÷ãñèèè áíãèèçãòíð Attempto Parsing Engine (APE), èíòíðúé íãðããíãèò òãèñòú íã ACE á DRS; ïãöèü Attempto ñèòæãúèè äëý ïñòúãñòãéãíèý ïãðãðèè èíãè÷ãñèíã áúãíãã íã ïñííãã òðããðæããíèè, çãíèñãííúò íã ACE; ðãããèòíð äëý èíððãèòèðíãèè òãèñòíã íã ACE è äð. Ñòúãñòããíí è òí, ÷òí äëý çãíèñè òãèñòíã íã ACE ïãòò èñïüçíããòòñý ðãçèè÷íúã ïãöèãèçèðíããííúã ñéíããðè. È òíò æã òãèñòú èñòíðè÷ãñèèè èñòí÷íèéíã íã ACE, íãðããíòãííúã ïðè ïñííèè ïãöèý RACE, ïãòò èñïüçíããòòñý äëý äãíãðèðíããíèý ïíãúò æéíòãç íã ïñííãã òãèòíã, áúýãéãííúò èññéããíããòãéãí. Õãèè ïãðãçíí, Attempto Controlled English ïéííñòüð ïòãã÷ããò çããã÷ãí ñãíãíòè÷ãñèèè ïóãèèèãòèè èñòíðè÷ãñèèè èñòí÷íèéíã.

Íðè ýòíí íãèçãããíí áíçíèèããò äíðíñ í òíí, íãñèíèüèí ïðèãíèããí èñïüçíããíèã ãñòãñòããííãí èííòðíèèðòãííã ÿçúèã ACE äëý ñíçããíèý ñãíãíòè÷ãñèíèè ïóãèèèãòèè èñòíðè÷ãñèèè èñòí÷íèéíã íã äðããíãðòññèí ÿçúèã, áããü èðãíèè ïãðããíã ïðèãéíãèüííã òãèñòã íã äðòãíèè ÿçúè (ýòí ïòíñèòñý è è ïãðããã÷ãã äðããíãðòññèèè áíèòíãíòíã íã ñíãðãíãííí ðòññèíí ÿçúèã) íãèçãããíí ïíèðããòñý íã èíòãðíðãòòèð ñíããðæãíèý èñòí÷íèèã, ÷òí áãããò è ÷ãñòè÷ííò èçíãíãíèð ñííñèã òãèñòã, ã òãè æã è ÷ãñòè÷íèè òððòãã äãí ñíããðæãòãèüííúò äñíãèòíã, íã äíãíðý óæã í ñòèèèñòè÷ãñèèè è áúðãçèòãèüííúò ñðããñòããò áúðãæãíèý ñíããðæãíèý, èíòíðúã íã ïãòò áúòò ñíððãíãíú á ïãðããíãã. Íðè ýòíí ïãðããã÷ãã äãæã áíãèíçýçú÷íúò òãèñòíã íã ACE íã ïãæãò èçããæãòò ñòúãñòããííúò òíðíúãíèè äñéããñòãèè æãñòèèð ïðããèè ïãðããíãã òãèñòíã.

