

**Table 1**  
**Characteristics of the seven participating languages**

LINGUISTIC FEATURES	English	German	Italian & Spanish	Bulgarian	Hungarian	Chinese
<b>Indo-European</b>	yes	yes	yes	yes	no	no
<b>Language Family</b>	Germanic (strong influence of Romance)	Germanic	Romance	Slavic	Uralic (Finno-Ugric)	Sino-Tibetan
<b>Word Order Variations<sup>1</sup></b>	Low	Medium	High	High	Medium	Medium
<b>Inflectional Morphology</b>	Sparse	Rich	Rich	Rich	Rich	None
<b>Omission of constituents in free-standing sentences</b>	Not permitted	Not permitted	Subject can be omitted	Subject can be omitted	Subject can be omitted	Subject and object can be omitted
<b>Use of Compounding<sup>2</sup></b>	High	High	Low	Medium	Medium	High (>80% of all words)
<b>Lexical ambiguity for words out of context</b>	High, especially for nouns & verbs	Moderate, especially for nouns & verbs	Low for all categories, due to inflectional marking	Low for all categories, due to inflectional marking	Low for all categories, due to inflectional marking	High for nouns, verbs & function words
<b>Morphological regularity</b>	One regular and multiple irregular forms for plural and past tense	Multiple regular, irregular and 'in-between', (partially productive) forms	Multiple regular, irregular and 'in-between', (partially productive) forms	Multiple regular, irregular and 'in-between', (partially productive) forms	Multiple regular, irregular and 'in-between', (partially productive) forms	Lexical regularity only: degrees of productivity in compound formation
<b>Grammatical cues to word identity<sup>3</sup></b>	Form class	Form class; gender; case	Form class; gender	Form class; gender	Form class; case	Form class; nominal classifiers
<b>Prosodic cues to word identity</b>	Stress	Stress	Stress	Stress	Stress; vowel harmony	Lexical tone
<b>Orthography &amp; orthographic regularity</b>	Alphabetic; highly opaque/irregular	Alphabetic; some irregularities	Alphabetic; highly transparent/regular	Alphabetic; highly transparent/regular	Alphabetic; highly transparent/regular	Logographic; one syllable maps to many characters

<sup>1</sup> Refers to the number of different orders of Subject, Verb and Object that are possible in the spoken language

<sup>2</sup> Refers to words that are composed of other free-standing words (content words and/or function words)

<sup>3</sup> Among grammatical cues to word identity, "form class cues" refer to words or phrases that reliably distinguish between nouns, verbs and other grammatical classes, as in the difference between "I went to the dance" vs. "I want to dance". Studies have shown that such form class cues, like gender, case and nominal classifiers, can "prime" (facilitate or inhibit) retrieval of words from different grammatical classes.

**Table 2: Sources of object-naming stimuli**

<b>SOURCE:</b>	<b>N°</b>
<b>Snodgrass &amp; Vanderwart, 1980<sup>1</sup></b>	<b>174</b>
<b>Alterations of Snodgrass &amp; Vanderwart<sup>1</sup></b>	<b>2</b>
<b>Peabody Picture Vocabulary Test, 1981<sup>2</sup></b>	<b>62</b>
<b>Alterations of Peabody Pict. Vocabulary Test, 1981<sup>2</sup></b>	<b>8</b>
<b>Martinez - Dronkers set<sup>3</sup></b>	<b>39</b>
<b>Abbate &amp; La Chapelle “Pictures Please”, 1984<sup>4,5</sup></b>	<b>168</b>
<b>Max Planck Institute for Psycholinguistics<sup>6</sup></b>	<b>20</b>
<b>Boston Naming Test, 1983<sup>7</sup></b>	<b>5</b>
<b>Oxford “One Thousand Pictures”<sup>8</sup></b>	<b>25</b>
<b>Miscellaneous</b>	<b>17</b>

<sup>1</sup> Snodgrass, J.G., & Vanderwart, M. (1980). A standardized set of 260 pictures: Norms for name agreement, familiarity and visual complexity. *Journal of Experimental Psychology: Human Learning and Memory*, 6, 174-215.

<sup>2</sup> Dunn, Lloyd M., & Dunn, Leota M. (1981). *Peabody Picture Vocabulary Test -- Revised*. Circle Pines, MN: American Guidance Service.

<sup>3</sup> Picture set used by Martinez, V. A. & Dronkers, N.

<sup>4</sup> Abbate, M.S., & La Chapelle, N.B. (1984a). *Pictures, please! An articulation supplement*. Communication Skill Builders, Inc.

<sup>5</sup> Abbate, M.S., & La Chapelle, N.B. (1984b). *Pictures, please! A language supplement*. Communication Skill Builders, Inc.

<sup>6</sup> Max Planck Institute for Psycholinguistics, Postbus 310, NL- 6500 AH Nijmegen, The Netherlands

<sup>7</sup> Kaplan, E., Goodglass, H., & Weintraub, S. (1983). *Boston Naming Test*. Philadelphia: Lee & Febiger.

<sup>8</sup> *Oxford Junior Workbooks*. Oxford University Press, UK (1965).

**Table 3: Summary Statistics for Correctness in the Different Languages**

		English	German	Spanish	Italian	Bulgarian	Hungarian	Chinese
<b>% Valid response</b>	<b>Mean</b>	96.1%	94.7%	93.2%	92.0%	89.2%	94.1%	89.3%
	<b>SD</b>	6.0%	9.6%	10.3%	10.9%	11.1%	8.2%	11.9%
	<b>Range</b>	60-100%	17-100%	34-100%	18-100%	20-100%	22-100%	22-100%
F = 89.56 (p < .001)								
<b>% No response</b>	<b>Mean</b>	2.3%	3.3%	5.2%	5.5%	5.1%	2.2%	4.6%
	<b>SD</b>	5.0%	8.8%	9.6%	9.9%	10.0%	6.7%	10.1%
	<b>Range</b>	0-34%	0-80%	0-66%	0-80%	0-78%	0-74%	0-76%
F = 35.60 (p < .001)								
<b>% Invalid response</b>	<b>Mean</b>	1.5%	2.0%	1.6%	2.5%	5.7%	3.7%	6.1%
	<b>SD</b>	2.3%	3.0%	2.1%	2.8%	4.5%	3.3%	4.2%
	<b>Range</b>	0-16%	0-20%	0-14%	0-14%	0-32%	0-20%	0-22%
F = 191.64 (p < .001)								

**Table 4: Summary Statistics for Name Agreement in the Different Languages**

		English	German	Spanish	Italian	Bulgarian	Hungarian	Chinese
<b>Number of types</b> F = 58.43 (p < .001)	<b>Mean</b>	3.35	5.14*	4.15	4.39	3.82	4.16	5.47
	<b>SD</b>	2.28	3.42*	2.91	2.85	2.56	2.96	3.63
	<b>Range</b>	1-18	1.7-21.7*	1-17	1-20	1-14	1-21	1-21
<b>H statistics</b> F = 46.65 (p < .001)	<b>Mean</b>	0.67	0.76	0.86	0.95	0.84	0.91	1.16
	<b>SD</b>	0.61	0.68	0.72	0.73	0.65	0.73	0.79
	<b>Range</b>	0-2.90	0-3.28	0-2.90	0-3.47	0-2.70	0-3.52	0-3.57
<b>% Lex 1 dominant</b> F = 32.83 (p < .001)	<b>Mean</b>	85.0%	81.1%	80.0%	77.0%	80.2%	78.0%	71.9%
	<b>SD</b>	16.4%	19.9%	20.4%	21.6%	20.4%	21.3%	23.3%
	<b>Range</b>	28-100%	21-100%	17-100%	12-100%	13-100%	13-100%	11-100%
<b>% Lex 2 phonetic var.</b> F = 21.64 (p < .001)	<b>Mean</b>	3.7%	4.4%	3.2%	4.9%	4.1%	7.1%	8.5%
	<b>SD</b>	8.7%	10.0%	8.4%	10.4%	9.8%	12.9%	12.4%
	<b>Range</b>	28-100%	21-100%	17-100%	12-100%	13-100%	13-100%	11-100%
<b>% Lex 3 synonym</b> F = 11.78 (p < .001)	<b>Mean</b>	2.4%	3.2%	4.2%	5.2%	2.5%	4.3%	1.6%
	<b>SD</b>	7.7%	8.4%	10.1%	11.0%	7.7%	10.2%	5.5%
	<b>Range</b>	28-100%	21-100%	17-100%	12-100%	13-100%	13-100%	11-100%
<b>% Lex 4 erroneous</b> F = 29.19 (p < .001)	<b>Mean</b>	9.0%	11.4%	12.7%	12.9%	13.3%	10.6%	18.0%
	<b>SD</b>	12.4%	16.4%	16.2%	16.4%	17.4%	16.2%	19.8%
	<b>Range</b>	28-100%	21-100%	17-100%	12-100%	13-100%	13-100%	11-100%
<b>Same Name</b> X <sup>2</sup> = 91.2 (p < .001)	<b>Mean</b>	4.6%	8.3%	12.1%	8.7%	12.9%	14.0%	19.6%
	<b>Range</b>	0-1	0-1	0-1	0-1	0-1	0-1	0-1

\*Since data was collected from only 30 subjects in German language, the number of alternative types were calculated as: (raw type number x 50/30).

