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6 How Online Consumer Reviews Are Influenced by the Language and Valence of Prior  
7 Reviews: A Construal Level Perspective

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14 Please cite as follows:

15 Aerts, G., Smits, T., & Verlegh, P. W. J. (2017). How online consumer reviews are  
16 influenced by the language and valence of prior reviews: A construal level perspective.  
17 *Computers in Human Behavior*, 75, 855–864. <https://doi.org/10.1016/j.chb.2017.06.023>

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## 32 1. Introduction

33 The Internet has changed the way consumers search for information, and more  
34 importantly the way they buy products and order services. Consumers increasingly look for  
35 online reviews to provide them with valuable information about products and services.  
36 Online reviews are often regarded as an extension of traditional word-of-mouth (WOM) into  
37 the online domain, and are often referred to as electronic word-of-mouth (eWOM).

38 eWOM currently is one of the most often considered ways to gain knowledge about  
39 products and services (Hennig-Thurau, Malhotra, Frieger, Gensler, Lobschat, Rangaswamy  
40 et al. 2010; Hong & Park, 2012; Kim & Hollingshead, 2015). According to Nielsen, online  
41 consumer reviews are the third most trusted format; two-thirds trust consumer opinions  
42 posted online (Nielsen, 2015). Online consumer reviews are generated by consumers and  
43 written for prospective consumers. In these eWOM reviews, consumers only have to interact  
44 with their computers to post their opinions about products or services. Their opinions are  
45 widely and easily accessible to other consumers, but are only disseminated if and when  
46 prospective consumers search for them (Sen & Lerman, 2007). These product or service  
47 descriptions appear on review platforms such as *Amazon.com* or *Tripadvisor*. A review  
48 example could be: "The dinner in this restaurant was good, the food was delicious." These  
49 online comments are often seen as helpful and credible, which both can be driven by several  
50 types of factors (Chua & Banerjee, 2016; Huang, Chen, Yen & Tran; 2015; Shan, 2016).  
51 Contrary to verbal face-to-face word-of-mouth, online consumer reviews contain some  
52 textual and graphical elements that influence consumers (Cheung & Thadani, 2012; King,  
53 Racherla & Bush, 2014). Because of the lack of facial expressions and vocal fluctuations in  
54 computer-mediated communications environments, reviewers have to learn from online  
55 interaction which is available (Hong & Park, 2012).

56           This suggests that the contents of one's review may be easily influenced by the  
57 context in which it is provided. In line with this notion, earlier research has found that the  
58 contents of reviews are influenced by those of prior reviews that have been posted on the  
59 platform (e.g., Moe & Schweidel, 2012; Purnawirawan, Dens & De Pelsmacker, 2012). The  
60 strong influence of online reviews on purchase decisions is to a larger extent caused by the  
61 perception that reviews provide independent information from a large number of people who  
62 purchased the product. Contrary to this perception, posting online reviews might be seen as  
63 context-dependent communication (Hamilton, Schlosser & Chen, 2017; Liang, 2016), that is  
64 partly influenced by what (and how) previous reviewers wrote.

65           On a more generalized level of theorizing, these findings are in line with the idea that  
66 humans are prone to imitating each other in social interaction (Chen, Chartrand, Lee-Chai &  
67 Bargh, 1998). This imitative behavior streamlines social interaction and aids in learning to  
68 replicate actions and improves language comprehension (Adank, Hagoort & Bekkering,  
69 2010). Imitative behavior has been found to occur in many ways, including language use.  
70 Recent research has shown that synchronization in conversational style, more specifically  
71 *linguistic style matching* (LSM) increases shared perceptions among interlocutors  
72 (Pennebaker, 2011). Due to this linguistic style matching, the words that one person uses go  
73 along with the words used by the other person uses. In the present research, we conceive  
74 online reviews as partly conversational utterances, which are prone to linguistic style  
75 matching, so that reviewers display imitative behavior in their review writing, both in terms  
76 of valence and linguistic style.

