Counterfactual and Semifactual Conditionals Prime Alternative Possibilities.

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Counterfactual and Semifactual Conditionals Prime Alternative Possibilities

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The authors examined in 3 experiments the comprehension of counterfactuals, such as "If it had rained, the plants would have bloomed," and semifactuals, such as "Even if it had rained, the plants would have bloomed," compared with indicative conditionals, "If it rained, the plants bloomed." The first experiment showed that people read the negative conjunction, "not p and not q" faster when it was primed by a counterfactual than when it was primed by an indicative conditional. They read the affirmative conjunction, "p and q" equally quickly when it was primed by either conditional. The 2nd experiment showed that people read the negated-antecedent conjunction, "not p and q" faster when it was primed by a semifactual conditional. The 3rd experiment corroborated these results in a direct comparison of counterfactuals and semifactuals. The authors discuss the implications of the results for the mental representations of different conditionals.

Keywords: reasoning, conditionals, counterfactuals, semifactuals, mental models

The nature of the mental representations that people construct when they understand an indicative conditional, such as "If it rained, the plants bloomed," has been the subject of some debate. One view is that people construct a syntactic representation by recovering the underlying logical form, for example, "If p, then q" (Braine & O'Brien, 1998; Rips, 1994). Another view is that people construct a content-sensitive representation by recovering a relevant domain, for example, "If the action is to be taken, then the precondition must be met" or "If a benefit is to be taken, then a cost must be paid" (Holyoak & Cheng, 1995; Fiddick, Cosmides, & Tooby, 2000). A third view is that people construct mental models keeping in mind different possibilities (Johnson-Laird & Byrne, 2002).

In the mental model view, two key principles govern the mental representations that people construct. The first principle is that people keep in mind only *true* possibilities, for example, "It rained, and the plants bloomed." They do not keep in mind false possibilities, for example, "It rained, and the plants did not bloom" (Johnson-Laird & Byrne, 2002). The second principle is that people keep in mind *few* possibilities (Johnson-Laird & Byrne, 1991). The conditional is consistent with several true possibilities, for example that it rained and the plants bloomed, and that it did not rain and the plants did not bloom. These two true possibilities correspond to a biconditional interpretation. On the conditional interpretation, a third true possibility is that it

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did not rain and the plants bloomed. People are able to distinguish many different interpretations of conditionals (Byrne, Espino, & Santamaría, 1999; Johnson-Laird & Byrne, 2002), but they do not keep in mind *all* the true possibilities initially. They try to represent as few as they can, because of the constraints of the working memory (Johnson-Laird, Byrne, & Schaeken, 1992). They may think about just one of the true possibilities (i.e., "It rained, and the plants bloomed"), which corresponds to the referents in the conditional. Their interpretation is not entirely conjunctive; they may be aware that there are alternative possibilities, but they initially do not think about them.

Information about the possibilities that people keep in mind has come mainly from studies of the inferences they make from conditionals and the situations by which they judge whether the conditionals are true or false (e.g., Evans, Newstead, & Byrne, 1993). In this article, we make use of a new, more direct technique: We measured the length of time it takes people to read a conjunctive description, such as "It did not rain, and the plants did not bloom," after it has been primed by different sorts of conditionals (Santamaría & Espino, 2002; see also Galinsky & Moskovitz, 2000; Roese & Olson, 1997). In three experiments, we compared conditionals in the indicative mood, 1 such as "If it rained, the plants bloomed," to conditionals in the subjunctive mood, such as the counterfactual "If it had rained, the plants would have bloomed," and the semifactual "Even if it had rained, the plants would have bloomed." Counterfactual and semifactual conditionals have led to important developments in philosophical theories of semantics of the last century (e.g., Chisholm, 1946; Lewis, 1973; Stalnaker, 1968). People can readily imagine alternatives to reality (Byrne, 2005), and these counterfactual and semifactual thoughts are important in everyday thinking generally (for reviews see Byrne, 2002; Kahneman & Miller, 1986; Roese & Olson, 1995).