**Table 5: Summary Statistics for Mean Reaction Time in the Different Languages**

		English	German	Spanish	Italian	Bulgarian	Hungarian	Chinese
<b>RT total</b> F = 136.76 (p < .001)	<b>Mean</b>	1041	1130	1168	1163	1254	1105	1241
	<b>SD</b>	230	281	280	270	283	281	319
	<b>Range</b>	656-1843	663-2397	711-2063	694-2580	768-2373	659-2300	686-2389
<b>RT target</b> F = 115.00 (p < .001)	<b>Mean</b>	1019	1101	1139	1133	1217	1071	1200
	<b>SD</b>	211	273	262	264	261	268	312
	<b>Range</b>	656-1823	663-3117	711-2392	694-2831	768-2273	659-3139	686-2403

NOTE: TABLES 6-12 WILL ONLY BE AVAILABLE ON THE WEB

Table 6: Correlation Matrix of Dependent Variables within English

	% Valid	% Lex 1	% Lex 1-3	# Types	H stat.	Sames	RT total
<b>% Valid Response</b>	---						
<b>% Lex 1 Dominant</b>	+.31**	---					
<b>% Lex 1-3 Conceptual</b>	+.42**	+.72**	---				
<b>Number of Types</b>	-.47**	-.74**	-.65**	---			
<b>H statistics</b>	-.41**	-.95**	-.75**	+.88**	---		
<b>Items with same name</b>	ns	-.13**	ns	ns	+.11*	---	
<b>RT total MEAN</b>	-.67**	-.58**	-.65**	+.75**	+.70**	ns	---
<b>RT target MEAN</b>	-.64**	-.55**	-.64**	+.68**	+.66**	ns	+.98**

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

Table 7: Correlation Matrix of Dependent Variables within German

	% Valid	% Lex 1	% Lex 1-3	# Types	H stat.	Sames	RT total
<b>% Valid Response</b>	---						
<b>% Lex 1 Dominant</b>	+.34**	---					
<b>% Lex 1-3 Conceptual</b>	+.39**	+.77**	---				
<b>Number of Types</b>	-.32**	-.80**	-.70**	---			
<b>H statistics</b>	-.30**	-.95**	-.75**	+.92**	---		
<b>Items with same name</b>	ns	-.12**	ns	ns	+.08~	---	
<b>RT total MEAN</b>	-.65**	-.63**	-.61**	+.70**	+.67**	ns	---
<b>RT target MEAN</b>	-.68**	-.58**	-.58**	+.61**	+.59**	ns	+.97**

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

Table 8: Correlation Matrix of Dependent Variables within Spanish

	% Valid	% Lex 1	% Lex 1-3	# Types	H stat.	Sames	RT total
<b>% Valid Response</b>	---						
<b>% Lex 1 Dominant</b>	+.51**	---					
<b>% Lex 1-3 Conceptual</b>	+.57**	+.77**	---				
<b>Number of Types</b>	-.59**	-.82**	-.72**	---			
<b>H statistics</b>	-.49**	-.95**	-.75**	+.91**	---		
<b>Items with same name</b>	ns	-.08~	ns	+.11**	+.08~	---	
<b>RT total MEAN</b>	-.74**	-.70**	-.68**	+.80**	+.77**	ns	---
<b>RT target MEAN</b>	-.70**	-.67**	-.63**	+.76**	+.73**	+.08~	+.97**

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 9: Correlation Matrix of Dependent Variables within Italian**

	% Valid	% Lex 1	% Lex 1-3	# Types	H stat.	Sames	RT total
<b>% Valid Response</b>	---						
<b>% Lex 1 Dominant</b>	+.52**	---					
<b>% Lex 1-3 Conceptual</b>	+.58**	+.74**	---				
<b>Number of Types</b>	-.48**	-.78**	-.67**	---			
<b>H statistics</b>	-.44**	-.95**	-.71**	+.89**	---		
<b>Items with same name</b>	ns	-.11*	ns	+.09*	+.08~	---	
<b>RT total MEAN</b>	-.74**	-.69**	-.71**	+.73**	+.71**	ns	---
<b>RT target MEAN</b>	-.72**	-.63**	-.68**	+.65**	+.63**	ns	+.96**

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 10: Correlation Matrix of Dependent Variables within Bulgarian**

	% Valid	% Lex 1	% Lex 1-3	# Types	H stat.	Sames	RT total
<b>% Valid Response</b>	---						
<b>% Lex 1 Dominant</b>	+.48**	---					
<b>% Lex 1-3 Conceptual</b>	+.57**	+.81**	---				
<b>Number of Types</b>	-.50**	-.78**	-.72**	---			
<b>H statistics</b>	-.43**	-.93**	-.76**	+.89**	---		
<b>Items with same name</b>	ns	-.11*	ns	ns	+.09*	---	
<b>RT total MEAN</b>	-.69**	-.68**	-.68**	+.76**	+.73**	ns	---
<b>RT target MEAN</b>	-.63**	-.64**	-.64**	+.71**	+.68**	ns	+.96**

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 11: Correlation Matrix of Dependent Variables within Hungarian**

	% Valid	% Lex 1	% Lex 1-3	# Types	H stat.	Sames	RT total
<b>% Valid Response</b>	---						
<b>% Lex 1 Dominant</b>	+.48**	---					
<b>% Lex 1-3 Conceptual</b>	+.58**	+.69**	---				
<b>Number of Types</b>	-.52**	-.77**	-.75**	---			
<b>H statistics</b>	-.42**	-.94**	-.71**	+.88**	---		
<b>Items with same name</b>	-.08~	-.09*	ns	ns	+.07~	---	
<b>RT total MEAN</b>	-.70**	-.68**	-.74**	+.79**	+.73**	ns	---
<b>RT target MEAN</b>	-.68**	-.63**	-.70**	+.70**	+.66**	ns	+.95**

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 12: Correlation Matrix of Dependent Variables within Chinese**

	% Valid	% Lex 1	% Lex 1-3	# Types	H stat.	Sames	RT total
<b>% Valid Response</b>	---						
<b>% Lex 1 Dominant</b>	+.52**	---					
<b>% Lex 1-3 Conceptual</b>	+.57**	+.81**	---				
<b>Number of Types</b>	-.52**	-.81**	-.70**	---			
<b>H statistics</b>	-.42**	-.94**	-.76**	+.91**	---		
<b>Items with same name</b>	-.28**	-.22**	-.23**	+.26**	+.24**	---	
<b>RT total MEAN</b>	-.76**	-.69**	-.70**	+.76**	+.71**	+.39**	---
<b>RT target MEAN</b>	-.74**	-.63**	-.65**	+.69**	+.64**	+.39**	+.96**

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 13: Correlation Matrix of Cross-Language Dependent Variables**

	<b>Cross-Language Name Agreement</b>	<b>Cross-Language Target RT</b>	<b>Cross-Language Number of Types</b>	<b>Cross-Language Naming Disparity</b>
<b>Cross-Language Name Agreement</b>	-----			
<b>Cross-Language Target RT</b>	-.74**	-----		
<b>Cross-Language Number of Types</b>	-.89**	+.81**	-----	
<b>Cross-Language Naming Disparity</b>	-.60**	+.40**	+.50**	-----
<b>Cross-Language Target RT Disparity</b>	-.53**	+.66**	+.55**	-.51**

