How to read various charts at this website

1. Introduction

Language Faculty Science discusses a number of Experiments but the information of those Experiments is provided only partially in the book due to the space considerations. This website provides the design, Examples, and results of every Experiment discussed in the book. Those who have a copy of the book can make use of the basic information provided here regarding how to read various charts at this website. For the illustration, we refer to charts for EPSA [31]-4, which is the *Main-Experiment* discussed in Chapter 6.[1] See Ch. 5: section 3 for how the Examples are presented to the informants on-line.

Those who do not have a copy of the book but wish to learn about experimental aspects of what is presented in *Language Faculty Science* may find it useful to consult with the Glossary provided at the "Top page" of this website before going over the following.

The illustration given in each section below is in relation to an actual chart, which can be viewed by clicking first "EPSA [31]-4 (=[31]-11)" under "English Experiments" under "Menu" and then a particular clickable part of that page you see. The illustration below goes from the top to the bottom of that page.

2. Design

The Design page of EPSA [31]-4 looks like (1).

(1)
Experiment No.4

schema design	**Schema Group #1**	WCO in Schema B
	Schema A1	ok NP V [... B ...] (Under BVA(NP, B))
	Schema B1	* [... B ...] V NP (Under BVA(NP, B))
	Schema C1	ok [... B ...] V NP (With B being referential)
	Schema Group #2	Reconstruction effects in Schema A, with Schema B continuing to be about WCO
	Schema A2	ok [... B ...] NP V (Under BVA(NP, B))
	Schema B2	* [... B ...] V NP (Under BVA(NP, B))
	Schema C2	ok [... B ...] V NP (With B being referential)
	Schema Group #3	Schema B involves local disjointness effects, but that is not the main point of this EPSA.
	Schema A3	ok NP V [... B ...] (Under BVA(NP, B))
	Schema B3	* NP V B (Under BVA(NP, B))
	Schema C3	ok NP V B (With B being referential)
example design	**Lexical Group #1** every boy **Lexical Group #2** no boy	
test design	accept until 2014/02/22 **Yes-or-No (in sets)** Included Times shown = 1 The number of Example tokens = 18	

[1] The references to (a section of) a chapter below are all to the CUP book, unless otherwise specified.

	Yes-or-No (one each)	Included	Times shown = 1 The number of Example tokens = 18
	Five-ranking (in sets)	Excluded	Times shown = 1 The number of Example tokens = 18
	Five-ranking (one each)	Excluded	Times shown = 1 The number of Example tokens = 18

The Examples of our Experiment are constructed, and hence classified, by the following three dimensions:[2]

(2) a. Schema types (Schema A, Schema B, and Schema C)
b. Schema groups
c. Lexical groups

The "schema design" makes reference to Schema types and Schema groups and the "example design" to Lexical groups. The number of the Schema types is always 3 (Schema A, Schema B, and Schema C). EPSA [31]-4 has three SGs and 2 LGs. It thus consists of 3x3x2=18 Examples as indicated in (3).

3. Examples

(3)

a. EPSA [31] #4 : list of example sentences (lexically grouped)

1	A1-1	ok	(Under the interpretation "Every boy praised his own father") Every boy praised his father.
2	B1-1	*	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.
3	C1-1	ok	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.
4	A2-1	ok	(Under the interpretation "Every boy praised his own father") His father, every boy praised.
5	B2-1	*	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.
6	C2-1	ok	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.
7	A3-1	ok	(Under the interpretation "Every boy praised his own father") Every boy praised his father.
8	B3-1	*	(Under the interpretation "Every boy praised himself") Every boy praised him.
9	C3-1	ok	(With *him* referring to a specific boy, Mike, for example)

[2] See the Glossary entries for "Schema A," "Schema B," "Schema C," "Schema group," and "Lexical group."

			Every boy praised him.

10	A1-2	ok	(Under the interpretation "No boy praised his own father") No boy praised his father.
11	B1-2	*	(Under the interpretation "No boy was praised by his own father") His father praised no boy.
12	C1-2	ok	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.
13	A2-2	ok	(Under the interpretation "No boy praised his own father") His father, no boy praised.
14	B2-2	*	(Under the interpretation "No boy was praised by his own father") His father praised no boy.
15	C2-2	ok	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.
16	A3-2	ok	(Under the interpretation "No boy praised his own father") No boy praised his father.
17	B3-2	*	(Under the interpretation "No boy praised himself") No boy praised him.
18	C3-2	ok	(With *him* referring to a specific boy, Mike, for example) No boy praised him.

b. EPSA [31] #4 : list of example sentences (configurationally grouped)

1	A1-1	ok	(Under the interpretation "Every boy praised his own father") Every boy praised his father.
2	A1-2	ok	(Under the interpretation "No boy praised his own father") No boy praised his father.
3	A2-1	ok	(Under the interpretation "Every boy praised his own father") His father, every boy praised.
4	A2-2	ok	(Under the interpretation "No boy praised his own father") His father, no boy praised.
5	A3-1	ok	(Under the interpretation "Every boy praised his own father") Every boy praised his father.
6	A3-2	ok	(Under the interpretation "No boy praised his own father") No boy praised his father.

7	B1-1	*	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.
8	B1-2	*	(Under the interpretation "No boy was praised by his own father") His father praised no boy.
9	B2-1	*	(Under the interpretation "Every boy was praised by his own father")

			His father praised every boy.
10	B2-2	*	(Under the interpretation "No boy was praised by his own father") His father praised no boy.
11	B3-1	*	(Under the interpretation "Every boy praised himself") Every boy praised him.
12	B3-2	*	(Under the interpretation "No boy praised himself") No boy praised him.