¹ The grammatical term "linguistic mood" refers to the form of the verb and whether it expresses a fact (indicative), command (imperative), or wish (subjunctive). It is also sometimes referred to as "linguistic mode."

Our aim was to test the idea that people envisage different possibilities when they understand the different sorts of conditionals.

Our predictions were based on the idea that people understand an indicative conditional, "If p, then q," by envisaging initially just a single possibility corresponding to p and q (Johnson-Laird & Byrne, 1991, 2002). They understand counterfactuals by keeping in mind two possibilities corresponding to "p and q" and "not p and not q" (Byrne & Tasso, 1999). We predicted that indicative and counterfactual conditionals will both prime "p and q" but only counterfactuals will prime "not p and not q." People understand semifactuals by keeping in mind two possibilities corresponding to "p and q" and "not p and q" (Moreno-Rios, Garcia-Madruga, & Byrne, unpublished manuscript). We predicted that indicative and semifactual conditionals will both prime "p and q" but only semifactuals will prime "not p and q." The length of time to read assertions can provide valuable information about the possibilities that people keep in mind (Wason, 1959).

No other theory of conditionals makes these predictions. Neither the formal rule theory nor the content-sensitive rule theory proposes that people keep in mind any of the four conjunctive possibilities when they understand the conditional. More important, neither existing sort of theory proposes systematic differences between the priming effects of indicative conditionals compared with counterfactual and semifactual conditionals. Counterfactuals could be incorporated by formal rule theories if the statement "If p had been the case, then q would have been the case" is decomposed into two assertions," If p, then q," and "not p and not q" (Braine & O'Brien, 1998; Rips, 1994). Such a formal rule theory predicts not only that people will read "not p and not q" more quickly after a counterfactual than after an indicative conditional, but also that the counterfactual will prime people to read "If p, then q," more quickly than "p and q." Our first experiment pits the predictions of the mental model theory against those of these alternative theories.

Experiment 1: A Comparison of Factual and Counterfactual Primes

The aim of the experiment was to examine a counterfactual conditional such as "If there had been roses, then there would have been lilies" as a prime for understanding conjunctions such as "There were roses, and there were lilies." The model theory proposes that people understand a counterfactual by keeping in mind two possibilities from the outset: "There were roses, and there were lilies," and "There were no roses, and there were no lilies." It predicts that the counterfactual will prime reading these two conjunctions. We compared the counterfactual conditional as a prime to a factual conditional, such as "If there are roses, then there are lilies." The model theory proposes that people understand a factual conditional such as "If there are roses, then there are lilies" by keeping in mind explicitly just one possibility from the outset: "There are roses, and there are lilies." It predicts that the factual conditional will prime just this conjunction. We predict that people will read the negative conjunction, "There were no roses, and there were no lilies" more quickly after the counterfactual than after the factual conditional. Overall, the prediction is that people will read the conjunction, "There were no roses, and there were no lilies" more quickly after a counterfactual than after a factual conditional and that they will read the other three sorts of conjunction, "There were roses, and there were lilies," "There were no roses, and there were lilies," and "There were no roses, and there were no lilies," equally quickly after both conditionals.

Method

Design and materials. We constructed paragraphs that contained seven sentences (or sentence fragments) presented one by one. The scenarios contained two scene-setting sentences, for example, "Miguel was going to a flower shop with his sister. She told him that in this shop, . . ." which was followed by the conditional, for example, ". . . if there are roses, then there are lilies." (The complete materials can be found in the Appendix.) The scenarios contained another scene-setting sentence, "When they arrived at the shop, the salesman said to them. . . ," followed by the key conjunction "...there were roses, and there were lilies." The scenarios ended with a filler scene-setting sentence "Miguel and his sister went to the cinema" followed by a simple filler question, such as "Did Miguel and his sister go to a flower shop?" The participants were not required to make propositional inferences in the experiment, and the simple questions were designed to ensure that they read the stories for comprehension. Half of the filler questions required an affirmative response, and the other half required a negative response. The questions targeted information presented at the start, middle, and end of the stories to ensure that participants read each story. The stories were presented to the participants in their native Spanish.