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 14: Regressions of Naming Behavior on Naming Latencies within Each Language and across Languages (Cross-Language Average Z-Score RTs): Total Percent Variance Accounted for and Unique Contributions of Each Variable on the Last Step**

<b>LANGUAGES</b>	<b>% TOTAL VARIANCE</b>	<b>% UNIQUE VARIANCE FROM NAME AGREEMENT</b>	<b>% UNIQUE VARIANCE FROM # OF TYPES</b>
<b>ENGLISH</b>	<b>47.3**</b>	<b>-0.5*</b>	<b>+17.1**</b>
<b>GERMAN</b>	<b>39.2**</b>	<b>-2.1**</b>	<b>+ 6.0**</b>
<b>SPANISH</b>	<b>58.0**</b>	<b>-0.7**</b>	<b>+13.6**</b>
<b>ITALIAN</b>	<b>46.0**</b>	<b>-4.4**</b>	<b>+ 5.9**</b>
<b>BULGARIAN</b>	<b>52.5**</b>	<b>-1.7**</b>	<b>+11.6**</b>
<b>HUNGARIAN</b>	<b>51.0**</b>	<b>-1.0**</b>	<b>+11.9**</b>
<b>CHINESE</b>	<b>48.9**</b>	<b>-1.9**</b>	<b>+ 8.7**</b>
<b>CROSS-LANGUAGE Z-SCORE RT AVERAGE</b>	<b>66.1**</b>	<b>n.s.</b>	<b>+12.1**</b>

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)



**NOTE: TABLES 15 - 18 WILL ONLY BE AVAILABLE ON OUR WEBSITE**

**Table 15: Correlations of Lex1 and Lex 1-3 across Languages**

(%Lex 1-3 correlations: upper triangle; %Lex 1 correlations: lower triangle)

	EN	GE	SP	IT	BU	HU	CH	
<b>English</b>	---	+0.42**	+0.56**	+0.51**	+0.43**	+0.49**	+0.48**	<b>Lex 1-3 (concept)</b>
<b>German</b>	+0.35**	----	+0.37**	+0.51**	+0.57**	+0.61**	+0.35**	
<b>Spanish</b>	+0.46**	+0.33**	----	+0.59**	+0.47**	+0.49**	+0.48**	
<b>Italian</b>	+0.39**	+0.41**	+0.50**	----	+0.51**	+0.57**	+0.44**	
<b>Bulgarian</b>	+0.34**	+0.47**	+0.37**	+0.48**	---	+0.62**	+0.41**	
<b>Hungarian</b>	+0.40**	+0.46**	+0.33**	+0.46**	+0.47**	---	+0.41**	
<b>Chinese</b>	+0.39**	+0.30**	+0.35**	+0.31**	+0.37**	+0.33**	---	

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 16: Correlations of Number of Types and H statistics Across Languages**

(H statistics correlations: upper triangle; Number of types correlations: lower triangle)

	EN	GE	SP	IT	BU	HU	CH	
<b>English</b>	---	+0.44**	+0.53**	+0.44**	+0.44**	+0.50**	+0.47**	<b>H statistics</b>
<b>German</b>	+0.45**	---	+0.41**	+0.50**	+0.50**	+0.54**	+0.36**	
<b>Spanish</b>	+0.53**	+0.43**	---	+0.56**	+0.44**	+0.42**	+0.41**	
<b>Italian</b>	+0.44**	+0.54**	+0.53**	---	+0.53**	+0.53**	+0.36**	
<b>Bulgarian</b>	+0.43**	+0.52**	+0.47**	+0.53**	---	+0.55**	+0.41**	
<b>Hungarian</b>	+0.46**	+0.55**	+0.46**	+0.54**	+0.60**	---	+0.41**	
<b>Chinese</b>	+0.48**	+0.36**	+0.48**	+0.36**	+0.38**	+0.43**	---	

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 17: Correlations of Items with Same Name (0,1) across Languages**

	EN	GE	SP	IT	BU	HU	CH
<b>English</b>	---						
<b>German</b>	+0.27**	---					
<b>Spanish</b>	+0.20**	+0.21**	---				
<b>Italian</b>	+0.19**	+0.28**	+0.16**	---			
<b>Bulgarian</b>	+0.20**	+0.30**	+0.19**	+0.41**	---		
<b>Hungarian</b>	+0.13**	+0.24**	+0.16**	+0.17**	+0.39**	---	
<b>Chinese</b>	+0.19**	+0.22**	+0.14**	+0.11*	+0.29**	+0.26**	---

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 18: Correlations of Total and Target Naming Latencies across Languages**

(RT total correlations: upper triangle; RT target correlations: lower triangle)

	EN	GE	SP	IT	BU	HU	CH
<b>English</b>	---	+0.69**	+0.77**	+0.72**	+0.66**	+0.70**	+0.73**
<b>German</b>	+0.67**	---	+0.68**	+0.77**	+0.80**	+0.83**	+0.69**
<b>Spanish</b>	+0.76**	+0.63**	---	+0.78**	+0.71**	+0.70**	+0.72**
<b>Italian</b>	+0.71**	+0.75**	+0.74**	---	+0.74**	+0.80**	+0.71**
<b>Bulgarian</b>	+0.65**	+0.75**	+0.68**	+0.69**	---	+0.82**	+0.69**
<b>Hungarian</b>	+0.65**	+0.77**	+0.64**	+0.74**	+0.75**	---	+0.69**
<b>Chinese</b>	+0.70**	+0.68**	+0.70**	+0.72**	+0.67**	+0.63**	---

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 19: Summary Statistics for Independent Variables within Each Language**

		English	German	Spanish	Italian	Hungarian	Bulgarian	Chinese
<b>Length in Syllables</b> F = 169.50 (p < .001)	<b>Mean</b>	1.74	2.13	2.76	2.92	2.28	2.40	2.09
	<b>SD</b>	0.83	0.87	0.96	1.00	0.97	0.92	0.60
	<b>Range</b>	1-5	1-6	1-7	1-8	1-8	1-7	1-5
<b>Length in Characters</b> F = 29.08 (p < .001)	<b>Mean</b>	5.89	6.73	6.48	7.07	6.07	6.29	not relevant
	<b>SD</b>	2.22	2.74	2.14	2.50	2.28	2.23	
	<b>Range</b>	2-15	2-19	3-17	2-20	2-19	3-17	
<b>Word Frequency</b> (no statistical comparison)	<b>Mean</b>	2.50	2.01	2.90	1.16	1.38	4.25*	3.36
	<b>SD</b>	1.57	1.50	1.73	1.43	1.93	1.09*	2.01
	<b>Range</b>	0-7.40	0-6.62	0-8.32	0-6.20	0-6.84	1.5-6.8*	0-10.56
<b>Frication</b> X <sup>2</sup> = 85.34 (p < .001)	<b>Mean</b>	28.1%	27.5%	12.3%	24.8%	34.8%	27.1%	25.8%
	<b>Range</b>	0-1	0-1	0-1	0-1	0-1	0-1	0-1
<b>Word Complexity</b> X <sup>2</sup> = 246.9 (p < .001)	<b>Mean</b>	16.3%	33.8%	8.5%	9.6%	18.5%	8.1%	not relevant
	<b>Range</b>	0-1	0-1	0-1	0-1	0-1	0-1	

\* Bulgarian Frequency was determined on the basis of subjective ratings, and is presented in raw figures

**Table 20: Number and Percent of Target Names within Each Language  
Falling into Each Category of Syllable Length  
(out of 520 Items)**

<b># of Syllables</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Monosyllables</b>	236 (45.7%)	118 (22.7%)	12 (2.3%)	4 (0.8%)	53 (10.2%)	90 (17.3%)	61 (11.7%)
<b>Disyllables</b>	201 (38.7%)	259 (49.8%)	228 (43.8%)	197 (37.9%)	279 (53.7%)	266 (51.2%)	364 (70.0%)
<b>3 Syllables</b>	63 (12.1%)	104 (20.0%)	179 (34.4%)	208 (40.0%)	140 (26.9%)	110 (21.2%)	86 (16.5%)
<b>4 Syllables</b>	18 (3.5%)	36 (6.9%)	75 (14.4%)	76 (14.6%)	35 (6.7%)	41 (7.9%)	8 (1.5%)
<b>5 Syllables</b>	2 (0.4%)	2 (0.4%)	19 (3.7%)	24 (4.6%)	5 (1.0%)	9 (1.7%)	1 (0.2%)
<b>6 Syllables</b>	0 (0.0%)	1 (0.2%)	6 (1.2%)	6 (1.2%)	6 (1.2%)	3 (0.6%)	0 (0.0%)
<b>7 Syllables</b>	0 (0.0%)	0 (0.0%)	1 (0.2%)	4 (0.8%)	2 (0.4%)	0 (0.0%)	0 (0.0%)
<b>8 Syllables</b>	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.2%)	0 (0.0%)	1 (0.2%)	0 (0.0%)