13	C1-1	ok	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.
14	C1-2	ok	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.
15	C2-1	ok	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.
16	C2-2	ok	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.
17	C3-1	ok	(With *him* referring to a specific boy, Mike, for example) Every boy praised him.
18	C3-2	ok	(With *him* referring to a specific boy, Mike, for example) No boy praised him.

SG3 is not directly relevant to the issues addressed in the CUP book, the result charts for EPSA [31]-4 do not consider informant judgments that involve SG3. We could have given (4) instead of (1), indicating that SG3 is excluded.

(4)
Experiment No.4

schema design	**Schema Group #1**	WCO in Schema B
	Schema A1	ok NP V [... B ...] (Under BVA(NP, B))
	Schema B1	* [... B ...] V NP (Under BVA(NP, B))
	Schema C1	ok [... B ...] V NP (With B being referential)
	Schema Group #2	Reconstruction effects in Schema A, with Schema B continuing to be about WCO
	Schema A2	ok [... B ...] NP V (Under BVA(NP, B))
	Schema B2	* [... B ...] V NP (Under BVA(NP, B))
	Schema C2	ok [... B ...] V NP (With B being referential)
	Schema Group #3	**Excluded** Schema B involves local disjointness effects, but that is not the main point of this EPSA.
	~~Schema A3~~	~~ok NP V [... B ...] (Under BVA(NP, B))~~
	~~Schema B3~~	~~* NP V B (Under BVA(NP, B))~~
	~~Schema C3~~	~~ok NP V B (With B being referential)~~
example design	**Lexical Group #1**	every boy

	Lexical Group #2 no boy (**examples change**)
test design	accept until 2014/10/22 **Yes-or-No (in sets)** Included Times shown = 1 The number of Example tokens = 12 **Yes-or-No (one each)** Included Times shown = 1 The number of Example tokens = 12 **Five-ranking (in sets)** Included Times shown = 1 The number of Example tokens = 12 **Five-ranking (one each)** Included Times shown = 1 The number of Example tokens = 12

If (4) were chosen, the list of Examples would be 3x2x2=12 Examples, as indicated in (5), which does not show the Examples of SG3.

(5)

a. EPSA [31] #4 : list of example sentences (lexically grouped)

1	A1-1	ok	(Under the interpretation "Every boy praised his own father") Every boy praised his father.
2	B1-1	*	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.
3	C1-1	ok	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.
4	A2-1	ok	(Under the interpretation "Every boy praised his own father") His father, every boy praised.
5	B2-1	*	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.
6	C2-1	ok	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.

7	A1-2	ok	(Under the interpretation "No boy praised his own father") No boy praised his father.
8	B1-2	*	(Under the interpretation "No boy was praised by his own father") His father praised no boy.
9	C1-2	ok	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.
10	A2-2	ok	(Under the interpretation "No boy praised his own father") His father, no boy praised.
11	B2-2	*	(Under the interpretation "No boy was praised by his own father") His father praised no boy.
12	C2-2	ok	(With *His* referring to a specific boy, Mike, for example)

			His father praised no boy.

b. EPSA [31] #4 : list of example sentences (configurationally grouped)

1	A1-1	ok	(Under the interpretation "Every boy praised his own father") Every boy praised his father.
2	A1-2	ok	(Under the interpretation "No boy praised his own father") No boy praised his father.
3	A2-1	ok	(Under the interpretation "Every boy praised his own father") His father, every boy praised.
4	A2-2	ok	(Under the interpretation "No boy praised his own father") His father, no boy praised.

5	B1-1	*	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.
6	B1-2	*	(Under the interpretation "No boy was praised by his own father") His father praised no boy.
7	B2-1	*	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.
8	B2-2	*	(Under the interpretation "No boy was praised by his own father") His father praised no boy.

9	C1-1	ok	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.
10	C1-2	ok	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.
11	C2-1	ok	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.
12	C2-2	ok	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.

Both in (3) and (5), the list of Examples in EPSA [31]-4 is repeated twice, but organized differently. Consider the list under "lexically grouped" in (5a). The numbers in the first column represent the serial numbers of the Examples. The letter-number combination in the second column (which we can call "Example ID") expresses, for each Example, its Schema type, its Schema group (SG) and its Lexical group (LG) *in that order*. It uniquely identifies an Example in an Experiment, as indicated in (6).

(6) Example IDs in EPSA [31]-4 (as given in (5a)):

Serial number	Example ID	Predicted Judgment	What Schema type, SG, and LG the Example is made of
1	A1-1	Yes answer	Schema A, SG1, LG1

2	A1-2	Yes answer	Schema A, SG1, LG2
3	A2-1	Yes answer	Schema A, SG2, LG1
4	A2-2	Yes answer	Schema A, SG2, LG2
5	B1-1	No answer	Schema B, SG1, LG1
6	B1-2	No answer	Schema B, SG1, LG2
7	B2-1	No answer	Schema B, SG2, LG1
8	B2-2	No answer	Schema B, SG2, LG2
9	C1-1		Schema C, SG1, LG1
10	C1-2		Schema C, SG1, LG2
11	C2-1		Schema C, SG2, LG1
12	C2-2		Schema C, SG2, LG2

"ok" and "*" that follow the "Example IDs" in (5) represent the predicted judgments in the case of A1-1 to A2-2 and B1-1 to B2-2, as indicated in (6). The informant judgments in the case of C1-1 to C2-2 are expected, though not predicted, to be a Yes answer. Hence the cells for C1-1 to C2-2 under "Predicted Judgments" are left blank in (6).[3, 4]

4. Summary (of the result)

The Summary chart of EPSA [31]-4 is as given in (7) although only the judgments by the first eight informants out of the 179, are given here. Because SG3 is excluded, the chart in (7) does not refer to the informant judgments on Examples of SG3. I will now explain various parts of the chart by adding footnotes, starting footnote 5.

