

APPENDIX A

EXPERIMENT 1 RAW READING TIMES

Table A.1 Raw Reading Times for Each Region in Experiment 1 (msec./word)
(Residual Reading Times in Parentheses)

Analysis Region	(a) <i>a-every</i> singular	(b) <i>a-every</i> plural	(c) <i>every-a</i> singular	(d) <i>every-a</i> plural
1. Kelly showed	534 (-31)	540 (-27)	498 (-74)	477 (-82)
2. a/every photo	539 (10)	508 (-25)	558 (-12)	552 (-6)
3. to a/every critic	525 (-18)	499 (-47)	476 (-53)	490 (-30)
4. last month.	561 (6)	557 (-1)	545 (-13)	542 (-9)
5. The critic(s) was/were	463 (-65)	527 (-18)	469 (-71)	456 (-82)
6. from a major	464 (-69)	483 (-56)	455 (-77)	452 (-68)
7. gallery.	708 (100)	705 (87)	640 (68)	625 (55)

The effects in the analyses of raw reading times for the critical region, region 5, were as follows: Q-order, $F_1(1,22) = 8.02$, $p = .01$; $F_2(1,19) = 2.57$, $p > .10$; Number, $F_1(1,22) = 8.43$, $p < .01$; $F_2(1,19) = 3.93$, $p < .07$; Q*N interaction, $F_1(1,22) = 9.15$, $p < .01$; $F_2(1,19) = 17.77$, $p < .001$; means comparison of (a) vs. (b), $F_1(1,22) = 16.72$, $p < .001$; $F_2(1,19) = 14.58$, $p = .001$; means comparison of (c) vs. (d), $F_s < 1$.

The significant effects for other regions were: Region 1: Q-order, $F_1(1,22) = 5.91$, $p < .05$; $F_2(1,19) = 6.45$, $p < .05$. Region 3: Q-order, $F_1(1,22) = 4.82$, $p < .05$; $F_2(1,19) = 3.48$, $p < .08$. Region 6: Q-order $F_1(1,22) = 8.63$, $p < .01$; F_2 unequal N.

APPENDIX B

EXPERIMENT 3 ADDITIONAL ANOVAS

Table B.1 Percentage of Cases Where *each, every* > *a* Scope was Preferred for All Items in Experiment 3

– Predicate			+ Predicate				Mean	
			Resultative	Depictive	Combined			
<i>each</i>	(a)	21.4	(c)	9.5	(e)	10.0	9.7	13.6
<i>every</i>	(b)	17.3	(d)	9.1	(f)	9.5	9.3	12.0
Mean		19.4		9.3		9.7	9.5	12.8

A 2x3 ANOVA with quantifier (*each* or *every*) and predicate type (none, resultative, depictive) as factors was performed on all the data. There was a significant effect of predicate, with the sentences containing no secondary predicate getting more wide scope on the universal than the sentences with either type of secondary predicate, $F_1(2,152) = 11.54, p < .001$; $F_2(2,34) = 11.72, p < .001$. But there was no effect of quantifier and no interaction, $F_s < 1.3$.

In order to assess whether the type of secondary predicate played a role, a 2x2 ANOVA of quantifier and predicate type (resultative, depictive) was performed. There were no reliable effects, all $F_s < 1$. Hence, the resultative and depictive conditions were collapsed for further analysis.

Table B.2 Percentage of Cases Where *each, every* > *a* Scope was Preferred for the First Nine Items a Participant Saw in Experiment 3

– Predicate			+ Predicate				Mean	
			Resultative	Depictive	Combined			
<i>each</i>	(a)	24.2	(c)	6.9	(e)	10.1	8.7	13.7
<i>every</i>	(b)	11.0	(d)	9.3	(f)	7.8	8.7	9.4
Mean		17.6		8.1		9.0	8.7	11.6

For the first nine items that a participants saw, a 2x3 ANOVA of quantifier and predicate type yielded a significant effect of predicate, $F_2(2,34) = 5.07, p = .012$; a marginal effect of quantifier, $F_2(1,17) = 3.59, p = .075$; and a marginal interaction, $F_2(2,34) = 2.48, p < .10$. A 2x2 ANOVA of quantifier and predicate type (resultative, depictive) was also conducted on the first-half items. As in the analysis on all items, no effects were significant, $F_s < 1$.

APPENDIX C

EXPERIMENTAL MATERIALS

Experiment 1

Item one gives the full four-condition paradigm. Subsequent items are listed only in their singular forms.