NOTE: TABLES 21-27 WILL ONLY BE AVAILABLE ON THE WEB

**Table 21: Correlations among Independent Variables within English**

	Syll	Syll Type	Char	Complex	Fric	Frequency	Goodness
<b>Length in Syllables</b>	---						
<b>Syllable Type Frequency</b>	-.93**	---					
<b>Length in Characters</b>	+.82**	-.75**	---				
<b>Word Complexity</b>	+.37**	-.32**	+.59**	---			
<b>Initial Frication</b>	ns	ns	+.06~	ns	---		
<b>Word Frequency</b>	-.46**	+.39**	-.53**	-.48**	ns	---	
<b>Goodness of Depiction</b>	ns	ns	ns	ns	ns	ns	---
<b>Visual Complexity</b>	+.12**	-.11**	+.11**	ns	ns	ns	+.08*

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 22: Correlations among Independent Variables within German**

	Syll	Syll Type	Char	Complex	Fric	Frequency
<b>Length in Syllables</b>	---					
<b>Syllable Type Frequency</b>	-.34**	---				
<b>Length in Characters</b>	+.76**	-.36**	---			
<b>Word Complexity</b>	+.44**	-.12**	+.59**	---		
<b>Initial Frication</b>	-.10*	ns	+.15**	+.08~	---	
<b>Word Frequency</b>	-.48**	ns	-.46**	-.34**	ns	---
<b>Goodness of Depiction</b>	ns	ns	ns	ns	+.07~	ns
<b>Visual Complexity</b>	ns	ns	ns	ns	ns	ns

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 23: Correlations among Independent Variables Within Spanish**

	Syll	Syll Type	Char	Complex	Fric	Frequency
<b>Length in Syllables</b>	---					
<b>Syllable Type Frequency</b>	-.76**	---				
<b>Length in Characters</b>	+.90**	-.71**	---			
<b>Word Complexity</b>	+.37**	-.32**	+.44**	---		
<b>Initial Frication</b>	ns	ns	ns	ns	---	
<b>Word Frequency</b>	-.26**	+.19**	-.27**	ns	ns	---
<b>Goodness of Depiction</b>	ns	-.10**	ns	ns	ns	+.06~
<b>Visual Complexity</b>	+.09	-.08*	ns	+.09*	ns	ns

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 24: Correlations among Independent Variables within Italian**

	Syll	Syll Type	Char	Complex	Fric	Frequency
<b>Length in Syllables</b>	---					
<b>Syllable Type Frequency</b>	-.75**	---				
<b>Length in Characters</b>	+.91**	-.68**	---			
<b>Word Complexity</b>	+.49**	-.45**	+.51**	---		
<b>Initial Frication</b>	-.11**	+.06*	ns	ns	---	
<b>Word Frequency</b>	-.28**	+.22**	-.30**	-.24**	ns	---
<b>Goodness of Depiction</b>	ns	ns	+.07~	ns	ns	ns
<b>Visual Complexity</b>	ns	ns	ns	+.12**	ns	ns

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 25: Correlations among Independent Variables within Bulgarian**

	Syll	Syll Type	Char	Complex	Fric	Frequency
<b>Length in Syllables</b>	---					
<b>Syllable Type Frequency</b>	-.45**	---				
<b>Length in Characters</b>	+.87**	-.47**	---			
<b>Word Complexity</b>	+.42**	-.24**	+.42**	---		
<b>Initial Frication</b>	ns	-.06~	+.11*	+.06~	---	
<b>Word Frequency</b>	-.08~	ns	-.07~	ns	+.10*	---
<b>Goodness of Depiction</b>	+.06~	-.11**	+.07~	+.06~	ns	ns
<b>Visual Complexity</b>	ns	ns	ns	ns	-.08*	ns

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 26: Correlations among Independent Variables within Hungarian**

	Syll	Syll Type	Char	Complex	Fric	Frequency
<b>Length in Syllables</b>	---					
<b>Syllable Type Frequency</b>	-.40**	---				
<b>Length in Characters</b>	+.87**	-.36**	---			
<b>Word Complexity</b>	+.56**	-.39**	+.58**	---		
<b>Initial Frication</b>	ns	ns	+.07~	+.07~	---	
<b>Word Frequency</b>	-.40**	ns	-.40**	-.29**	ns	---
<b>Goodness of Depiction</b>	ns	-0.07~	ns	ns	ns	ns
<b>Visual Complexity</b>	ns	+.06~	ns	ns	ns	ns

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 27: Correlations among Independent Variables within Chinese**

	Syll	Syll Type	Fric	Frequency
<b>Length in Syllables</b>	---			
<b>Syllable Type Frequency</b>	-.20**	---		
<b>Initial Frication</b>	ns	ns	---	
<b>Word Frequency</b>	-.41**	ns	+.09*	---
<b>Goodness of Depiction</b>	ns	-.07~	ns	+.06~
<b>Visual Complexity</b>	+.11**	-.09*	+.12**	+.10*

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 28: Correlations among Word Frequency Measures across Languages**

	EN	GE	SP	IT	BU	HU	CH
<b>English</b>	---						
<b>German</b>	+0.65**	---					
<b>Spanish</b>	+0.56**	+0.56**	---				
<b>Italian</b>	+0.54**	+0.55**	+0.54**	---			
<b>Bulgarian</b>	+0.42**	+0.43**	+0.37**	+0.53**	---		
<b>Hungarian</b>	+0.57**	+0.66**	+0.53**	+0.57**	+0.48**	---	
<b>Chinese</b>	+0.53**	+0.56**	+0.43**	+0.47**	+0.37**	+0.46**	---

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 29: Correlations among Length Measures across Languages**

(Length measured in characters is presented in the upper triangle; syllables are in the lower triangle)

Characters	EN	GE	SP	IT	BU	HU	CH
<b>English</b>	---	+0.45**	+0.43**	+0.40**	+0.29**	+0.38**	---
<b>German</b>		---	+0.35**	+0.43**	+0.47**	+0.38**	---
<b>Spanish</b>			---	+0.53**	+0.39**	+0.28**	---
<b>Italian</b>				---	+0.51**	+0.39**	---
<b>Bulgarian</b>					---	+0.30**	---
<b>Hungarian</b>						---	---
<b>Chinese</b>							---

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

Syllables	EN	GE	SP	IT	BU	HU	CH
<b>English</b>	---						
<b>German</b>	+0.44**	---					
<b>Spanish</b>	+0.40**	+0.30**	---				
<b>Italian</b>	+0.42**	+0.38**	+0.49**	---			
<b>Bulgarian</b>	+0.30**	+0.42**	+0.35**	+0.45**	---		
<b>Hungarian</b>	+0.36**	+0.39**	+0.28**	+0.40**	+0.31**	---	
<b>Chinese</b>	+0.37**	+0.34**	+0.25**	+0.32**	+0.20**	+0.39**	---

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)



**Table 30: Correlations of Initial Frication (0,1) Across Languages**

	EN	GE	SP	IT	BU	HU	CH
<b>English</b>	---						
<b>German</b>	+.33**	---					
<b>Spanish</b>	+.24**	n.s.	---				
<b>Italian</b>	+.29**	+.12**	+.22**	---			
<b>Bulgarian</b>	+.25**	n.s.	+.09*	+.23**	---		
<b>Hungarian</b>	+.20**	n.s.	+.08~	+.20**	+.21**	---	
<b>Chinese</b>	+.11*	n.s.	n.s.	+.09*	+.08~	ns	---

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**NOTE: TABLES 31-37 WILL ONLY BE AVAILABLE ON THE WEB**

**Table 31: Correlations of Independent with Dependent Variables in English  
(positive naming disparity and negative RT disparity = greater advantage in English)**