(7)

EPSA [31] : BVA in English
Experiment #4 -- Summary

The values for the Examples of the Schema groups and/or Lexical groups that are "Excluded" are not shown.

participant list : **pers-r2.lst**[5]

straight file : **s20.lst** | Yes-or-No (in sets) | Yes-or-No (one each) | --- | --- [6]

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[3] See the Glossary entries for "Yes answer" and "No answer."

[4] In the Raw Data charts, to be given below, Schema A, Schema B, and Schema C are represented as 1, 2, and 3 in the first column, instead A, B, and C, respectively. See section 8 below.

[5] The "participant list : **pers-r2.lst**" means that this chart represents judgments by the informants classified as "r2," which is native speakers of English according to what is reported during the EPSA registration; see Ch. 5: section 5.2.

[6] This means that the informant judgments considered in this chart are the results of the Yes/No test type. There are two Yes/No test types: (i) the one where the informant sees a set of three Examples at a time (corresponding to the three Schema types) and (ii) the one where the informant sees one Example at a time; see Ch. 5: section 3.1. The result charts at this website all combine the two Yes/No test types, except when the justification of combining the results of the two Yes/No test types is addressed; see the part of English EPSAs [31]-1, [31]-4, [31]-7 and Japanese EPSAs [3]-7, [10]-10, and [33]-9, starting with "**The one-sentence-at-a-time test type vs. the three-sentences-at-a-time test type**."

EPSA [31]-#4 < english > (Total 179 participants7 ; 3237 answers8) ... as of May/15/2014[9]			
	Schema A	Schema B	Schema C
% of YES Answers10	54 %	22 %[11]	82 %
Number of Answers	1087	1081	1069

codename	Schema A	Schema B	Schema C	A＝0% B＞0%	A＞0% B＞0%	A＝0% B＝0%	0%＜A A＜25% B＝0%	A≧25% B＝0%	(where A≧50% B＝0%)
I1334104779nE[12]	100[13], 100, 100, 100,	0, 0, 0, 100,	100, 100, 100, 100,		[14]				

[7] If an informant reports a judgment on at least one Example, her/his reported judgments are considered in the result charts. For EPSA [31]-#4 (=[31]-4), there are 179 such informants (who are native speakers of English), as of May/15.2014.

[8] This is the total number of the reported judgments, counting each reported judgment on an Example. The informants are allowed to return to the Experiment as many times as they wish. Furthermore, the informants are allowed to take different test types that are made available to them. (See Ch. 5: sections 3.1 and 3.3.) In the case of a small number of Experiments, the Examples are shown to the informants twice. Therefore, the number in question can include more than one reported judgments on one Example by the same informant.

[9] This is the date when the chart was created, not the date when the last judgment was reported in EPSA [31]-4. As of 6/13/2014, the last reported judgment in EPSA [31]-4 was made on 2/22/2014.

[10] This is the percentage of the Yes Answers among all the answers given on the Examples instantiating the Schema in question. See the Glossary entry for "Yes answer."

[11] This %(Y), which is the %(Y) on Schema B, is for the group of 179 informants under consideration. It is the percentage of Yes Answers among all the reported judgments (1081) on the Examples instantiating Schema B (B1-1, B1-2, B2-1, and B2-2). In this sense, the %(Y) in question is for a *multiple-informant experiment*. If a particular choice of SG or LG makes a big difference, the %(Y) on a Schema type, therefore, may not be particularly meaningful unless we differentiate the results, depending upon the choice of SG or LG. That is why we also consider Schema-group-based result charts and Lexical-group-based result charts, as we will see below.

[12] What is given in this row is about the judgments reported by the informant whose code name is given here. What is indicated in each row is thus the result of a *single-informant experiment.*

[13] Each numerical figure in this cell represents the %(Y), for *each* informant, on an Example instantiating Schema A in the order of A1-1, A1-2, A2-1, and A2-2 *in that order*, which is in accordance with the order of the Examples in the list of Examples in (5b) (i.e., under "configurationally grouped"). If the chart included SG3, there would be two more figures and the six figures in the cell would represent the %(Y) on A1-1, A1-2, A2-1, A2-2, A3-1, and A3-2 *in that order*. The numbers in the cell under Schema B represent the %(Y)'s on B1-1, B1-2, B2-1, and B2-2, *in that order*. Likewise, the numbers in the cell under Schema C represent the %(Y)'s on C1-1, C1-2, C2-1, and C2-2, *in that order*. If an informant reports just one judgment on one Example, it is either a Yes answer or a No answer; see the Glossary. If it is a Yes answer, the %(Y) on the Example is 100%. If it is a No answer, the %(Y) is 0%.