The first independent variable was the sort of conjunction: "p and q," "not p and not q," "p and not q," and "not p and q." The second independent variable was the sort of conditional: counterfactual conditionals (in the subjunctive mood and past tense) and factual conditionals (in the indicative mood and present tense). The target measures were the reading times for the conjunctions. The design was fully within participants, and the eight experimental conditions (2 conditionals \times 4 conjunctions) were given to participants for six different contents, making a total of 48 trials. Each individual participant was given the 48 trials with a different content assigned at random, that is, 48 distinct contents. There were also 32 filler paragraphs in which no propositional connectives appeared (which used 32 different contents). We gave each participant the 80 trials in a different random order.

Participants and procedure. The participants were 32 students at the University of La Laguna, who received course credit for their participation. They were tested individually in a quiet room, and the experiment was controlled online by an IBM-compatible computer, running APT PC software (Poltrock & Foltz, 1988). They were encouraged to read the scenarios carefully at their own pace and to answer the questions as quickly and accurately as possible. The seven sentences in a scenario for each trial were presented one sentence at a time. After reading each sentence, the participants had to press the space bar to erase the screen and display the next sentence. After reading the question, the participants responded "yes" by pressing the right-hand key or "no" by pressing the left-hand key. The computer recorded participants' reading times for the conjunctions and the conditionals. Participants were given six practice scenarios before the experimental set to familiarize them with the procedure. Four of the scenarios matched the structure of the experimental trials, and two were similar to the fillers.

Results and Discussion

Before any data analysis, we identified an outlier as any latency that was less than the mean latency divided by 2 or greater than the mean latency plus 2.5 standard deviations. These outliers were replaced by the mean latency divided by 2, or the mean latency plus 2.5 standard deviations, respectively. Total number of replaced outliers represented 5% of the data set. Only participants who had more than 90% correct responses to the simple questions

were included in the analysis and only the reading times corresponding to their correct responses were analyzed. We carried out a 2 (conditional: factual vs. counterfactual) \times 4 (conjunction: "p and q," "p and not q," "not p and q," or "not p and not q") analysis of variance (ANOVA) with repeated measures on both factors. The ANOVA showed no main effect of conditional, F(1, 31) = 0.93, MSE = 74062; p = .34, but a main effect of conjunction, F(3, 93) = 38.15, MSE = 95367; p < .001. The interaction was marginally reliable, F(3, 93) = 2.33, MSE = 73130; p = .079. We expected only a partial interaction due to a difference for the negative but not for the affirmative sentence. The analysis had large power (99%) to detect an interaction of the same magnitude as that found in our later Experiment 3. To test our predictions, we carried out a series of planned comparisons on it.

Participants read the conjunction "not p and not q" 114 ms faster when it was primed by a counterfactual conditional compared with a factual conditional, t(31) = 2.34, SEM = 48.66; p < .03), as Table 1 shows. They took the same length of time to read the "p and q" conjunction whether it was primed by a counterfactual or a factual (only a 56-ms difference, t(31) = 1.26, SEM = 44.62; p = .21), and the analysis had large power (81%) to detect an effect of the same magnitude as that found for "not p and not q." There was no difference between the effect of the factual and counterfactual conditionals on the time people took to read "not p and q," a 62-ms difference, t(31) = 0.67, SEM = 92.92; p = .50, or "p and not q," a 127-ms, t(31) = 1.74, SEM = 73.14; p = .09, as Table 1 shows.

The experiment shows that a counterfactual conditional, "If p had been the case, then q would have been the case," primes people to read "p and q" and also "not p and not q." People read the affirmative conjunction "p and q" just as quickly after they have read the counterfactual as they do after they have read the indicative conditional "If p, then q"; but they read the negative conjunction "not p and not q" more quickly after they have read the counterfactual than after they have read the indicative. The results provide strong and direct support for the idea that people keep in mind two possibilities to understand the counterfactual, "p and q," and "not p and not p"; and they keep in mind just a single possibility, "p and q," at the outset to understand the indicative

conditional. Our aim in the next experiment is to examine the comprehension of semifactuals such as "Even if there had been roses, there would have been lilies."