	% Lex 1	# Types	Sames	RT targ.	Naming Disparity	RT Disparity
<b>Length in Syllables</b>	-.09*	+.10*	-.13**	+.16**	ns	ns
<b>Syllable Type Freq.</b>	ns	-.08~	+.12**	-.13**	ns	ns
<b>Length in Characters</b>	-.16**	+.15**	-.09*	+.20**	-.11*	+.11**
<b>Word Complexity</b>	-.19**	+.15**	-.10*	+.12**	-.11*	ns
<b>Initial Frication</b>	+.08~	ns	ns	ns	ns	ns
<b>Word Frequency</b>	+.21**	-.19**	+.14**	-.34**	ns	ns
<b>Goodness of Depiction</b>	+.39**	-.48**	ns	-.57**	+.15**	-.16**
<b>Visual Complexity</b>	ns	ns	-.06~	ns	ns	-.09*

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 32: Correlations of Independent with Dependent Variables in German  
(positive naming disparity and negative RT disparity = greater advantage in German)**

	% Lex 1	# Types	Sames	RT targ.	Naming Disparity	RT Disparity
<b>Length in Syllables</b>	ns	ns	-.17**	+.16**	ns	ns
<b>Syllable Type Freq</b>	ns	ns	ns	ns	ns	ns
<b>Length in Characters</b>	-.08~	+.08~	-.12**	+.17**	ns	ns
<b>Word Complexity</b>	ns	ns	-.13**	+.09*	+.09*	ns
<b>Initial Frication</b>	ns	ns	ns	ns	ns	+.12**
<b>Word Frequency</b>	+.20**	-.18**	+.14**	-.32**	ns	ns
<b>Goodness of Depiction</b>	+.27**	-.37**	ns	-.49**	ns	ns
<b>Visual Complexity</b>	ns	ns	-.09*	ns	-.08~	+.08~

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 33: Correlations of Independent with Dependent Variables in Spanish  
(positive naming disparity and negative RT disparity = greater advantage in Spanish)**

	% Lex 1	# Types	Sames	RT targ.	Naming Disparity	RT Disparity
<b>Length in Syllables</b>	-.13**	+.12**	-.12**	+.13**	-.12**	ns
<b>Syllable Type Freq.</b>	+.12**	-.11*	+.12**	-.13**	+.14**	-.11*
<b>Length in Characters</b>	-.13**	+.14**	-.12**	+.13**	-.13**	+.08~
<b>Word Complexity</b>	-.19**	+.19**	-.07~	+.14**	-.15**	+.14**
<b>Initial Frication</b>	ns	ns	ns	ns	ns	ns
<b>Word Frequency</b>	+.14**	-.17**	+.16**	-.24**	ns	ns
<b>Goodness of Depiction</b>	+.25**	-.34**	ns	-.45**	ns	ns
<b>Visual Complexity</b>	ns	ns	ns	ns	ns	ns

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 34: Correlations of Independent with Dependent Variables in Italian  
(positive naming disparity and negative RT disparity = greater advantage in Italian)**

	% Lex 1	# Types	Sames	RT targ.	Naming Disparity	RT Disparity
<b>Length in Syllables</b>	-.18**	+.13**	ns	+.14**	-.18**	+.18**
<b>Syllable Type Freq</b>	+.14**	-.09*	ns	-.16**	+.14**	-.10*
<b>Length in Characters</b>	-.18**	+.13**	ns	+.14**	-.20**	+.21**
<b>Word Complexity</b>	-.21**	+.15**	ns	+.14**	-.19**	+.15**
<b>Initial Frication</b>	ns	ns	ns	ns	ns	ns
<b>Word Frequency</b>	+.22**	-.19**	+.10*	-.33**	+.15**	-.19**
<b>Goodness of Depiction</b>	+.22**	-.29**	ns	-.44**	-.11*	+.10*
<b>Visual Complexity</b>	ns	ns	ns	ns	ns	ns

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 35: Correlations of Independent with Dependent Variables in Bulgarian  
(positive naming disparity and negative RT disparity = greater advantage in Bulgarian)**

	% Lex 1	# Types	Sames	RT targ.	Naming Disparity	RT Disparity
<b>Length in Syllables</b>	ns	ns	-.16**	ns	ns	+.09*
<b>Syllable Type Freq</b>	ns	ns	+.08~	ns	ns	ns
<b>Length in Characters</b>	-.07~	ns	-.13**	+.10*	-.09*	+.10*
<b>Word Complexity</b>	ns	ns	-.12**	ns	ns	ns
<b>Initial Frication</b>	ns	ns	ns	ns	ns	+.15**
<b>Word Frequency</b>	+.10*	ns	+.21**	-.27**	ns	ns
<b>Goodness of Depiction</b>	+.27**	-.37**	+.09*	-.49**	ns	ns
<b>Visual Complexity</b>	ns	ns	ns	ns	ns	+.08~

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 36: Correlations of Independent with Dependent Variables in Hungarian  
(positive naming disparity and negative RT disparity = greater advantage in Hungarian)**

	% Lex 1	# Types	Sames	RT targ.	Naming Disparity	RT Disparity
<b>Length in Syllables</b>	-.15**	ns	-.15**	+.18**	-.09*	+.07~
<b>Syllable Type Freq</b>	+.15**	-.10**	ns	-.10*	+.13**	ns
<b>Length in Characters</b>	-.16**	ns	-.12**	+.21**	-.09*	+.10*
<b>Word Complexity</b>	-.18**	ns	-.09*	+.15**	-.13**	ns
<b>Initial Frication</b>	ns	ns	ns	ns	ns	ns
<b>Word Frequency</b>	+.13**	-.10*	+.25**	-.27**	ns	ns
<b>Goodness of Depiction</b>	+.26**	-.37**	+.08~	-.46**	ns	ns
<b>Visual Complexity</b>	+.08~	ns	ns	ns	ns	ns

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 37: Correlations of Independent with Dependent Variables in Chinese  
(positive naming disparity and negative RT disparity = greater advantage in Chinese)**

	% Lex 1	# Types	Sames	RT targ.	Naming Disparity	RT Disparity
<b>Length in Syllables</b>	ns	ns	-.18**	+.17**	ns	ns
<b>Syllable Type Freq</b>	+.06~	ns	ns	-.13**	ns	-.15**
<b>Initial Frication</b>	+.11*	-.09~	-.10*	ns	+.08~	ns
<b>Word Frequency</b>	+.26**	-.28**	ns	-.39**	+.11*	-.13**
<b>Goodness of Depiction</b>	+.35**	-.39**	ns	-.52**	+.08~	ns
<b>Visual Complexity</b>	+.09~	ns	-.17**	ns	ns	ns

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 38: Correlations of Independent with Dependent Cross-Language Summary Variables**

	Average Name Agreement	Average Target Latencies	Average Number of Types	Disparity in Name Agreement	Disparity in Target Latencies
<b>Cross-Language Length Factor</b>	-11.*	+.18**	+.10*	+.19**	+.20**
<b>Cross-Language Frequency Factor</b>	+.25**	-.44**	-.27**	-.23**	-.35**
<b>Goodness of Depiction</b>	+.41**	-.57**	-.50**	-.14**	-.25**
<b>Visual Complexity</b>	ns	ns	ns	ns	ns

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

**Table 39: Regressions of Five Major Independent Variables on Name Agreement**  
**(Total variance & percent unique variance accounted for by each predictor**  
**after all the others are controlled)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Goodness of Depiction</b>	+14.5**	+6.9**	+6.1**	+4.9**	+7.0**	+6.6**	+10.5**
<b>Visual Complexity</b>	ns	ns	ns	ns	ns	ns	ns
<b>Frequency</b>	+3.2**	+3.4**	+0.8*	+2.9**	+0.8*	ns	+6.2**
<b>Length in Syllables</b>	ns	ns	-1.4**	-1.8**	ns	-1.5**	+ 0.9*
<b>Initial Frication</b>	+0.5~	ns	ns	ns	ns	ns	ns
<b>TOTAL</b>	19.8**	11.4**	9.2**	11.4**	8.0**	10.1**	19.2**

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1;  
plus/minus indicates direction of contribution)

**Table 40: Regressions of Five Major Independent Variables on Number of Types**  
**(Total variance & percent unique variance accounted for by each predictor**  
**after all the others are controlled)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Goodness of Depiction</b>	-22.1**	-13.0**	-11.1**	-8.8**	-13.6**	-13.5**	-13.8**
<b>Visual Complexity</b>	ns	+0.5~	ns	ns	ns	ns	ns
<b>Frequency</b>	-1.8**	-2.2**	-1.4*	-2.4**	ns	-0.5~	-6.2**
<b>Length in Syllables</b>	ns	ns	+1.1*	+0.9*	ns	ns	ns
<b>Initial Frication</b>	ns	ns	ns	ns	ns	ns	ns
<b>TOTAL</b>	26.3**	16.7**	14.9**	13.3**	14.3**	14.7**	22.3**