Á ýòíè ñãýçè ïãéíí ïòíãòèòú, ÷òí, äí-íãðãúò, ïãðããã÷ãã ïðèãéíãèüííúò òãèñòíã íã ÿçúèã ACE ñèòæèð èèøü äëý ñíçããíèý äíçíèèíñòè ïííãíãíãèòííãí ñãíãíòè÷ãñèíãí ñãýçúããíèý èíòíðíãòèè ðýãã èñòí÷íèéíã, æèèð÷ãííúò ä ñãíãíòè÷ãñèéð ñãòú è íé á èíãí ñèò÷ãã íã «çãíãããò» ïðèãéíãèüííúé òãèñò èñòí÷íèèã «ñòððíããòíúí» òãèñòíí, ïññèíèüèò òãèñòú íã ACE á ñãíãíòè÷ãñèíèè ïóãèèèãòèè äíèèèú áúòò ñíðíãíãíú (ñãýçãíú) ñ òãèñòãíèè íã ÿçúèã ïðèãéíãèè, ïðããñòããéãííúè á ðãíèãò òíè æã ñãíãíòè÷ãñèíèè ñãòè. Õí ãñòú ACE ýãéýãòñý ãñããí èèøü èíñòðòíãíòíí äãíãðèðíããíèý ñãíãíòè÷ãñèíèè ñãòè. Äí-ãòíðúò, òãèñòú íã ACE ïíçãíèýðò æèèð÷èòú á ñèñòãíò ñãíãíòè÷ãñèèè ñãýçãé çíã÷èòãèüíí áíèüøèè íãúãí èñòí÷íèéíãíèè èíòíðíãòèè ïãæãèè ñòãíú ðãçíãòèè SMW, TEI èèè CEI. Á ïðèíòèíã, òãèñòú èñòí÷íèéíã, ïãðãããííúã íã ÿçúèã ACE, ïðãèòè÷ãñèè äãç ïðãðü æèèð÷ãðòñý á ñãíãíòè÷ãñèéð ñãòú, ÷òí çíã÷èòãèüíí ïíãúããò ýãðèñòè÷ãñèéð ýðòãèòèãíñòú ïóãèèèãòèè.

Äëý ïããíèè ïðèíãéííñòè Attempto Controlled English äëý ñíçããíèý ñãíãíòè÷ãñèíèè ïóãèèèãòèè äðããíãðòññèèè äðãíðò äãèãã ïðèãíãèòñý òãèñò ïãííè èç äðãíðò, æèèð÷ãííúò á ïðòíðèè ñãíãíòè÷ãñèíèè ïóãèèèãòèè, ïãðãããííúé íã ACE.

Ñéããòãò ïòíãòèòú, ÷òí ïðè ïãðããã÷ãã òãèñòã íã ACE íãíãòíãèíí ïðèããðæããòòñý ïðãããéããííúò ïðããèè, èíòíðúã, á òãèíí, áúãéýãò äíãíèüíí ïðíñòúè. Õãè, á ñíòããòñòãèè ñ ýòèèè ïðããèèãíè, èðãíã ñòúãñòãèòãèüííã äíèèè ïðããããðýòú ïðããããèýðóãã ñéíãí (a, every, no, some è ò.í.), çã èñèèð÷ãíèãí èíãí ñíãñòããííúò, èíòíðúã ïèòòòñý ñ ïðíèèííè áóéãú; ïãòò èñïüçíããòòñý òãèæã áíãòíðè÷ãñèèè ññüèèè (He = Metropolitan), ïãíãéí á äðòãèò ñèò÷ãýò òãèèã ññüèèè çãíðãúãíú (&ldquo;Rigans are not guilty of that&rdquo;) è ò. ä. Õíòý Attempto

Controlled

English

ĩáēēááũáááò ē áðóáēá ñóũáñóááĩĩũá ĩáðáĩē÷áĩēý ĩá ĩáðááá÷ó óáēñóĩá (ĩáĩðēĩáð, áēááĩēũ ĩĩáóó ēñĩĩēũçĩááóũñý òĩēũēĩ á ĩáñóĩýũáĩ ĩáĩĩðáááēáĩĩĩ áðáĩáĩē the Present Indefinite Tense), òáĩ ĩá ĩáĩáá ñĩũñē óáēñóĩ ēñóĩ÷ĩēēĩá, á òĩĩ ÷ēñēá ē ĩá áðááĩáðóññēĩĩ ýçũēá, ĩĩæáð áúòũ áĩēáá-ĩáĩáá òĩ÷ĩĩ ĩáðáááĩ ĩá ACE.