Experiment 2: A Comparison of Factual and Semifactual Conditional Primes

The aim of the experiment was to examine a semifactual conditional such as "Even if there had been roses, there would have been lilies" as a prime for understanding conjunctions such as "There were roses, and there were lilies." The model theory proposes that people understand a semifactual by envisaging two possibilities from the outset but a different two possibilities from those for a counterfactual. For the semifactual, people keep in mind "There were roses and there were lilies," and "There were no roses and there were lilies" (Moreno-Rios et al., unpublished manuscript; McCloy & Byrne, 2002). It predicts that the semifactual will prime these two conjunctions. We compared the semifactual conditional as a prime to a factual conditional, such as "If there are roses, then there are lilies." Semifactual conditionals could be incorporated by formal rule theories by decomposing the statement "Even if p had been the case, then q would have been the case" into two assertions, "If p, then q," and "not p and q" (Braine & O'Brien, 1998; Rips, 1994). Such a formal rule theory predicts not only that people will read "not p and q" more quickly after a semifactual than after an indicative conditional but also that the semifactual primes people to read "not p and not q" more quickly than "p and q." Our second experiment pits the predictions of the mental model theory against this alternative theory.

Once again overall, the predictions of the model theory are that people will read the negated-antecedent conjunction "There were no roses, and there were lilies" more quickly from the semifactual than from the indicative conditional, and there will be no differences for the other three conjunctions: "There were roses, and there were lilies," "There were roses, and there were no lilies," and "There were no roses, and there were no lilies."

Table 1
Reading Times (and Standard Deviations) for the Four Conjunctions After the Different Sorts of Conditionals in Experiments 1–3

Target sentence	p & q	Not p & not q	Not <i>p</i> & <i>q</i>	p & not q
Experiment 1				
Factual prime	1646 (272)	1838 (314)	2182 (478)	1928 (458)
Counterfactual prime	1702 (335)	1724 (308)	2244 (490)	2055 (421)
Difference	-56	114*	-62	-127
Experiment 2				
Factual prime	1594 (279)	1697 (318)	1926 (332)	1785 (347)
Semifactual prime	1626 (260)	1645 (269)	1822 (242)	1797 (275)
Difference	-32	52	104*	- 12
Experiment 3				
Counterfactual prime	1761 (375)	2018 (469)	2277 (578)	2009 (491)
Semifactual prime	1733 (401)	1972 (475)	2123 (503)	1982 (455)
Difference	28	46	154*	27

Note. Reading times are given in milliseconds. The reading time for each conjunction is the time that elapsed from the appearance of the conjunction and the participant's keypress to continue reading the paragraph.

^{*} An asterisk indicates that the difference is reliable at the .05 level.

Method

The design, materials, and procedure were all similar to those used in the previous experiment. The only difference was that in this experiment, we compared factual conditionals to semifactual conditionals such as "Even if there had been roses, then there would have been lilies." The participants were a different set of 32 students at the University of La Laguna, who received course credit for their participation.

Results and Discussion

We treated outliers in the same way as in the previous experiment and the total outliers replaced was 4.9%. We carried out a 2 (conditional: factual vs. semifactual) \times 4 (conjunction: "p and q," "p and not q," "not p and q," or "not p and not q") ANOVA with repeated measures on both factors. The ANOVA showed no main effect of conditional, F(1, 31) = 1.25, MSE = 40098; p = .27, but a main effect of conjunction, F(3, 93) = 18, 48, MSE = 48771, p < .001. The interaction was not reliable, F(3, 93) = 1.53, MSE = 40642, p = .21, and the analysis had large power (99%) to detect an effect of the same magnitude as that found for the interaction in Experiment 3. To test our predictions, we carried out planned comparisons on it (see Winer, 1971 for a defense of the legitimacy of planned comparisons on a nonreliable interaction).