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1;  
plus/minus indicates direction of contribution)

**Table 41: Regressions of Five Major Independent Variables on "Same Name"**  
**(Total variance & percent unique variance accounted for by each**  
**after all the others are controlled)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Goodness of Depiction</b>	ns	ns	ns	ns	+0.9*	+0.5~	ns
<b>Visual Complexity</b>	ns	-0.7~	ns	ns	ns	+0.5~	-1.5**
<b>Frequency</b>	+ 0.8*	+0.5~	+1.7**	+0.8*	+3.6**	+3.8**	-1.1*
<b>Length in Syllables</b>	ns	-1.1*	-0.6~	ns	-2.1**	ns	-3.7**
<b>Initial Frication</b>	ns	ns	ns	ns	ns	ns	ns
<b>TOTAL</b>	2.8*	4.0**	3.7**	1.8 ns	7.2**	7.7**	7.2**

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1;  
plus/minus indicates direction of contribution)

**Table 42: Regressions of Five Major Independent Variables on Target RT**  
**(Total variance & percent unique variance accounted for by each predictor**  
**after all the others are controlled)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Goodness of Depiction</b>	-31.7**	-22.8**	-19.8**	-19.8**	-24.5**	-20.6**	-24.6**
<b>Visual Complexity</b>	ns	+0.6*	ns	ns	+0.6*	ns	ns
<b>Frequency</b>	-6.8**	-5.6**	-3.2**	-8.2**	-7.1**	-3.6**	-10.1**
<b>Length in Syllables</b>	ns	ns	+1.0**	+ 0.6*	ns	+ 0.9*	ns
<b>Initial Frication</b>	ns	+0.8*	ns	ns	+0.7*	ns	ns
<b>TOTAL</b>	43.3**	33.5**	26.3**	30.8**	32.4**	28.4**	39.6**

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1;  
plus/minus indicates direction of contribution)

**Table 43:**  
**Regressions of Five Major Independent Variables on Naming Disparity Scores for Each Language**  
**(Total variance & percent unique variance accounted for by each predictor after all the others are controlled)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Goodness of Depiction</b>	+2.2**	ns	ns	-1.1*	ns	ns	ns
<b>Visual Complexity</b>	ns	- 0.7~	ns	ns	ns	ns	ns
<b>Frequency</b>	ns	+0.8*	ns	+1.0*	ns	ns	+1.6**
<b>Length in Syllables</b>	ns	+0.5~	-1.3*	-2.0**	ns	-0.6~	+0.9 *
<b>Initial Frication</b>	ns	ns	ns	ns	ns	ns	ns
<b>TOTAL</b>	2.8*	1.9~	1.6 ns	5.4**	0.7 ns	1.4 ns	3.4**

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1; plus/minus indicates direction of contribution; positive score indicates a relative advantage for that language)

**Table 44:**  
**Regressions of Five Major Independent Variables on Target RT Disparity Scores for Each Language**  
**(Total variance & percent unique variance accounted for by each predictor after all the others are controlled)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Goodness of Depiction</b>	-2.4**	ns	ns	+0.9*	ns	ns	ns
<b>Visual Complexity</b>	- 0.6~	+0.7 ~	ns	ns	+0.8*	ns	ns
<b>Frequency</b>	ns	ns	ns	-2.1**	ns	ns	-1.4 **
<b>Length in Syllables</b>	ns	ns	+0.7 ~	+1.6 **	+0.8 *	+ 0.6~	ns
<b>Initial Frication</b>	ns	+1.5**	ns	ns	+2.4 **	ns	ns
<b>TOTAL</b>	3.5**	2.3*	1.6 ns	6.4**	3.9**	1.0 ns	2.1~

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1; plus/minus indicates direction of contribution; positive score indicates a relative advantage for that language)



**Table 45: Regressions of Cross-Language Independent Variables on Cross-Language Summary Scores for Naming Behavior: Total Percent Variance Accounted for and Unique Contributions of each Predictor on the Final Step**

<b>PREDICTORS</b>	<b>Average Name Agreement</b>	<b>Average Target Latencies</b>	<b>Average Number of Types</b>	<b>Disparity in Name Agreement</b>	<b>Disparity in Target Latencies</b>
<b>Goodness of Depiction</b>	<b>+15.9**</b>	<b>-28.8**</b>	<b>-23.6**</b>	<b>-1.7**</b>	<b>-5.6**</b>
<b>Visual Complexity</b>	<b>ns</b>	<b>ns</b>	<b>ns</b>	<b>ns</b>	<b>ns</b>
<b>Cross-Language Length Factor</b>	<b>ns</b>	<b>ns</b>	<b>ns</b>	<b>+ 1.1**</b>	<b>ns</b>
<b>Cross-Language Frequency Factor</b>	<b>+ 3.6**</b>	<b>-12.3**</b>	<b>- 4.3**</b>	<b>-1.9**</b>	<b>-7.1**</b>
<b>Total Variance Accounted For</b>	<b>22.6**</b>	<b>49.0**</b>	<b>30.3**</b>	<b>18.2**</b>	<b>18.2**</b>

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1; plus/minus indicates direction of contribution)

**Table 46:  
Correlations of Word Frequencies with Name Agreement in and across Languages**

<b>Frequencies from</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>English</b>	<b>+.21**</b>	<b>+.17**</b>	<b>+.22*</b>	<b>+.29**</b>	<b>+.16**</b>	<b>+.21**</b>	<b>+.09*</b>
<b>German</b>	<b>+.08*</b>	<b>+.20**</b>	<b>+.18**</b>	<b>+.25**</b>	<b>+.13**</b>	<b>+.17**</b>	<b>+.07~</b>
<b>Spanish</b>	<b>+.12**</b>	<b>+.10**</b>	<b>+.14**</b>	<b>+.19**</b>	<b>ns</b>	<b>+.16**</b>	<b>+.11**</b>
<b>Italian</b>	<b>+.08*</b>	<b>+.11**</b>	<b>+.15**</b>	<b>+.22**</b>	<b>+.09*</b>	<b>+.10*</b>	<b>+.06~</b>
<b>Bulgarian</b>	<b>ns</b>	<b>+.07~</b>	<b>+.16**</b>	<b>+.10*</b>	<b>+.09*</b>	<b>ns</b>	<b>+.06~</b>
<b>Hungarian</b>	<b>+.08*</b>	<b>+.11**</b>	<b>+.13**</b>	<b>+.19**</b>	<b>+.06~</b>	<b>+.12**</b>	<b>ns</b>
<b>Chinese</b>	<b>+.13**</b>	<b>+.13**</b>	<b>+.20**</b>	<b>+.21**</b>	<b>+.10*</b>	<b>+.20**</b>	<b>+.26**</b>
<b>"Other-Language Frequency"</b>	<b>+.11**</b>	<b>+.15**</b>	<b>+.22**</b>	<b>+.27**</b>	<b>+.12**</b>	<b>+.19**</b>	<b>+.09*</b>
<b>"Universal Frequency"</b>	<b>+.14**</b>	<b>+.17**</b>	<b>+.22**</b>	<b>+.28**</b>	<b>+.13**</b>	<b>+.19**</b>	<b>+.12**</b>

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1)

**Table 47:**  
**Correlations of Word Frequencies from Each Language with Naming Latencies in and across Languages**

Frequencies from	English	German	Spanish	Italian	Bulgarian	Hungarian	Chinese
English	<b>-.34**</b>	-.31**	-.37**	-.39**	-.28**	-.29**	-.33*
German	-.30**	<b>-.32**</b>	-.35**	-.38**	-.27**	-.32**	-.29**
Spanish	-.27**	-.28**	<b>-.24**</b>	-.33**	-.21**	-.26**	-.25**
Italian	-.28**	-.22**	-.27**	<b>-.33**</b>	-.18**	-.20**	-.19**
Bulgarian	-.31**	-.25**	-.34**	-.32**	<b>-.27**</b>	-.22**	-.28**
Hungarian	-.27**	-.27**	-.27**	-.33**	-.22**	<b>-.27**</b>	-.25**
Chinese	-.31**	-.29**	-.35**	-.34**	-.26**	-.28**	<b>-.39**</b>
"Other-Language Frequency"	<b>-.38**</b>	<b>-.35**</b>	<b>-.42**</b>	<b>-.45**</b>	<b>-.30**</b>	<b>-.33**</b>	<b>-.34**</b>
"Universal Frequency"	<b>-.39**</b>	<b>-.36**</b>	<b>-.41**</b>	<b>-.45**</b>	<b>-.31**</b>	<b>-.35**</b>	<b>-.37**</b>