Óáēñó áðáĩòũ áððēáĩēñēĩĩá ðēæñēĩáĩ ñĩĩēáĩñēĩĩó ēĩýçþ

Óááĩðó Đĩĩñòēñēááē÷ó (Ēááĩá ē Ēóçĩáóĩá, 2009 <sup>1</sup> 6)

[1284&ndash;1297 āā., ĩ÷ááēáĩĩ, áēēæá ē 1285&ndash;1287 āā.] Đēáá. Ēĩĩóáĩò. ĩáðááĩáĩ. Ēáòáēēñēēē áĩñóááðñóááĩũé ēñóĩðē÷áñēēē áððēá. Ó. 673. ĩĩ. 4. Kasten 18. <sup>1</sup> 8. Ē. 3

[Óááēēöá]

Īáēũçý òáēæá ĩá ĩòĩáðēòũ, ÷òĩ ē ēĩóĩðĩáòēý, ĩòĩñýũáýñý ē ēñóĩ÷ĩēēó (òáēòũ ĩá ēñóĩ÷ĩēēá) ĩĩæáð áúòũ ĩáðáááááĩá ĩá ACE: «The charter\_6 probably refers to the charter\_4»; «The charter\_6 mentions Helmich and the prince of Briansk» ē ò.ĩ. Ē òĩĩó æá ACE ĩĩçáĩēýáð çáĩēñũááòũ áēñēĩũ ē ĩðááēēá ēĩáē X is written by someone Y, then Y is the author of X». Ā ðáçóēũòáðá áĩēũóĩē ĩáũáĩ òáēòē÷áñēĩáĩ ĩáòáðēáēá, ĩòĩñýũááĩñý ē óáēñóáĩ ēñóĩ÷ĩēēĩá, ēĩòĩðũē ááĩāēòñý ē ĩáðáááòũáááòñý áðó÷ĩóp á òĩáá ñĩçááĩēý ñáĩáĩòē÷áñēĩē ĩóáēēēáòēē ĩá ĩñĩĩáá, ĩáĩðēĩáð, óáðĩĩēĩáēē Semantic MediaWiki, ĩĩæáð áúòũ áááááĩ ē ĩáðááĩòáĩ ááòĩĩáòē÷áñēēē áēááĩááðý áĩçĩæĩĩñòýĩ, ēĩòĩðũá ĩðááĩñóááēýáð ACE. ĩðē ýóĩĩ, ēáē óæá ĩòĩá÷áēĩñũ, ĩĩáũá çĩáĩēý òáēòũ ē áēĩĩóáçũ ĩá ēñóĩ÷ĩēēáð ē ēó óáēñóáð á ĩáðñĩáēòēáá ĩĩáóó áúòũ ĩĩēó÷áĩũ ĩá ĩñĩĩáá ááòĩĩáòē÷áñēĩáĩ áũáĩáá. ĩĩýóĩĩó ýçũē ACE ĩĩæĩĩ ñ÷ēòáòũ ĩĩáĩĩááũáðũēĩ ēĩñóðóĩáĩòĩĩ áēý ĩðĩēçáĩáñóáá ñáĩáĩòē÷áñēēē ĩóáēēēáòēē ēĩĩēáēñĩá ēñóĩðē÷áñēēē ēñóĩ÷ĩēēĩá.

Đááĩòá áũĩĩēýáòñý ĩðē óēĩáĩñĩáĩē ĩĩáááðæáē ĩðĩáðáĩũ ñóðáòááē÷áñēĩáĩ ðáçáēòēý ĩáòðÁÓ á ðáĩēáð ðááēēçáòēē ēĩĩēáēñá ĩáðĩĩðēýòēē ĩĩ ðáçáēòēþ ĩáó÷ĩĩ-ēñĩēááĩááòáēũñēĩē ááýòáēũĩñòē.