77           A small number of studies have examined language use in online reviews.  
78 Schellekens, Verlegh and Smidts (2010) were among the first to analyze written comments.  
79 They found that product experiences that were congruent with consumers' brand attitudes  
80 were communicated in a more abstract wording. In order to obtain a more systematic

81 understanding of the impact of prior reviews on the use of language abstraction in subsequent  
82 reviews the *construal level theory* (CLT; Trope & Liberman, 2010) could be used.  
83 Specifically, *construal level theory* suggests that we form abstract mental construals of distal  
84 objects or experiences and concrete construals of close objects or experiences. Thus, although  
85 we cannot experience what is not present, we can make predictions and speculate. Predictions  
86 and speculations are all mental constructions, distinct from direct experience and they will  
87 transcend the actual moment. They represent psychological distance which is a subjective  
88 experience that something is close or far away from the self, here, and now (Freitas, Salovey  
89 & Liberman; 2001; Trope & Liberman, 2010). Lots of research on this theory has been done  
90 (Fujita, Trope, Liberman & Levin-Sagi, 2006; Trope & Liberman, 2003, 2010), however, the  
91 theory has not been widely applied in the online consumer review context.

92 To the best of our knowledge, the present research is the first to examine how the use  
93 of language abstraction of reviewers is influenced by the use of language abstraction in prior  
94 reviews, and how the resulting language use subsequently impacts the attitudes and intentions  
95 of readers. Previous research on word-of-mouth has mainly focused on the reader, but little  
96 attention has been paid to the question of how consumers describe products and whether and  
97 how this influences the extent to which prior reviews influence subsequent reviewers. This  
98 article aims to fill those gaps. We conducted two experimental studies which were approved  
99 by the first author's designated Ethics Committee. Study 1 investigates the effect of the level  
100 of abstraction in a backpack review on attitudes towards the reviewer, the product and the  
101 subsequent reviewers' writing behavior. Study 2 examines the suggested effects of a search  
102 product (*i.e., a smartphone*) with valence as an extra factor to assure the effects of Study 1  
103 are not only limited to positive reviews. In addition, the design of both studies differed. In  
104 Study 1 participants had to evaluate a backpack of an unfamiliar brand whereas in Study 2  
105 they had to evaluate their own smartphone.

## 106 2. Literature review

### 107 2.1. Construal Level Theory

108 To better understand how the language used in online reviews is influenced by a prior  
109 review, we discuss the properties of online review content from the perspective of *construal*  
110 *level theory* (Trope & Liberman, 2010). CLT predicts that when psychological distance  
111 decreases (a subjective feeling that something is close to the self), one will think in a more  
112 concrete way (Fujita et al., 2006; Trope & Liberman, 2003). Conversely, when psychological  
113 distance increases, one will think and write more abstractly. Prior research already found  
114 evidence for the impact of psychological distance on construal and consumer evaluations  
115 (Huang, Burtch, Hong & Polman, 2016; Zhao & Xie, 2011). These studies made use of two  
116 dimensions of psychological distance and found that the effect of spatial distance (i.e.,  
117 authoring a review about a geographically distant restaurant, rather than a proximate one)  
118 increased the effect of temporal distance (i.e., authoring a review after a lengthy delay, rather  
119 than immediately) on consumer evaluations, and the other way around.

120 The impact of psychological distance on language abstraction has been widely  
121 demonstrated (Trope & Liberman, 2010), with different embodiments of distance creating the  
122 same respective levels of construal. For example, people were found to use more concrete  
123 language when describing their own actions than another one's actions (Semin & Fiedler,  
124 1989), or when instructed to address someone politely (i.e., "distant") rather than in  
125 colloquial language (Stephan, Liberman, & Trope, 2010). Concrete language refers to things  
126 that are available to the senses, and can be observed and measured while abstract language  
127 refers to ideas or concepts. Similarly, concrete consumer reviews are those containing more  
128 detailed information about a product than abstract consumer reviews do. Consider for  
129 example the following reviews: "The laptop I bought, combines powerful performance and a  
130 great keyboard with new eye-tracking technology for a genuinely innovative experience."