[14] For each informant, one of the 5 boxes under (i)-(v) is shaded, indicating which of these categories the informant's reported judgments belong to.
(i) A=0%, B>0%: the %(Y) on Schema A is 0% and the %(Y) on Schema B is larger than 0%

J1334108643aE	100, 100, 0, 0,	100, 100, 100, 100,	100, 100, 100, 100,						
G1334109581rE	100, 100, 0, 0,	0, 0, 0, 0,	100, 100, 100, 100,						15
J1334125186eE	0, 0, 0, 50[16],	0, 0, 0, 0,	100, 100, 100, 100,						
R1334166330nE	50, 50, 50, 100,	100, 100, 50, 0,	100, 50, 100, 50,						
L1334180602iE	100, 100, 100, 0,	0, 0, 0, 0,	0, 0, 0, 100,						
P13341818651E	100, 100, 0, 0,	0, 0, 0, 0,	100, 100, 100, 100,						
C1334186019iE	100, 100, 0, 33[17],	66, 100, 100, 33,	100, 66, 100, 66,						
…									
				A＝0% B＞0%	A＞0% B＞0%	A＝0% B＝0%	0%＜A A＜25% B＝0%	A≧25% B＝0%	(where A≧50% B＝0%)
			Number of informants	318	7719	1020	221	8522	(73)

(ii) A>0%, B>0%: the %(Y) on Schema A and the %(Y) on Schema B are both larger than 0%
(iii) A=0%, B=0%: the %(Y) on Schema A and the %(Y) on Schema B are both 0%
(iv) 0%<A, A<25%, B=0%: the %(Y) on Schema A is larger than 0% and smaller than 25%, and the %(Y) on Schema B is 0%
(v) A≧25%, B=0%: the %(Y) on Schema A is 25% or larger, and the %(Y) on Schema B is 0%
All the Examples instantiating each Schema type are considered here. Because we consider a combination of the %(Y) on Schema A and the %(Y) on Schema B, none of the boxes under (i)-(v) will be shaded for an informant if that informant only reports a judgment on Examples of Schema A or Schema B (and not on any Example instantiating the other Schema) or if the informant does not report any judgments on any Example instantiating Schema A or Schema B while reporting a judgment on an Example instantiating Schema C.

[15] The box under (vi) is shaded to indicate that the informant's reported judgments belong to the category in (vi).
(vi) (where A≧50%, B=0%): the %(Y) on Schema A is 50% or larger and the %(Y) on Schema B is 0%
It is only lightly shaded to indicate that this category is a subset of the category in (v) above.

[16] The %(Y) on an Example being 50% means that the informant has reported judgments on the Example twice or more times (which must be an even number) and 50% of those answers were Yes answers.

[17] The %(Y) on an Example being 33% means that the informant has reported judgments on the Example three times or more and 33% of those answers were Yes answers. 1/3 is rounded down to 33%. Similar rounding takes place elsewhere, which sometimes results in a situation where we do not obtain the "expected" 100% by adding various % figures.

[18] The number of informants whose reported judgments belong to the category in (i) in footnote 14 is 3, which is about 1.6 % of the informants under consideration.

[19] The number of informants whose reported judgments belong to the category in (ii) in footnote 14 is 77, which is about 43.5 % of the informants under consideration.

[20] The number of informants whose reported judgments belong to the category in (iii) in footnote 14 is 10, which is

Percentage	1.6%23	43.5%	5.6%	1.1%	48%

5. Schema-group-based (result)

When the choice of a SG makes a big difference, it is useful to consider the results of an Experiment, focusing on different SGs, as in our Schema-group-based-result chart in (8) below. This is based on the same set of reported judgments as (7). The information in (8) is therefore already contained in (7).

(8)

EPSA [31] : BVA in English
Experiment #4 -- Results of Each Schema Group

The values for the Examples of the Schema groups and/or Lexical groups that are "Excluded" are not shown.

participant list : pers-r2.lst

straight file : s20.lst | Yes-or-No (in sets) | Yes-or-No (one each) | --- | --- |

EPSA [31]-#4 < english > (Total 179 participants ; 3237 answers) ... as of Jul/29/2014				
Schema Group 1	WCO in Schema B			
	Schema A 1	% of YES Answers	81 %[24]	ok NP V [... B ...] (Under BVA(NP, B))
		Number of Answers	548	
	Schema B 1	% of YES Answers	21 %	* [... B ...] V NP (Under BVA(NP, B))
		Number of Answers	544	
	Schema C 1	% of YES Answers	80 %	ok [... B ...] V NP (With B being referential)
		Number of Answers	536	
Schema Group 2	Reconstruction effects in Schema A, with			

about 5.6 % of the informants under consideration.

[21] The number of informants whose reported judgments belong to the category in (iv) in footnote 14 is 2, which is about 1.1 % of the informants under consideration.

[22] The number of informants whose reported judgments belong to the category in (v) in footnote 14 is 85, which is about 48 % of the informants under consideration. If we add the numbers on this row (excluding 73 in the category in (vi) in footnote 15), we get 3+77+10+2+85=177, instead of 179. That is because there are two informants for whom we do not have both %(Y) on Schema A and %(Y) on Schema B. See the last sentence in footnote 14.

[23] %(I) is the percentage of the informants in a given experiment who have reported Yes on **at least one** of the **Examples* under consideration while at the same time reporting a judgment on an *[ok]Example* corresponding to Schema A. See the Glossary. The %(I) in EPSA [31]-4, including all the native speakers of English, is therefore 1.6+43.5=45.1, which is given as 45% in the book. See footnote 17.

[24] This is the %(Y) on Schema A of SG1, in the *multiple-informant experiment*. It combines the two LGs. Similarly, "21%" and "80%" below are the %(Y) on Schema B of SG1 and the %(Y) on Schema C of SG1, respectively.