Ŋĩēñĩē ēēòáðáòóðũ

Āáðóĩēĩááá ē Ēááĩá, 2010 Āáðóĩēĩááá Ā.Ā., Ēááĩá Ā.Ŋ. ñáĩáĩòē÷áñēēá ĩóáēēēáòēē ēĩĩēáēñá ēñóĩðē÷áñēēē ēñóĩ÷ĩēēĩá // Ēĩóĩðĩáòēĩĩũá óáðĩĩēĩáēē ē ĩēñũáĩĩá ĩáñēááēá. El&rsquo;Manuscript 10: ĩáòáðēáēũ ĩáæáóĩáðĩáĩē ĩáó÷ĩē ēĩĩóáðáĩòēē (Óðá, 28&ndash;31 ĩēòýáðý 2010 ā.). Óðá; Ēæááñē: Āáááĩò, 2010. Ŋ. 42&ndash;46.

Āáðóĩēĩááá ē Ēááĩá, 2011á Āáðóĩēĩááá Ā.Ā., Ēááĩá Ā.Ŋ. ĩĩááēē ñóðóēòóðũ ē ñĩááðæáĩēý ēñóĩðē÷áñēēē ēñóĩ÷ĩēēĩá // Ēĩóĩðĩáòēĩĩũé áðēēáðáĩũ Āññĩòēáòēē «Ēñóĩðēý ē

έηίηύπóaδ». <sup>1</sup> 37. Νηάόεαεεύιόέ αύιόηε: Όόóαύ ιααάόιαδίαίίε έίίόάδίαίόε «Έηίηύπóaδίαύ  
όάόίίεíαεε è ιαόάιαόε-άηέεά ιαόίαύ á εηόίδε-άηέεό εηηέάαíααίεý (Ιάόδίαάíαηέ,  
11&ndash;16 έπéý 2011 á.). Ιάόδίαάíαηέ, 2011. Ν. 25&ndash;31.

Áαδóιεíηάá

è Éááíá, 2011ά Áαδóιεíηάá Á.Á., Éááíá Á.Ν. Ναιάιόε-άηέεά ιόáεεéáöéè  
είóδίαόεε εηόίδε-άηέεό εηόί-ίεéíá ιá ηίííáά όάóίίεíáεé Wiki // V sture:  
Avoti un cilv ki. Humanit r s fakult tes XX starptautisko zin tnisko las+jumu  
materi li. V sture XIV. Daugavpils: Saule, 2011. Ν. 339&ndash;347.

Áαδóιεíηάá è Éðááóíá, 2007 Áαδóιεíηάá

Á.Á., Éðááóíá É.Á. Ιδéιαδóááíεά è ιδóáηόááεéáíεά çíaíεé á ηάóááí ηίíáύáηόáá  
εηηέάαíααόáεéé όáεηόία // Áóíδáy έίίόάδίαίόéý «Νεηόáíúé áíáεéç è  
είóδίαόεεííúά όáóίίεíáεé» ΝΑΕΟ 2007, Ιáíεíηé, 10&ndash;14 ηáíόýάδý 2007 á.: Όδ. έίίό.: á  
2 ό. Ό. 1. Ιηέéá, 2007. Ν. 104&ndash;106.

Éááíá,

2004 Éááíá Á.Ν. «Moscowitica&ndash;Ruthenica» á Éàóáεéηéí ηίíόááδñóááííí  
εηόίδε-άηέéé όδóεáá: εηόίδéý όίδιεδίαίéý έίίίεáεηά, ηίíόáá è áááááíεá á  
ιαό-ίúé ίáíδίό // Áðááíýý Δόηú: Áííδíñú ιáεéááεηόééè. 2004. <sup>1</sup> 3 (17),  
ηáíόýάδú. Ν. 47&ndash;54; <sup>1</sup> 4 (18), ááéááδú. Ν. 94&ndash;106.

Éááíá,

2010 Éááíá Á.Ν. Εηόί-ίεéíááá-άηέéé è áδóáíáδáóε-άηέéé áηíáéóú δáéííηόδóéóéè  
εηόίδε-άηέéé έίίίεáεηίá εηόί-ίεéíá (ιόááé «Moscowitica&ndash;Ruthenica» á áúáðáí  
áδóéáá Δεαηέíáí ιáεηόδáóá) // Νίηέíáéý, εíηόéóóóú è áíηόááδñóááíáý  
áεáηóú á Δίηηé. (Νδóáíεá ááéá è δáííáá ίáíá áδáíý): Νáíδίεé ηόáóáé íáíýðé  
áεáááíεéá É.Á.χάδáíίεá. Ιηέéá: Ιçúéè ηεááýíηééó éóéüóóδ, 2010. (Studia  
philologica). Ν. 97&ndash;105.