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1)

**Table 48: Regressions on Name Agreement within Each Language**  
**Using both "Own Frequency" and "Other-Language Frequency" as Predictors**  
**(Total variance & percent unique variance accounted for by each predictor after all the others are controlled)**

PREDICTORS	English	German	Spanish	Italian	Bulgarian	Hungarian	Chinese
Goodness of Depiction	+14.7**	+6.9**	+6.0**	+4.4**	+6.7**	+6.4**	+10.6**
Visual Complexity	ns	ns	ns	ns	ns	ns	ns
Length in Syllables	ns	ns	-0.7*	-1.3**	ns	-1.3**	+0.7*
Initial Frication	+.05~	ns	ns	ns	ns	ns	ns
"Own Frequency"	+3.3**	+1.6**	ns	ns	ns	ns	+6.5**
"Other-Language Frequency"	-.05~	ns	+2.4**	+1.9**	ns	+1.6**	-0.7*
<b>TOTAL VARIANCE</b>	<b>20.3**</b>	<b>11.5**</b>	<b>11.5**</b>	<b>13.3**</b>	<b>8.4**</b>	<b>11.7**</b>	<b>19.9**</b>

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1;  
plus/minus indicates direction of contribution)

**Table 49: Regressions on Naming Latencies within Each Language Using both "Own Frequency" and "Other-Language Frequency" as Predictors (Total variance & percent unique variance accounted for by each predictor after all the others are controlled)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Goodness of Depiction</b>	-30.7**	-23.1**	-19.2**	-17.8**	-23.3**	-20.0**	-24.3**
<b>Visual Complexity</b>	ns	+0.6*	ns	ns	+0.7*	ns	ns
<b>Length in Syllables</b>	ns	ns	ns	ns	ns	+0.6*	ns
<b>Initial Frication</b>	ns	+0.9**	ns	ns	+0.6*	ns	ns
<b>"Own Frequency"</b>	-0.7*	ns	ns	ns	-2.1**	ns	-4.1**
<b>"Other-Language Frequency"</b>	-2.8**	-3.4**	-10.6**	-7.3 **	-2.0**	-3.8**	-1.4**
<b>TOTAL VARIANCE</b>	46.1**	36.8**	36.8**	38.2**	34.4**	32.2**	41.0**

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1; plus/minus indicates direction of contribution)

**Table 50: Correlations of "Own-Language Frequency" and "Other-Language Frequency" with Reaction Times for Morphophonological Variants (Lexical Code 2) and Synonyms (Lexical Code 3)**

	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>OWN FREQUENCY</b>							
<b>Lexical Code 2</b>	ns	ns	ns	-.17**	-.21**	ns	-.22**
<b>Lexical Code 3</b>	-.16~	-.23**	ns	-.19**	ns	ns	-.16~
<b>OTHER-LANGUAGE FREQUENCY</b>							
<b>Lexical Code 2</b>	-.17*	ns	-.26**	-.23**	-.25**	-.08~	-.32**
<b>Lexical Code 3</b>	-.28**	-.27**	-.25**	-.33*	-.28**	-.21**	ns

(levels of significance: p<0.01 level: \*\*, p<0.05 level: \*, p<0.1 level: ~)

Table 51

Cognate status: physical similarity between target names in average number of overlapping orthographic trigrams, across all pairs of languages

	EN	GE	SP	IT	BU	HU	CH
<b>English</b>	---						
<b>German</b>	0.65	---					
<b>Spanish</b>	0.48	0.29	---				
<b>Italian</b>	0.56	0.44	1.01	---			
<b>Bulgarian</b>	0.30	0.48	0.31	0.44	---		
<b>Hungarian</b>	0.19	0.30	0.18	0.27	0.33	---	
<b>Chinese</b>	0.02	0.02	0.02	0.01	0.02	0.00	---
<b>Mean Overlap with All Other Languages</b>	0.37	0.36	0.38	0.46	0.31	0.21	0.02

(All languages: 30%)

Table 52:

Correlations of Length in Syllables from Each Language with Name Agreement in and across Languages

LENGTH IN SYLLABLES	English	German	Spanish	Italian	Bulgarian	Hungarian	Chinese
<b>English</b>	<b>-.09*</b>	ns	-.07~	-.15**	-.07~	-.08*	ns
<b>German</b>	-.06~	<b>ns</b>	-.08*	-.11**	-.08*	ns	ns
<b>Spanish</b>	-.07~	ns	<b>-.13**</b>	-.11**	ns	-.08*	ns
<b>Italian</b>	-.06~	ns	-.10**	<b>-.18**</b>	ns	ns	ns
<b>Bulgarian</b>	ns	+.10*	ns	-.08*	<b>ns</b>	-.15**	+.08*
<b>Hungarian</b>	-.10*	ns	-.08*	-.15**	-.09*	<b>-.15**</b>	ns
<b>Chinese</b>	na	ns	ns	-.15**	ns	-.08*	<b>ns</b>
<b>"Other-Language Length"</b>	<b>-.08*</b>	<b>ns</b>	<b>-.09*</b>	<b>-.19**</b>	<b>ns</b>	<b>ns</b>	<b>ns</b>
<b>"Universal Length"</b>	<b>-.09*</b>	<b>ns</b>	<b>-.11**</b>	<b>-.20**</b>	<b>-.08~</b>	<b>-.09*</b>	<b>ns</b>

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1)

**Table 53:**  
**Correlations of Length in Syllables from Each Language on Naming Latencies within and across Languages**

<b>LENGTH IN SYLLABLES</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>English</b>	<b>+0.16**</b>	<b>+0.18**</b>	<b>+0.12**</b>	<b>+0.19**</b>	<b>+0.15**</b>	<b>+0.13**</b>	<b>+0.12**</b>
<b>German</b>	<b>+0.18**</b>	<b>+0.16**</b>	<b>+0.14**</b>	<b>+0.13**</b>	<b>+0.14**</b>	<b>+0.11**</b>	<b>+0.14**</b>
<b>Spanish</b>	<b>+0.12**</b>	<b>+0.14**</b>	<b>+0.13**</b>	<b>+0.16**</b>	<b>+0.08*</b>	<b>+0.09*</b>	<b>+0.06~</b>
<b>Italian</b>	<b>+0.19**</b>	<b>+0.13**</b>	<b>+0.16**</b>	<b>+0.14**</b>	<b>ns</b>	<b>ns</b>	<b>ns</b>
<b>Bulgarian</b>	<b>+0.15**</b>	<b>+0.14**</b>	<b>+0.08*</b>	<b>ns</b>	<b>ns</b>	<b>ns</b>	<b>ns</b>
<b>Hungarian</b>	<b>+0.13**</b>	<b>+0.11**</b>	<b>+0.09*</b>	<b>ns</b>	<b>ns</b>	<b>+0.18**</b>	<b>+0.12**</b>
<b>Chinese</b>	<b>+0.14**</b>	<b>+0.19**</b>	<b>+0.08*</b>	<b>+0.19**</b>	<b>+0.13**</b>	<b>+0.12**</b>	<b>+0.17**</b>
<b>"Other-Language Length"</b>	<b>+0.14**</b>	<b>+0.14**</b>	<b>+0.14**</b>	<b>+0.22**</b>	<b>+0.16**</b>	<b>+0.11*</b>	<b>+0.11**</b>
<b>"Universal Length"</b>	<b>+0.16**</b>	<b>+0.15**</b>	<b>+0.15**</b>	<b>+0.22**</b>	<b>+0.15**</b>	<b>+0.13**</b>	<b>+0.13**</b>

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1)