	Schema B continuing to be about WCO			
	Schema A 2	% of YES Answers	26 %[25]	ok [... B ...] NP V (Under BVA(NP, B))
		Number of Answers	539	
	Schema B 2	% of YES Answers	22 %	* [... B ...] V NP (Under BVA(NP, B))
		Number of Answers	537	
	Schema C 2	% of YES Answers	83 %	ok [... B ...] V NP (With B being referential)
		Number of Answers	533	

codename	Schema Group 1									Schema Group 2								
	Schema A 1	Schema B 1	Schema C 1	A = 0% B > 0%	A > 0% B > 0%	A = 0% B = 0%	0% < A < 25% B = 0%	A ≧ 25% B = 0%	(where A ≧ 50% B = 0%)	Schema A 2	Schema B 2	Schema C 2	A = 0% B > 0%	A > 0% B > 0%	A = 0% B = 0%	0% < A < 25% B = 0%	A ≧ 25% B = 0%	(where A ≧ 50% B = 0%)
I133410 4779nE	100[26], 100[27],	0[28], 0[29],	100[30], 100[31],							100[32], 100[33],	0[34], 100[35],	100[36], 100[37],						
J13341	100,	100,	100,							0, 0,	100,	100,						

[25] This is the %(Y) on Schema A of SG2, in the *multiple-informant experiment*. It combines the two LGs. Similarly, "22%" and "83%" below are the %(Y) on Schema B of SG2 and the %(Y) on Schema C of SG2, respectively.

[26] This is the %(Y) on A1-1 for the informant whose codename appears in this row. The qualification "for the informant whose codename appears in this row" also applies to the following 11 footnotes.

[27] This is the %(Y) on A1-2.

[28] This is the %(Y) on B1-1.

[29] This is the %(Y) on B1-2.

[30] This is the %(Y) on C1-1.

[31] This is the %(Y) on C1-2.

[32] This is the %(Y) on A2-1.

[33] This is the %(Y) on A2-2.

[34] This is the %(Y) on B2-1.

[35] This is the %(Y) on B2-2.

[36] This is the %(Y) on C2-1.

[37] This is the %(Y) on C2-2.

08643aE	100,	100,	100,								100,	100,						
G1334109581rE	100, 100,	0, 0,	100, 100,							0, 0,	0, 0,	100, 100,						
J1334125186eE	0, 0,	0, 0,	100, 100,							0, 50,	0, 0,	100, 100,						
R1334166330nE	50, 50,	100, 100,	100, 50,							50, 100,	50, 0,	100, 50,						
L1334180602iE	100, 100,	0, 0,	0, 0,							100, 0,	0, 0,	0, 100,						
P1334818651E	100, 100,	0, 0,	100, 100,							0, 0,	0, 0,	100, 100,						
C1334186019iE	100, 100,	66, 100,	100, 66,							0, 33,	100, 33,	100, 66,						
…																		
	Schema Group 1		A＝0% B＞0%	A＞0% B＞0%	A＝0% B＝0%	0%＜A A＜25% B＝0%	A≧25% B＝0%	(where A≧50% B＝0%)	Schema Group 2		A＝0% B＞0%	A＞0% B＞0%	A＝0% B＝0%	0%＜A A＜25% B＝0%	A≧25% B＝0%	(where A≧50% B＝0%)
		Number of informants	5	61	13	0	98	(97)		Number of informants	34	28	69	1	42	(34)
		Percentage	2.8%	34.4%	7.3%	0%	55.3%			Percentage	19.5%	16%	39.6%	0.5%	24.1%	

6. Lexical-group-based (result)

When the choice of an LG makes a big difference, it is useful to consider the results of an Experiment, focusing on different LGs, as in our Lexical-group-based-result chart in (9) below. This is based on the same set of reported judgments as (7). The information in (9) is therefore already contained in (7), as in the case of (8).

(9)

1. EPSA [31] : BVA in English
Experiment #4 -- Results of Each Example Group

The values for the Examples of the Schema groups and/or Lexical groups that are "Excluded" are not shown.

participant list : pers-r2.lst

straight file : s20.lst | Yes-or-No (in sets) | Yes-or-No (one each) | --- | --- |

EPSA [31]-#4 < english > (Total 179 participants ; 3237 answers) ... as of May/15/2014				
Lexical Group 1	every boy			
	A	% of YES Answers	56 %[38]	ok (Under the interpretation "Every boy praised his own father") Every boy praised his father.
		Number of Answers	541	
	B	% of YES Answers	21 %	* (Under the interpretation "Every boy was praised by his own father") His father praised every boy.
		Number of Answers	538	
	C	% of YES Answers	85 %	ok (With His referring to a specific boy, Mike, for example) His father praised every boy.
		Number of Answers	539	
Lexical Group 2	no boy			
	A	% of YES Answers	51 %[39]	ok (Under the interpretation "No boy praised his own father") No boy praised his father.
		Number of Answers	546	
	B	% of YES Answers	22 %	* (Under the interpretation "No boy was praised by his own father") His father praised no boy.
		Number of Answers	543	
	C	% of YES Answers	78 %	ok (With His referring to a specific boy, Mike, for example) His father praised no boy.
		Number of Answers	530	

[38] This is the %(Y) on Schema A of LG1, in the *multiple-informant experiment*. It combines the two SGs. Similarly, "21%" and "85%" below are the %(Y) on Schema B of LG1 and the %(Y) on Schema C of LG1, respectively.