1. Kelly showed a photo to every critic last month. The photo was of a run-down building.
Kelly showed every photo to a critic last month. The photos were of a run-down building.
Kelly showed every photo to a critic last month. The critic was from a major art gallery.
Kelly showed every photo to a critic last month. The critics were from a major art gallery.
2. Jacob told a story to every reporter this week. The story was about the mayor.
Jacob told every story to a reporter this week. The reporter was eager for news.
3. Linda gave a doll to every girl over the weekend. The doll was dressed entirely in satin.
Linda gave every doll to a girl over the weekend. The girl was very excited and happy.
4. The guide lent a map to every busdriver before the trip. The map was of the surrounding area.
The guide lent every map to a busdriver before the trip. The driver was unfamiliar with the area.
5. Trisha offered an interesting prize to every young poet last night. The prize was worth twenty dollars.
Trisha offered every interesting prize to a young poet last night. The poet was not very well-known.
6. Matthew sent a purchase order to every assistant manager last week. The order was for new computers and equipment.
Matthew sent every purchase order to an assistant manager last week. The manager was in charge of buying equipment.
7. The nurse loaned a new magazine to every elderly patient on Thursday. The magazine was about Hollywood.
The nurse loaned every new magazine to an elderly patient on Thursday. The patient was extremely grateful.
8. The day care worker read a picture book to every sick child this morning. The book was about jungle animals.
The day care worker read every picture book to a sick child this morning. The child was allowed to stay in bed.
9. The stage manager issued a small prop to every minor actor before the show. The prop was for the final scene.
The stage manager issued every small prop to a minor actor before the show. The actor was in the final scene.
10. The professor assigned a long article to every graduate student last semester. The article was about the greenhouse effect.
The professor assigned every long article to a graduate student last semester. The student was supposed to write a report.
11. Helen demonstrated a task to every intern yesterday morning. The task was very time-consuming.
Helen demonstrated every task to an intern yesterday morning. The intern was young and energetic.
12. The accountant explained a statute to every client on Monday. The statute was related to taxes.
The accountant explained every statute to a client on Monday. The client was quite wealthy.
13. The prisoner reported a problem to every watchman during the night. The problem seems quite difficult to solve.
The prisoner reported every problem to a watchman during the night. The watchman seems unwilling to help out.
14. Kenny delivered a message to every secretary before five o'clock. The message seems rather cryptic.
Kenny delivered every message to a secretary before five o'clock. The secretary seems overworked.
15. Francine announced a job opening to every skilled dancer after class. The opening seems to be quite promising.
Francine announced every job opening to a skilled dancer after class. The dancer seems to be looking for work.
16. Carol sang an amusing song to every little boy this afternoon. The song seems to have an upbeat melody.
Carol sang every amusing song to a little boy this afternoon. The boy seems to like all kinds of music.
17. David submitted a complex proposal to every federal agency last month. The proposal seems somewhat interesting.
David submitted every complex proposal to a federal agency last month. The agency seems to fund a lot of projects.

18. The artist described an original painting to every serious collector last evening. The painting seems to be highly valued.
The artist described every original painting to a serious collector last evening. The collector seems to be very rich.
19. The drunk recited a mailing address to every police officer last night. The address seems incomplete.
The drunk recited every mailing address to a police officer last night. The officer seems unimpressed.
20. The doctor recommended a therapy group to every rape victim this month. The group seems to be helpful.
The doctor recommended every therapy group to a rape victim this month. The victim seems to need to talk.

Pilot Experiment 1

The parenthesized material occurred only in the +secondary predicate conditions.

1. A busboy squeezed each/every napkin (dry).
1a. Each napkin was squeezed by a possibly different busboy (until it was dry).
1b. The napkins were all squeezed (until they were dry) by the same busboy, possibly all at the same time.
2. A reporter saw each/every boy (naked).
2a. The boys (were all naked and) were all seen by the same reporter. They may have all been seen at the same time.
2b. Each boy was seen by a possibly different reporter (while he (the boy) was naked).
3. A painter bought each/every brush (dirty).
3a. Each brush was bought by a possibly different painter. (Plus each one was dirty when it was bought.)
3b. The brushes were all bought by the same painter (and they were all dirty when bought).
4. A counselor remembered each/every camper (happy).
4a. The campers were all remembered by the same counselor. (In the memory, the campers were all happy.)
4b. Each of the campers was remembered by a possibly different counselor. (In each memory, the camper was happy.)
5. A child painted each/every tree (blue).
5a. Each tree was painted (the color blue) by a possibly different child.
5b. The trees were all painted (the color blue) by the same child.
6. A teenager tasted each/every cake (warm).
6a. The cakes were all tasted by the same teenager (while they were warm).
6b. Each cake was tasted by a possibly different teenager (while it was warm).
7. A friend prepared each/every vegetable (raw).
7a. The vegetables were all prepared by the same friend (and were all raw when they were prepared).
7b. Each vegetable was prepared by a possibly different friend (and was raw when it was prepared).
8. A girl made each/every sweater (small).
8a. Each sweater was made by a possibly different girl. (In each case, the girl either made the sweater in a small size or did something to it to cause it to become small.)
8b. The sweaters were all made by the same girl. (She either made them in a small size or did something to them to cause it to become small.)

Experiment 3

The first secondary predicate listed is a resultative predicate. The second is a depictive predicate.