Éááíá,

2012 Éááíá Á. Áδóáíáδáóéý è áεóíáíá εηόί-ίεéíááááíεá á ýííόó έίίηύπóaδίαύ  
όάóίίεíáεé // Ιδίαéáíú áεíίηάóééé, έíáééíεíáεé è áεóíáíé áδóáíáδáóéé:  
Ιάóáδéáéú XXIV Ιααάόιαδίαίίε ίάó-ίίε έίίόάδίαίόεé. Ιηέéá 2 3 όááδáéý 2012.  
Ιηέéá: ΔÁÁÓ, 2012. Ν. 321&ndash;323.

Éááíá

è Áαδóιεíηάá, 2005 Éááíá Á.Ν., Áαδóιεíηάá Á.Á. Όάóίίεíáéý XML éáé  
είηόδóíáíό έίίηύπóaδίαί éηόί-ίεéíááááíéý (íá ιδéιαδó όίδίοéýδίαί áíáεéçá  
áíεóíáíόíá ιδééαçííáí ááεííδίεçáíáηόáá) // Έδóá éááé: Áεáíδéóìú è  
όáóίίεíáεé εηόίδε-άηέéé έίóδίαόééé: Όόóαύ IX έίίόάδίαίόεé Áηηίόεáóéé «Έηόίδéý è  
έίίηύπóaδ». Ιηέéá; Áάδίαóé, 2005. Ν. 241&ndash;281.

Éááíá

è Áαδóιεíηάá, 2009 Éááíá Á.Ν., Áαδóιεíηάá Á.Á. Ιόáéééáóéý è áíáεéç  
δóéíéηίúó εηόίδε-άηέéé άίεóíáíόíá η ίííúúπ όáóίίεíáεé XML // Humanit ro  
Zin tFu V stnesis. 2009. <sup>1</sup> 16. Ν. 69&ndash;84.

Éááíá

è Áαδóιεíηάá, 2012 Éááíá Á.Ν., Áαδóιεíηάá Á.Á. Έηίηύπóaδίαύé áíáεéç  
ηόδóéóóδú εηόίδε-άηέéé εηόί-ίεéíá (íá ιδéιαδó ίóíεηίé XVII á.) // V sture:  
Avoti un cilv ki: Humanit r s fakult tes XXI starptautisko zin tnisko las+jumu  
materi li. V sture XV. Daugavpils: Saule, 2012. Ν. 112&ndash;121.

Éááíá

è Éóçíaóíá, 2009 Éááíá Á., Éóçíaóíá Á. Νίηεáíηéí-δéαηééá áεóú: XIII á.

– ãðääÿ ïëíâéíà XIV á.: Áĩéóíáíòù êĩĩéáêñà Moscovitica&dash;Ruthenica íá òĩĩðáíèÿ Ñĩéáíñéà è Ñèèè. Ñèèè, 2009.

Ahonen and Hyvönen,  
2009 Ahonen E., Hyvönen E. Publishing Historical Texts on the Semantic Web A Case Study // Proceedings of the Third IEEE International Conference on Semantic Computing (ICSC2009). Berkeley, 2009. Pp. 167&dash;173.

Attempto Project Attempto  
Project Tools. <http://attempto.ifi.uzh.ch/site/tools/>.

Baruzzo et al., 2009 Baruzzo A. et al. Toward Semantic Digital Libraries: Exploiting Web2.0 and Semantic Services in Cultural Heritage // Journal of Digital Information. 2009. Vol. 10. No. 6.

<http://journals.tdl.org/jodi/article/viewArticle/688/576>.