[39] This is the %(Y) on Schema A of LG2, in the *multiple-informant experiment*. It combines the two SGs. Similarly, "22%" and "78%" below are the %(Y) on Schema B of LG2 and the %(Y) on Schema C of LG2, respectively.

codename	Lexical Group 1									Lexical Group 2								
	A	B	C	A＝0% B＞0%	A＞0% B＞0%	A＝0% B＝0%	0%＜A A＜25% B＝0%	A≧25% B＝0%	(where A≧50% B＝0%)	A	B	C	A＝0% B＞0%	A＞0% B＞0%	A＝0% B＝0%	0%＜A A＜25% B＝0%	A≧25% B＝0%	(where A≧50% B＝0%)
I1334104779nE	100[40], 100[41],	0[42], 0[43],	100[44], 100[45],							100[46], 100[47],	0[48], 100[49],	100[50], 100[51],						
J1334108643aE	100, 0,	100, 100,	100, 100,							100, 0,	100, 100,	100, 100,						
G1334109581rE	100, 0,	0, 0,	100, 100,							100, 0,	0, 0,	100, 100,						
J1334125186eE	0, 0,	0, 0,	100, 100,							0, 50,	0, 0,	100, 100,						
R1334166330nE	50, 50,	100, 50	100, 100,							50, 100,	100, 0,	50, 50,						

[40] This is the %(Y) on A1-1 for the informant whose codename appears in this row. The qualification "for the informant whose codename appears in this row" also applies to the following 11 footnotes.

[41] This is the %(Y) on A2-1.

[42] This is the %(Y) on B1-1.

[43] This is the %(Y) on B2-1.

[44] This is the %(Y) on C1-1.

[45] This is the %(Y) on C2-1.

[46] This is the %(Y) on A1-2.

[47] This is the %(Y) on A2-2.

[48] This is the %(Y) on B1-2.

[49] This is the %(Y) on B2-2.

[50] This is the %(Y) on C1-2.

[51] This is the %(Y) on C2-2.

		,																
L1334180602iE	100, 100,	0, 0,	0, 0,							100, 0,	0, 0,	0, 100,						
P1334181865 1E	100, 0,	0, 0,	100, 100,							100, 0,	0, 0,	100, 100,						
C1334186019iE	100, 0,	66, 100,	100, 100,							100, 33,	100, 33,	66, 66,						
…																		
	Lexical Group 1		A＝0% B＞0%	A＞0% B＞0%	A＝0% B＝0%	0%＜A A＜25% B＝0%	A≧25% B＝0%	(where A≧50% B＝0%)	Lexical Group 2		A＝0% B＞0%	A＞0% B＞0%	A＝0% B＝0%	0%＜A A＜25% B＝0%	A≧25% B＝0%	(where A≧50% B＝0%)
		Number of informants	4	52	16	0	104	(96)		Number of informants	4	62	14	2	94	(87)
		Percentage	2.2%	29.5%	9%	0%	59%			Percentage	2.2%	35.2%	7.9%	1.1%	53.4%	

7. Informant List

(10)

EPSA [31] : BVA in English
Experiment #4

pers-r2-x82-x83.lst[52] [created: Jun/22/2014 (12:19)[53]] 75[54]人
English Natives; [31]-#1 (Every: A=25+; B=0); [31]-#1 (No: A=25+; B=0);

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[52] The informant classification here for EPSA [31]-4 is based on the result of EPSA [31]-1, focusing on the informants whose %(Y)'s on Schema A and Schema B are [25% or higher] and 0%, respectively, both with SG1 (BVA(every boy, his)) and with SG2(BVA(no boy, his)). As will be noted in footnote 54, the informants whose codenames are shaded in grey are excluded from consideration here because their reported judgments are not in accordance with what is indicated above. See Ch. 6: section 3.3.2. We are only considering native speaker of English; see Ch. 5: section 5.2.

[53] The date here is when this file was created. See footnote 9.

[54] The shaded "informants" in the list are those whose judgments are excluded in result charts that are based on this informant classification. There are 75 informants whose judgments are considered in the result charts that are based on this informant classification.

s/n	codename	familiarity
239	**I1334104779nE**	not familiar[55]
240	X1334106255oC	so-so
241	J1334108643aE	not familiar
242	G1334109581rE	so-so
243	J1334125186eE	not familiar
244	Y1334130439aC	so-so
245	J1334141810hK	not familiar
246	R1334166330nE	not familiar
247	**L1334180602iE**	not familiar
248	**P13341818651E**	so-so
252	C1334186019iE	not familiar
	…	
767	**Pi1391084617E**	not familiar
732	Ax1390455942K	not familiar
756	**La1390781458E**	so-so
811	Me1393119886K	so-so
782	Tr1391673096K	not familiar
729	Sg1390362538K	so-so

Serial numbers of informants are supplied in some informant-classification lists but not in some others, for a technical reason.

8. Raw Data

(11)

9536 answers

EPSA [31] : BVA in English
Experiment #4 [Straight List of Raw Data]

The answers are listed as they have been reported.
The blue boxes are for okExamples; the light pink boxes are for *Examples.
The value in the box under β represents the reported judgment; when it is not 0 for a *Example, the box is marked yellow.

codename	example	β	time	test type
I1334104779nE	1[56] 2[57] 2[58] (Under the interpretation "No boy praised his own father")	100[60]	2012.04.10	Yes-or-No (in sets)[62]

[55] The informants are classified into three groups in accordance with what they report during EPSA registration as to whether they understand (i) how "bound readings" and "bound variable anaphora" are used in linguistic discussion and (ii) what is meant by "A takes wide scope over B" in linguistic discussion. If they report they understand neither, they are classified as "not familiar." If they report they understand one but not the other, they are classified as "so-so." If they report they understand both, they are classified as "familiar."