131 (concrete) as opposed to “The laptop has great quality, lots of cool features and is easy-to-  
132 use!” (abstract). The greater level of detail is associated with a low level of cognitive  
133 construal, at which people think more concretely and is, as earlier declared, associated with  
134 psychological proximity. When people are thinking at low levels of construal, they are  
135 focusing on details that are less essential to the overall essence of the object. In this case we  
136 talk about the peripheral, secondary features. Contrary, a high level construal is when people  
137 are thinking abstractly (Trope & Liberman, 2003). To conclude, online consumer reviews  
138 that are written in a concrete language style provide detailed information about a product as  
139 opposed to abstract written reviews. Previous research already found that level of detail in a  
140 prior review affected the credibility of search products (Jiménez & Mendoza, 2013).  
141 Research from fields such as social psychology and interpersonal communication has shown  
142 that the level of mental construal affects the attitudes and behavior of the reader towards the  
143 sender (e.g., Schellekens et al., 2010; 2012). They showed that language abstraction in word  
144 of mouth influences receivers' inferences about the product attitudes of the sender  
145 (Schellekens et al., 2010). According to the CLT, it was found that when a person has to  
146 make decisions for the near future, reviews from proximal social others have a larger impact  
147 on one's product attitudes than reviews from distant social others (Zhao & Xie, 2011). Based  
148 on these prior findings it can be argued that online review elements could be understood from  
149 *construal level theory*. The question, however, arises whether language abstraction in online  
150 consumer reviews is influenced by prior posts.

## 151 2.2. Linguistic Style Matching

152 Previous research reported a positive relationship between prior reviews and  
153 subsequent reviews (Ma, Khansa, Deng & Kim; 2013), it was found that the average rating of  
154 prior posts can serve as a signal for subsequent consumers which will positively affect their  
155 post-consumption evaluations. Purnawirawan and colleagues (2012) demonstrated sequence

156 effects in the impact of reviews on readers. It has been argued that review sequence matters  
157 not only in prospective customers' buying behavior, perceived usefulness, and  
158 trustworthiness but also in how the subsequent reviewers will write comments (Walther,  
159 DeAndrea, Kim & Anthony, 2010). Chen and colleagues (1998) found that people mimic  
160 each other's behaviors in social interaction, which aids in learning to replicate actions and  
161 better language comprehension (Adank et al., 2010). Thus, the use of language of a reviewer  
162 can play an important role in the decision process and in the writing behavior of a following  
163 reviewer. *Linguistic style matching* (LSM) states that the words someone uses covary with  
164 the words someone else uses on the reciprocity level but also on the broader conversational  
165 level (Cappella, 1996). Words one reviewer uses prime the reader to respond in a specific  
166 way. However, because language use is reciprocal and coordinated, it is usually not clear who  
167 is following and leading. Thus, a reviewer could influence the following reviewer's language  
168 or could be influenced by the prior reviewer's language at the word level in natural  
169 conversation. Earlier research on mimicry already found that one's nonverbal behavior could  
170 be affected by another's movement (Chartrand & Bargh, 1999). Other research also offered  
171 substantial evidence that individuals in dyadic interactions exhibit LSM on both the  
172 conversation level as well as on a turn-by-turn level. Furthermore, LSM is unrelated to  
173 ratings of the quality of the interaction (Niederhoffer & Pennebaker, 2002). The base of the  
174 *linguistic style matching* findings is the observation that words are predictive elements of  
175 language that capture the style rather than content of an expression. Earlier research found  
176 that women and men react and accommodate to gender-preferential language in electronic  
177 communication (Thomson & Murachver, 2001; Thomson, Murachver & Green, 2001). The  
178 results revealed that linguistic style had the greatest impact on participants' language use.  
179 When people harmonize in language style, they are also likely to share a common  
180 understanding and conceptualization of their conversation topics (Pennebaker, 2011). Recent

181 research demonstrated that linguistic style accommodation is associated with positive social  
182 outcomes (Muir, Joinson, Cotterill & Dewdney, 2016) and that congruence with the target  
183 group's typical linguistic style increased the impact of online reviews on consumer decisions  
184 (Ludwig, de Ruyter, Friedman, Brügger, Wetzels & Pfann, 2013).

185         Based on LSM, we predict that reviewers seek to match the language use of prior  
186 reviews they are exposed to. As mentioned earlier, people will mimic words on the broader  
187 conversational level (Cappella, 1996). More particularly, and based on CLT (Fujita et al.,  
188 2006; Trope & Liberman, 2003), we propose that reviewers display a tendency to mimic the  
189 level of abstractness/concreteness in the content of prior reviews when writing their own  
190 reviews.

191         **H1.** Reviewers are influenced by the language used in prior reviews: if reviewers read  
192 a concrete (abstract) review, they will write a concrete (abstract) review themselves.