Participants read the conjunction "not p and q" 104 ms faster after a semifactual than after a factual conditional, t(31) = 2.15, SEM = 48.38; p < .05, as Table 1 shows. They took the same length of time to read the "p and q" conjunction after a semifactual and a factual, only a 32-ms difference, t(31) = 0.67, SEDM = 48.11; p = .50, and the analysis had large power (84%) to detect an effect of the same magnitude as that found for "not p and q." There was no difference between the effect of the semifactual and factual conditionals on the time people took to read "not p and not q," only a 52-ms difference, t(31) = 1.11, SEM = 46.44; p = .27, or "p and not q," a 120-ms difference, t(31) = 0.20, SEM = 57.55; p = .84.

The experiment shows that participants read the affirmative conjunction "p and q" as quickly after they have read a semifactual as a factual conditional, but they read the "not p and q" conjunction more quickly after they have read a semifactual than a factual conditional. The results corroborate the suggestion that participants keep in mind two possibilities ("p and q" and "not p and q") to understand the semifactual conditional, and they keep in mind a single possibility ("p and q") to understand the factual conditional.

Experiment 3: Counterfactual and Semifactual Conditional Primes

The aim of the experiment was to provide a direct comparison of counterfactual and semifactual conditionals to each other as primes. The model theory predicts that participants will read the "p and q" conjunction readily when it appears after either sort of conditional, they will read the "not p and not q" conjunction more quickly when it appears after the counterfactual than the semifactual conditional, and they will read the "not p and q" conjunction more quickly when it appears after the semifactual than the counterfactual. It predicts that participants will read the "p and not q" conjunction readily when it appears after either sort of conditional.

Method

The design, materials, and procedure were all similar to those used in the previous experiment. The only difference was that in this experiment, we compared counterfactual conditionals to semifactual conditionals. The participants were a new set of 32 students at the University of La Laguna, who received course credit for their participation.

Results and Discussion

We treated outliers in the same way as in the previous experiments and the total outliers replaced was 5.4%. We carried out a 2 (conditional: counterfactual vs. semifactual) \times 4 (conjunction: "p and q," "p and not q," "not p and q," or "not p and not q") ANOVA with repeated measures on both factors. It showed a main effect of conditional, F(1, 31) = 4.95, MSE = 52696; p < .04, reflecting that participants took longer to read the conjunctions after a counterfactual than a semifactual conditional. It also showed a main effect of conjunction, F(3, 93) = 28.47, MSE = 63238, p < .001. The interaction was also reliable, F(3, 93) = 8.46, MSE = 54670, p < .001. We carried out planned comparisons on it to test our predictions.

As expected, participants took the same length of time to read the "p and q" conjunction after a semifactual and a counterfactual, only a 28-ms difference, t(31) = 0.62, SEM = 44.68; p = .53, as Table 1 shows, and the analysis had large power (84%) to detect an effect of the same magnitude as that found for "not p and q" described next. Participants read the conjunction "not p and q" 154 ms quicker after a semifactual than after a counterfactual conditional, as predicted, t(31) = 2.06, SEM = 74.42; p < .05. However, they were not quicker to read the conjunction "not p and not q" after a counterfactual than after a semifactual, only a 46-ms difference, t(31) = 1.22, SEM = 37.71; p = .23. The analysis had medium power (67%) to detect an effect of the same magnitude as that found for "not p and q." Finally, as predicted, they took the same time to read the "p and not q" conjunction after a semifactual and a counterfactual conditional, only a 27-ms difference, t(31) =0.45, SEM = 60.92; p = .65, and the analysis had the same power as the previous one.