1. A maid polished each/every mirror {Ø/spotless/steamed-up}.
1a. Each mirror was polished by a possibly different maid {Ø/until it was spotless/when it was steamed-up}.
1b. All the mirrors were polished by the same maid {Ø/until they were spotless/when they were steamed-up}.
2. A helper dyed each/every shirt {Ø/blue/damp}.
2a. Each shirt was dyed by a possibly different helper {Ø/until it was the color blue/while it was damp}.
2b. All the shirts were dyed by the same helper {Ø/until they were the color blue/while they were damp}.
3. A janitor dusted each/every bookcase {Ø/spotless/empty}.
3a. Each bookcase was dusted by a possibly different janitor {Ø/until it was spotless/while it was empty}.
3b. All the bookcases were dusted by the same janitor {Ø/until they were spotless/while they were empty}.

4. A gardener pruned each/every bush {Ø/short/frozen}.
 - 4a. Each bush was pruned by a possibly different gardener {ø/until it was short/while it was frozen}.
 - 4b. All the bushes were pruned by the same gardener {ø/until they were short/while they were frozen}.
5. An aide tied each/every package {Ø/closed/half-empty}.
 - 5a. Each package was tied by a possibly different aide {ø/so that it was closed/when it was half-empty}.
 - 5b. All the packages were tied by the same aide {ø/so that they were closed/when they were half-empty}.
6. A servant ironed each/every sheet {Ø/smooth/wet}.
 - 6a. Each sheet was ironed by a possibly different servant {ø/until it was smooth/while it was wet}.
 - 6b. All the sheets were ironed by the same servant {ø/until they were smooth/while they were wet}.
7. A teenager painted each/every chair {Ø/yellow/unsanded}.
 - 7a. All the chairs were painted by the same teenager {ø/so that they were yellow/when they were unsanded}.
 - 7b. Each chair was painted by a possibly different teenager {ø/so that it was yellow/when it was unsanded}.
8. A man cut each/every board {Ø/short/filthy}.
 - 8a. All the boards were cut by the same man {ø/so that they were short/when they were filthy}.
 - 8b. Each board was cut by a possibly different man {ø/so that it was short/when it was filthy}.
9. A child froze each/every banana {Ø/solid/ripe}.
 - 9a. All the bananas were frozen by the same child {ø/until they were solid/when they were ripe}.
 - 9b. Each banana was frozen by a possibly different child {ø/until it was solid/when it was ripe}.
10. A boy sliced each/every carrot {Ø/thin/raw}.
 - 10a. All the carrots were sliced by the same boy {ø/into thin pieces/when they were raw}.
 - 10b. Each carrot was sliced by a possibly different boy {ø/into thin pieces/when it was raw}.
11. A woman stained each/every table {Ø/brown/dusty}.
 - 11a. All the tables were stained by the same woman {ø/until they were brown/while they were dusty}.
 - 11b. Each table was stained by a possibly different woman {ø/until it was brown/while it was dusty}.
12. A clerk crushed each/every box {Ø/flat/damp}.
 - 12a. All the boxes were crushed by the same clerk {ø/so that they were flat/while they were damp}.
 - 12b. Each box was crushed by a possibly different clerk {ø/so that it was flat/while it was damp}.
13. A boy scout filed each/every knife {Ø/sharp/dirty}.
 - 13a. All the knives were filed by the same boy scout {ø/until they were sharp/when they were dirty}.
 - 13b. Each knife was filed by a possibly different boy scout {ø/until it was sharp/when it was dirty}.
14. A cook mixed each/every batter {Ø/smooth/cold}.
 - 14a. All the batters were mixed by the same cook {ø/until they were smooth/while they were cold}.
 - 14b. Each batter was mixed by a possibly different cook {ø/until it was smooth/while it was cold}.
15. A girl squeezed each/every washcloth {Ø/dry/hot}.
 - 15a. All the washcloths were squeezed by the same girl {ø/until they were dry/while they were hot}.
 - 15b. Each washcloth was squeezed by a possibly different girl {ø/until it was dry/while it was hot}.
16. A volunteer folded each/every poster {Ø/flat/wet}.
 - 16a. Each poster was folded by a possibly different volunteer so it was flat/when it was wet}.
 - 16b. All the posters were folded by the same volunteer so they were flat/when they were wet}.
17. A girl toasted each/every muffin {Ø/crispy/unsliced}.
 - 17a. Each muffin was toasted by a possibly different girl {ø/until it was crispy/when it was unsliced}.
 - 17b. All the muffins were toasted by the same girl {ø/until they were crispy/when they were unsliced}.
18. A worker trimmed each/every wire {Ø/short/cold}.
 - 18a. Each wire was trimmed by a possibly different worker {ø/so that it was short/when it was cold}.
 - 18b. All the wires were trimmed by the same worker {ø/so that they were short/when they were cold}.