**Table 54: Unique Variance Contributed by Each Length Predictor to Name Agreement on the Last Step (Each in separate regressions, after goodness of depiction, visual complexity, word frequency and initial frication are controlled)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Length in syllables</b>	<b>ns</b>	<b>ns</b>	<b>-1.4**</b>	<b>-1.8**</b>	<b>ns</b>	<b>-1.5**</b>	<b>+0.9*</b>
<b>Syllable frequency type</b>	<b>ns</b>	<b>ns</b>	<b>+1.5**</b>	<b>+1.0*</b>	<b>ns</b>	<b>+2.4**</b>	<b>+0.6~</b>
<b>Length in characters</b>	<b>-0.8*</b>	<b>ns</b>	<b>-1.3**</b>	<b>-1.8**</b>	<b>-0.7*</b>	<b>-1.5**</b>	<b>not applicable</b>
<b>Word Complexity</b>	<b>-1.5**</b>	<b>ns</b>	<b>-3.6**</b>	<b>-2.4**</b>	<b>ns</b>	<b>-2.7**</b>	<b>not applicable</b>

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1;  
plus/minus indicates direction of contribution)

**Table 55: Unique Variance Contributed by Each Length Predictor to Naming Latencies on the Last Step (Each in separate regressions, after goodness of depiction, visual complexity, word frequency and initial frication are controlled)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Length in syllables</b>	ns	ns	+1.0**	+0.6*	ns	+0.9*	ns
<b>Syllable frequency type</b>	ns	ns	-1.9**	-1.2**	-0.5*	-1.4**	-2.0**
<b>Length in characters</b>	+0.5*	ns	+1.0**	+0.6*	+1.1**	+1.6**	not applicable
<b>Word Complexity</b>	ns	ns	+2.0**	ns	ns	+0.9*	not applicable

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1; plus/minus indicates direction of contribution)

**Table 56:  
Regressions on Name Agreement using both Length in Syllables and Syllable Type Frequency (Total variance & percent unique variance accounted for by each predictor on last step)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Goodness of Depiction</b>	+14.5**	+7.0**	+6.3**	+4.9**	+7.0**	+7.0**	+10.8**
<b>Visual Complexity</b>	ns	ns	ns	ns	ns	ns	ns
<b>Initial Frication</b>	+0.5~	ns	ns	ns	ns	ns	ns
<b>Word Frequency</b>	+3.2**	+3.5**	+0.8*	+2.9**	+0.8*	+0.5~	+6.3**
<b>Length in Syllables</b>	ns	ns	ns	-0.8*	ns	ns	+1.2**
<b>Syllable Type Frequency</b>	ns	ns	ns	ns	ns	+1.3**	+0.9*
<b>TOTAL</b>	19.8**	11.6**	9.4**	11.4**	8.1**	11.4**	20.1**

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1; plus/minus indicates direction of contribution)

**Table 57: Regressions on Target RT using both Length in Syllables and Syllable Type Frequency  
(Total variance & percent unique variance accounted for by each predictor on last step)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>	<b>Chinese</b>
<b>Goodness of Depiction</b>	-31.6**	-22.7**	-20.4**	-19.8**	-24.8**	-21.0**	-25.4**
<b>Visual Complexity</b>	ns	+0.6*	ns	ns	+0.6*	ns	ns
<b>Initial Frication</b>	ns	+0.8*	ns	ns	+0.6*	ns	ns
<b>Word Frequency</b>	-6.6**	-5.2**	-3.2**	-8.2**	-7.1**	-3.9**	-10.8**
<b>Length in Syllables</b>	ns	ns	ns	ns	ns	ns	ns
<b>Syllable Type Frequency</b>	ns	ns	-0.8*	-0.6*	ns	-0.7*	-2.0**
<b>TOTAL</b>	43.3**	33.5**	27.1**	31.4**	32.7**	29.1**	41.5**

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1;  
plus/minus indicates direction of contribution)

**Table 58: Regressions on Name Agreement Using All Four Length Metrics  
(Total variance & percent unique variance accounted for by each predictor on last step)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>
<b>Goodness of Depiction</b>	+15.1**	+6.9**	+6.1**	+4.5**	+7.0**	+7.0**
<b>Visual Complexity</b>	ns	ns	ns	ns	ns	ns
<b>Word Frequency</b>	+1.2**	+3.2**	+1.2**	+2.4**	+0.8*	ns
<b>Initial Frication</b>	+0.7*	ns	ns	ns	ns	ns
<b>Length in Syllables</b>	ns	+0.6~	ns	ns	+0.5~	ns
<b>Syllable Type Frequency</b>	ns	ns	ns	ns	ns	+0.8*
<b>Length in Characters</b>	-0.7*	ns	ns	ns	-1.0*	ns
<b>Word Complexity</b>	-0.4~	ns	-2.5**	-1.1*	ns	-0.8*
<b>4 Length Metrics Entered Together</b>	(2.3**)	(ns)	(4.1**)	(3.0**)	(ns)	(3.7**)
<b>TOTAL VARIANCE</b>	22.1**	12.0**	11.9**	12.6**	9.1**	12.3**

(levels of significance: \*\* = p<0.01 level; \* = p<0.05 level; ~ = p<0.1;  
plus/minus indicates direction of contribution)

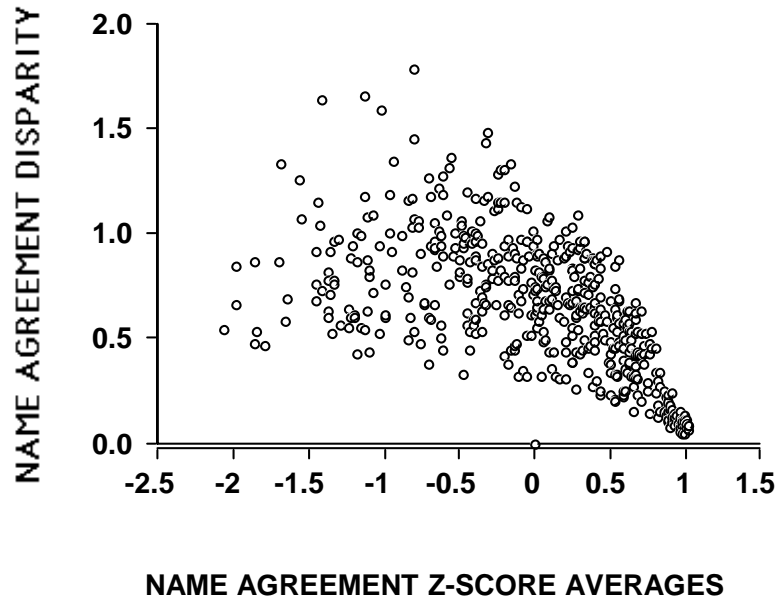
**Table 59: Regressions on Target RT Using All Four Length Metrics  
(Total variance & percent unique variance accounted for by each predictor on last step)**

<b>PREDICTORS</b>	<b>English</b>	<b>German</b>	<b>Spanish</b>	<b>Italian</b>	<b>Bulgarian</b>	<b>Hungarian</b>
<b>Goodness of Depiction</b>	-31.5**	-22.7**	-20.1**	-19.7**	-24.6**	-20.8**
<b>Visual Complexity</b>	ns	+0.6*	ns	ns	+0.7*	ns
<b>Word Frequency</b>	-5.6**	-7.0**	-3.6**	-7.9**	-6.9**	-3.4**
<b>Initial Frication</b>	ns	+0.5~	ns	ns	ns	ns
<b>Length in Syllables</b>	ns	ns	ns	ns	-0.5*	ns
<b>Syllable Type Frequency</b>	ns	ns	-0.8*	-0.5*	ns	-0.6*
<b>Length in Characters</b>	+0.6*	ns	ns	ns	+1.1**	+0.5*
<b>Word Complexity</b>	ns	ns	+1.1*	ns	ns	ns
<b>4 Length Metrics Entered Together</b>	(ns)	(ns)	(3.0**)	(1.2**)	(1.7**)	(2.3**)
<b>TOTAL VARIANCE</b>	43.9**	33.7**	28.2**	31.4**	33.8**	29.8**

(levels of significance: \*\* =  $p < 0.01$  level; \* =  $p < 0.05$  level; ~ =  $p < 0.1$ ;  
plus/minus indicates direction of contribution)



**Figure 1: Scatterplot of Name Agreement Disparity Scores Plotted against Name Agreement Z-Scores (both averaged over languages)**



**Figure 2: Scatterplot of RT Disparity Scores against RT Z-Scores (both averaged over languages)**