The results of the third experiment support the suggestion that participants keep in mind different possibilities to understand the semifactual and counterfactual conditionals. The experiment confirms the earlier finding that the semifactual and counterfactual equally prime the "p and q" possibility; the semifactual primes "not p and q" more than the counterfactual, but unexpectedly the counterfactuals did not prime "not p and not q" more than the semifactuals. We can rule out the idea that the semifactual is understood by keeping in mind three possibilities: The second experiment shows that the "not p and not q" possibility is not primed by the semifactual compared with the factual conditional. One possible explanation is that in this third experiment, participants were given conditionals that all required them to keep in mind two possibilities. The demands may have been higher than in the previous two experiments in which they were given one sort of conditional that required them to keep in mind two possibilities (counterfactuals or semifactuals) and another sort that required them to keep in mind just a single possibility (indicatives). As a result in this experiment, some participants may have resorted to a shortcut of keeping in mind a single possibility for some of the conditionals.

General Discussion

The three experiments reported here rely on a priming methodology to test directly predictions about the way people understand

counterfactual and semifactual conditionals. The first experiment corroborated the suggestion that a counterfactual conditional such as "If the car had been out of petrol, it would have stalled" is understood by keeping in mind not only the affirmative possibility, "The car was out of petrol and it stalled," but also the negative possibility, "The car was not out of petrol, and it did not stall." The second experiment corroborated the suggestion that a semifactual conditional, such as "Even if the runner had taken a painkiller, she would have lost the race," is understood by keeping in mind not only the affirmative possibility, "The runner took a painkiller, and she lost the race," but also the negated-antecedent possibility, "The runner did not take a painkiller, and she lost the race." The third experiment showed that people read a negated-antecedent conjunction, such as "There were no roses, and there were lilies," more quickly when it was primed with the semifactual than with the counterfactual. Unexpectedly they did not read the negative conjunction, "There were no roses and no lilies," more quickly when primed with a counterfactual than with a semifactual.

The results of priming experiments such as the three reported in this article are readily explained by theories that propose that people understand conditionals by keeping in mind different possibilities (Johnson-Laird & Byrne, 2002). These data may be particularly difficult for alternative theories of conditionals to explain. Rule-based theories, such as the idea that people rely on formal rules of inference (Braine & O'Brien, 1998; Rips, 1994) or the idea that they rely on domain specific rules (Fiddick, Cosmides & Tooby, 2000; Gigerenzer & Hug, 1992; Holyoak & Cheng, 1995), provide no means by which to predict that certain conjunctions will be primed by a conditional and other conjunctions will not. The theories do not predict that people keep in mind possibilities. A formal rule theory might propose that a counterfactual is decomposed to the conditional, "If p, then q," and the conjunction, "not p and not q," and that a semifactual is decomposed to the conditional, "If p, then q," and the conjunction "not p and q." Such an account must predict that the counterfactual and semifactual primes, "not p and not q" and "not p and q," respectively, more so than any other conjunction. The data rule out this explanation.

Until now, the evidence that people keep in mind different possibilities to understand a counterfactual, semifactual, or factual conditional has been inferred from the conclusions people endorse from these different conditionals, their construction and evaluation of different possibilities consistent and inconsistent with the conditionals, and their judgments of what the conditionals are meant to imply (Byrne & Tasso, 1999; Quelhas & Byrne, 2003; Thompson & Byrne, 2002). The priming methodology used in the comprehension tasks in these three experiments provides a more direct measure of the initial representations that people construct to understand conditionals. Our results are well matched with those obtained in reasoning tasks and provide new evidence that a key difference in understanding conditionals of different sorts is the possibilities that people keep in mind.

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Appendix

Listed below are the conditional forms and content used in our experiments. We have provided the English translations first and the original Spanish phrases second.

English Translation

Factual conditionals were of the form:

"If there is a pencil, then there is a notebook." Counterfactuals were of the form:

"If there had been a pencil, then there would have been a notebook."

Semifactuals were of the form:

"Even if there had been a pencil, there would have been a notebook."

Content (for factual conditionals)

If there is a pencil, then there is a notebook.

If there are apples, then there are pears.

If there are apartments, then there are hotels.

If there are roses, then there are lilies.

If there are rabbits, then there are squirrels.

If there are motorbikes, then there are cars.

If there is a swing, then there is a toboggan.