[56] This stands for Schema type A. The number in this column represents the Schema type of the Example. "2" stands for Schema type B, and "3" for Schema type C.

[57] This stands for SG2.

				His father, no boy praised.[59]		(17:47)[61]	
I1334104779nE	2	2	2	(Under the interpretation "No boy was praised by his own father") His father praised no boy.	100	2012.04.10 (17:47)	Yes-or-No (in sets)
I1334104779nE	3	2	2	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.	100	2012.04.10 (17:47)	Yes-or-No (in sets)
I1334104779nE	1	3	1	(Under the interpretation "Every boy praised his own father") Every boy praised his father.	100	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	2	3	1	(Under the interpretation "Every boy praised himself") Every boy praised him.	0	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	3	3	1	(With *him* referring to a specific boy, Mike, for example) Every boy praised him.	100	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	1	1	1	(Under the interpretation "Every boy praised his own father") Every boy praised his father.	100	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	2	1	1	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.	0	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	3	1	1	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.	100	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	1	1	2	(Under the interpretation "No boy praised his own father") No boy praised his father.	100	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	2	1	2	(Under the interpretation "No boy was praised by his own father") His father praised no boy.	0	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	3	1	2	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.	100	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	1	3	2	(Under the interpretation "No boy praised his own father") No boy praised his father.	100	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	2	3	2	(Under the interpretation "No boy praised himself") No boy praised him.	0	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	3	3	2	(With *him* referring to a specific boy, Mike, for example) No boy praised him.	100	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	1	2	1	(Under the interpretation "Every boy praised his own father") His father, every boy praised.	100	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	2	2	1	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.	0	2012.04.10 (17:48)	Yes-or-No (in sets)
I1334104779nE	3	2	1	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.	100	2012.04.10 (17:48)	Yes-or-No (in sets)
X1334106255oC	2	3	2	(Under the interpretation "No boy praised himself") No boy praised him.	0	2012.04.10 (18:13)	Yes-or-No (in sets)
X1334106255oC	3	3	2	(With *him* referring to a specific boy, Mike, for example) No boy praised him.	100	2012.04.10 (18:13)	Yes-or-No (in sets)
X1334106255oC	2	1	1	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.	0	2012.04.10 (18:14)	Yes-or-No (in sets)
X1334106255oC	3	1	1	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.	100	2012.04.10 (18:14)	Yes-or-No (in sets)
X1334106255oC	1	2	2	(Under the interpretation "No boy praised his own father")	0	2012.04.10 (18:16)	Yes-or-No (in sets)

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[58] This stands for LG2.

[60] The Yes answer is recorded as 100. Since we are here addressing the reported informant judgment on each Example, the %(Y) on the Example is either 100 or 0.

[62] This indicates what test type was chosen; see Ch. 5: section 3.1.

[59] The ID of this Example is A2-2. See (6).

[61] This indicates when the judgment was recorded.

				His father, no boy praised.			
…							
J1334125186eE	3	1	1	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.	100	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	3	2	2	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.	100	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	2	1	1	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.	0	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	1	2	1	(Under the interpretation "Every boy praised his own father") His father, every boy praised.	0	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	3	3	1	(With *him* referring to a specific boy, Mike, for example) Every boy praised him.	100	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	2	3	1	(Under the interpretation "Every boy praised himself") Every boy praised him.	0	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	2	3	2	(Under the interpretation "No boy praised himself") No boy praised him.	0	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	1	1	1	(Under the interpretation "Every boy praised his own father") Every boy praised his father.	0	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	1	1	2	(Under the interpretation "No boy praised his own father") No boy praised his father.	0	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	3	2	1	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.	100	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	2	2	2	(Under the interpretation "No boy was praised by his own father") His father praised no boy.	0	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	3	1	2	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.	100	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	3	3	2	(With *him* referring to a specific boy, Mike, for example) No boy praised him.	100	2012.04.11 (00:09)	Yes-or-No (one each)
J1334125186eE	1	3	2	(Under the interpretation "No boy praised his own father") No boy praised his father.	25	2012.04.11 (00:11)	Five-ranking (in sets)
J1334125186eE	2	3	2	(Under the interpretation "No boy praised himself") No boy praised him.	25	2012.04.11 (00:11)	Five-ranking (in sets)
J1334125186eE	3	3	2	(With *him* referring to a specific boy, Mike, for example) No boy praised him.	100	2012.04.11 (00:11)	Five-ranking (in sets)
J1334125186eE	1	2	2	(Under the interpretation "No boy praised his own father") His father, no boy praised.	25	2012.04.11 (00:11)	Five-ranking (in sets)
J1334125186eE	2	2	2	(Under the interpretation "No boy was praised by his own father") His father praised no boy.	0	2012.04.11 (00:11)	Five-ranking (in sets)
J1334125186eE	3	2	2	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.	100	2012.04.11 (00:11)	Five-ranking (in sets)
J1334125186eE	1	3	1	(Under the interpretation "Every boy praised his own father") Every boy praised his father.	50	2012.04.11 (00:12)	Five-ranking (in sets)
J1334125186eE	2	3	1	(Under the interpretation "Every boy praised himself") Every boy praised him.	0	2012.04.11 (00:12)	Five-ranking (in sets)
J1334125186eE	1	1	1	(Under the interpretation "Every boy praised his own father") Every boy praised his father.	25	2012.04.11 (00:12)	Five-ranking (in sets)
J1334125186eE	2	1	1	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.	0	2012.04.11 (00:12)	Five-ranking (in sets)
J1334125186eE	3	1	1	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.	100	2012.04.11 (00:12)	Five-ranking (in sets)
J1334125186eE	1	2	1	(Under the interpretation "Every boy praised his own father") His father, every boy praised.	25	2012.04.11 (00:12)	Five-ranking (in sets)
J1334125186eE	2	2	1	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.	25	2012.04.11 (00:12)	Five-ranking (in sets)
J1334125186eE	3	2	1	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.	100	2012.04.11 (00:12)	Five-ranking (in sets)
J1334125186eE	1	1	2	(Under the interpretation "No boy praised his own father")	25	2012.04.11 (00:12)	Five-ranking (in sets)