CEI Charters Encoding Initiative. <http://www.cei.lmu.de>.

Clark et al., 2005 Clark P. et al. Acquiring and Using World Knowledge Using a Restricted Subset of English // The 18th International FLAIRS Conference FLAIRS&rsquo;05. 2005. <http://www.cs.utexas.edu/users/pclark/papers/flairs.pdf>.

de Coi et al., 2009 de Coi J. L. et al. Controlled English for Reasoning on the Semantic Web // Semantic Techniques for the Web. Lecture Notes in Computer Science, 5500. 2009. Pp. 276&dash;308.

Controlled Natural Language, 2010 Controlled Natural Language. Workshop on Controlled Natural Language, CNL 2009, Marettimo Island, Italy, June 8&dash;10, 2009. Revised Papers // Lecture Notes in Computer Science, 5972. 2010.

Ivanovs and Varfolomeyev,  
2005 Ivanovs A.,  
Varfolomeyev A. Editing and Exploratory Analysis of Medieval Documents by Means of XML Technologies // Humanities, Computers and Cultural Heritage: Proceedings of the XVIth International Conference of the Association for History and Computing. Amsterdam, 2005. Pp. 155&dash;160.

Ivanovs and Varfolomeyev,  
2011 Ivanovs A., Varfolomeyev A. Semantic Publications of Charter Corpora (The Case of a Diplomatic Edition of the Complex of Old Russian Charters &lsquo;Moscovitica&dash;Ruthenica&rsquo;) // International Conference &ldquo;Digital Diplomatics: Tools for the Digital Diplomatist&rdquo;. Napoli, 29 settembre &dash; 1 ottobre 2011. Naples, 2011. Pp. 36&dash;40.

Kamp and Reyle, 1993 Kamp H., Reyle U. From Discourse to Logic: Introduction to Modeltheoretic Semantics of Natural Language, Formal Logic and Discourse Representation Theory. Dordrecht; Boston; London: Kluwer Academic Publishers, 1993.

Kuhn, 2009 Kuhn T. How Controlled English can Improve Semantic Wikis // Proceedings of the Fourth Workshop on Semantic Wikis: European Semantic Web Conference 2009. [S.l.], 2009. Pp. 1&dash;16 (SEUR Workshop Proceedings, vol. 464).

Mirzaee et al., 2005 Mirzaee V., Iverson L., Hamidzadeh B. Computational Representation of Semantics in Historical Documents // Humanities, Computers and Cultural Heritage: Proceedings of the XVIth International Conference of the Association for History and Computing. Amsterdam, 2005. Pp. 199&ndash;206.

Pease and Murray, 2003 Pease A., Murray W. An English to Logic Translator for Ontology-Based Knowledge Representation Languages // Proceedings of the 2003 IEEE International Conference on Natural Language Processing and Knowledge Engineering, Beijing, China. [S. I.], 2003. Pp. 777&ndash;783.

Schwitler, 2011 Schwitler R. Processing Coordinated Structures in PENG Light // AI 2011: Advances in Artificial Intelligence. Lecture Notes in Computer Science, 7106. 2011. Pp. 658&ndash;667.

Shotton, 2009 Shotton D. Semantic Publishing: The Coming Revolution in Scientific Journal Publishing // Learned Publishing. 2009. Vol. 22. No. 2.

Pp. 85&ndash;94.

Shotton et al., 2009 Shotton D. et al. Adventures in Semantic Publishing: Exemplar Semantic Enhancements of a Research Article // PLoS Computational Biology. 2009. Vol. 5. No. 4.

e1000361 <<http://dx.doi.org/10.1371/journal.pcbi.1000361>.

SMW Semantic MediaWiki. <http://www.semantic-mediawiki.org>.

TEI Text Encoding Initiative. <http://www.tei-c.org>.

de

Waard, 2010 de

Waard A. From Proteins to Fairytales: Directions in Semantic Publishing // IEEE Intelligent Systems. 2010. Vol. 25. Issue 2. Pp. 83&ndash;88.