If there is a mouse, then there is a cat.

If there are socks then there are suspender-belts.

If there is a lighthouse, then there is a tire.

If there is mayonnaise, then there is mustard.

If there are staples, then there are clips.

If there is whisky, then there is vodka.

If there are tickets, then there are lodgings.

If there is flour, then there is yeast.

If there are bread rolls, then there are pancakes.

If there are sweets, then there are donuts.

If there are girls, then there are boys.

If there are books, then there are exercise copies.

If there are goals, then there are baskets.

If there are models, then there are puzzles.

If there are weights, then there are bicycles.

If there is a comb, then there is a brush.

If there are coins, then there are notes.

If there are encyclopedias, then there are magazines.

If there is a table, then there is a chair.

If there is petrol, then there is diesel oil.

If there are letters, then there are postcards.

If there is a bird, then there is a dog.

If there is a bench, then there is a wastepaper basket.

If there is a lollipop, then there is a sweet.

If there is licorice, then there is chewing gum.

If there are tooth covers, then there are fillings.

If there are glasses, then there are contact lenses.

If there are roses, then there are lilies.

If there are perfumes, then there are colognes.

If there is Pepsi, then there is Coca-Cola.

If there are aspirins, then there are plasters.

If there is soup, then there is meat.

If there are pine trees, then there are fir trees.

If there are octopuses, then there are limpets.

If there are yachts, then there are canoes.

If there are sardines, then there are mackerels.

If there are soles, then there are heels.

If there is chamomile, then there is milk.

If there are hospital beds, then there are bandages.

If there are chronometers, then there are alarm clocks.

If there are chains, then there are bracelets.

Original Spanish

Si hay un lápiz entonces hay una libreta.

Si hubiera habido un lápiz entonces habría habido una libreta.

Aun si hubiera habido un lápiz habría habido una libreta.

Si hay un lápiz entonces hay una libreta.

Si hay manzanas entonces hay peras.

Si hay apartamentos entonces hay hoteles.

Si hay raquetas entonces hay mochilas.

Si hay conejos entonces hay ardillas.

Si hay motos entonces hay coches.

Si hay un columpio entonces hay un tobogán.

Si hay un ratón entonces hay un gato.

Si hay calcetines entonces hay ligueros.

Si hay un faro entonces hay un neumático.

Si hay mayonesa entonces hay mostaza.

Si hay grapas entonces hay clips.

Si hay whisky entonces hay vodka.

Si hay pasajes entonces hay alojamiento.

Si hay harina entonces hay levadura.

Si hay bollos entonces hay tortitas.

Si hay palmeras entonces hay donuts.

Si hay niñas entonces hay niños. Si hay libros entonces hay cuadernos.

Si hay porterías entonces hay canastas.

Si hay mecanos entonces hay puzzles.

Si hay pesas entonces hay bicicletas.

Si hay un peine entonces hay un cepillo.

Si hay monedas entonces hay billetes.

Si hay enciclopedias entonces hay revistas.

Si hay una mesa entonces hay una silla.

Si hay gasolina entonces hay gasoil.

Si hay cartas entonces hay postales.

Si hay un pájaro entonces hay un perro.

Si hay un banco entonces hay una papelera.

Si hay chupetes entonces hay caramelos. Si hay regaliz entonces hay chicles.

Si hay fundas entonces hay empastes.

Si hay gafas entonces hay lentillas.

Si hay rosas entonces hay azucenas.

Si hay perfumes entonces hay colonias.

Si hay Pepsi entonces hay Coca-Cola.

Si hay aspirinas entonces hay tiritas.

Si hay sopa entonces hay carne.

Si hay pinos entonces hay abetos.

Si hay pulpos entonces hay lapas.

Si hay yates entonces hay piraguas.

Si hay sardinas entonces hay caballas.

Si hay suelas entonces hay tapas.

Si hay manzanilla entonces hay leche.

Si hay camillas entonces hay vendas.

Si hay cronómetros entonces hay despertadores. Si hay cadenas entonces hay pulseras.

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