				No boy praised his father.			
J1334125186eE	2	1	2	(Under the interpretation "No boy was praised by his own father") His father praised no boy.	25	2012.04.11 (00:12)	Five-ranking (in sets)
J1334125186eE	3	1	2	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.	100	2012.04.11 (00:12)	Five-ranking (in sets)
J1334125186eE	2	1	2	(Under the interpretation "No boy was praised by his own father") His father praised no boy.	25	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	1	3	2	(Under the interpretation "No boy praised his own father") No boy praised his father.	25	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	3	2	1	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.	100	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	2	1	1	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.	25	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	3	3	1	(With *him* referring to a specific boy, Mike, for example) Every boy praised him.	100	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	1	1	2	(Under the interpretation "No boy praised his own father") No boy praised his father.	25	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	2	3	1	(Under the interpretation "Every boy praised himself") Every boy praised him.	25	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	1	2	1	(Under the interpretation "Every boy praised his own father") His father, every boy praised.	0	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	3	1	2	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.	100	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	1	1	1	(Under the interpretation "Every boy praised his own father") Every boy praised his father.	50	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	3	2	2	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.	100	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	1	2	2	(Under the interpretation "No boy praised his own father") His father, no boy praised.	25	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	3	1	1	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.	100	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	2	3	2	(Under the interpretation "No boy praised himself") No boy praised him.	0	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	1	3	1	(Under the interpretation "Every boy praised his own father") Every boy praised his father.	50	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	3	3	2	(With *him* referring to a specific boy, Mike, for example) No boy praised him.	100	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	2	2	2	(Under the interpretation "No boy was praised by his own father") His father praised no boy.	25	2012.04.11 (00:12)	Five-ranking (one each)
J1334125186eE	2	2	1	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.	0	2012.04.11 (00:12)	Five-ranking (one each)
Y1334130439aC	1	2	2	(Under the interpretation "No boy praised his own father") His father, no boy praised.	0	2012.04.11 (01:11)	Yes-or-No (in sets)
Y1334130439aC	2	2	2	(Under the interpretation "No boy was praised by his own father") His father praised no boy.	0	2012.04.11 (01:11)	Yes-or-No (in sets)
Y1334130439aC	3	2	2	(With *His* referring to a specific boy, Mike, for example) His father praised no boy.	0	2012.04.11 (01:11)	Yes-or-No (in sets)
Y1334130439aC	1	3	2	(Under the interpretation "No boy praised his own father") No boy praised his father.	100	2012.04.11 (01:12)	Yes-or-No (in sets)
Y1334130439aC	2	3	2	(Under the interpretation "No boy praised himself") No boy praised him.	0	2012.04.11 (01:12)	Yes-or-No (in sets)
Y1334130439aC	3	3	2	(With *him* referring to a specific boy, Mike, for example) No boy praised him.	100	2012.04.11 (01:12)	Yes-or-No (in sets)
Y1334130439aC	1	1	2	(Under the interpretation "No boy praised his own father") No boy praised his father.	100	2012.04.11 (01:13)	Yes-or-No (in sets)
Y1334130439aC	2	1	2	(Under the interpretation "No boy was praised by his own father") His father praised no boy.	0	2012.04.11 (01:13)	Yes-or-No (in sets)
Y1334130439aC	3	1	2	(With *His* referring to a specific boy, Mike, for example)	0	2012.04.11 (01:13)	Yes-or-No (in sets)

				His father praised no boy.			
Y1334130439aC	1	1	1	(Under the interpretation "Every boy praised his own father") Every boy praised his father.	100	2012.04.11 (01:13)	Yes-or-No (in sets)
Y1334130439aC	2	1	1	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.	0	2012.04.11 (01:13)	Yes-or-No (in sets)
Y1334130439aC	3	1	1	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.	100	2012.04.11 (01:13)	Yes-or-No (in sets)
Y1334130439aC	1	3	1	(Under the interpretation "Every boy praised his own father") Every boy praised his father.	100	2012.04.11 (01:14)	Yes-or-No (in sets)
Y1334130439aC	2	3	1	(Under the interpretation "Every boy praised himself") Every boy praised him.	0	2012.04.11 (01:14)	Yes-or-No (in sets)
Y1334130439aC	3	3	1	(With *him* referring to a specific boy, Mike, for example) Every boy praised him.	100	2012.04.11 (01:14)	Yes-or-No (in sets)
Y1334130439aC	1	2	1	(Under the interpretation "Every boy praised his own father") His father, every boy praised.	0	2012.04.11 (01:14)	Yes-or-No (in sets)
Y1334130439aC	2	2	1	(Under the interpretation "Every boy was praised by his own father") His father praised every boy.	100	2012.04.11 (01:14)	Yes-or-No (in sets)
Y1334130439aC	3	2	1	(With *His* referring to a specific boy, Mike, for example) His father praised every boy.	100	2012.04.11 (01:14)	Yes-or-No (in sets)
…							