193         Prior literature indicates that detailed reviews contain concrete, specific elements  
194 contrary to general reviews (Jiménez & Mendoza, 2013). Previous findings also revealed that  
195 consumers believe and trust evaluations containing detailed information because they infer  
196 that the recommender knows the product well (Bansal & Voyer, 2000). Consumers read  
197 reviews in order to find identity descriptive information about the reviewer (Forman, Ghose  
198 & Wiesenfeld, 2008). If the reader agrees with the reviewer, the initial feelings of the reader  
199 will be supported. Reviewer agreement refers to the degree of perceived agreement regarding  
200 the evaluation of a product but the evaluation of the reviewer him- or herself as well. Recent  
201 investigations in online settings show that reviewer agreement is related to consumers'  
202 attitudes. For instance, Benedicktus and colleagues (2010) found that consumers agree more  
203 with senders who has been evaluated favorably when their reviews are trustworthy. Based on



204 the prior discussion, we expect that a concrete review will increase the agreement with and  
205 the attitude towards the reviewer.

206 **H2.** A prior concrete (abstract) review has a positive (negative) effect on agreement  
207 with the reviewer (*H2a*) and leads to a more positive (negative) attitude towards the reviewer  
208 (*H2b*). Agreement with the reviewer mediates the effect of the level of abstractness in a prior  
209 review on readers' attitude towards the reviewer (*H2c*).

210 Previous research already followed somewhat the same idea and suggests that for  
211 search products concrete, detailed information is more credible and persuasive than abstract  
212 information (Jiménez & Mendoza, 2013). Moreover, it was found that detailed reviews lead  
213 to higher purchase intentions compared to general reviews. Early studies show that word-of-  
214 mouth which provides details is more convincing than broader communication since the  
215 recommendation becomes more diagnostic (Herr, Kardes & Kim, 1991). In addition,  
216 consumers infer that the recommender knows the product well when detailed information is  
217 given which they believe and trust more (Bansal & Voyer, 2000). Therefore, online consumer  
218 reviews which contain concrete written elements should be more credible and persuasive than  
219 the more abstract and general reviews (e.g., “the best product”, “amazing”, “nice in use”).

220 **H3.** A prior concrete (abstract) review leads to a higher (lower) star rating of the  
221 product (*H3a*), a more positive (negative) attitude towards the product (*H3b*), a higher  
222 (lower) willingness to purchase the product (*H3c*) and a higher (lower) willingness to  
223 recommend the product (*H3d*).

224 In sum, the literature provides evidence that previous posts on online review platforms  
225 may offer interesting information. The question then arises whether language in prior reviews  
226 influences review writers and whether this biased language use may have a subsequent effect  
227 on the persuasiveness of reviews. To test our claim that language abstraction in prior reviews

228 will lead to language abstraction in subsequent reviews, and in turn will impact readers'  
229 attitudes and intentions, two experimental studies will be conducted.

### 230 **3. Study 1**

#### 231 *3.1. Methods*

232 In Study 1, we examined the effects for a product that is commonly used by our subject  
233 population (a backpack). Study 1 used a cover story for a backpack of a non-familiar brand  
234 that extended into a new category. Using an unfamiliar product can exert experimental  
235 control over random deviations in people's opinion of an object under discussion. One could  
236 object that an unfamiliar product creates potential for a demand characteristic on subjects'  
237 responses (Zizzo, 2010), but we follow the methodology of previous studies within the field  
238 of online consumer reviews (e.g., Schellekens et al., 2012), and supplement Study 1 with  
239 Study 2, in which participants are asked to write a review for a product they actually used  
240 themselves.

##### 241 *3.1.1. Design and stimuli*

242 To evaluate the hypotheses, a between-subjects experiment was conducted. The study  
243 had two treatment conditions: one with a concrete consumer review, and one with an abstract  
244 consumer review. The stimuli were based on an existing review of the e-commerce platform  
245 bol.com, with addition of concrete versus abstract elements. To minimize potential confounds  
246 the length of the reviews was kept constant, all the reviews were rather positive and the price  
247 information was excluded. Samples of the text in the stimuli appear in the Appendix. We  
248 opted for a backpack, a widely used product, of a not so familiar brand (Oakley). The  
249 selection of a backpack was based on two criteria. First, the product presented in the review  
250 had to be somewhat unfamiliar in order to avoid strong preliminary position or biases of the  
251 product. Second, earlier research showed that product type can influence peoples' way of

252 processing information (Petty, Cacioppo & Schumann, 1983). More in specific, people tend  
253 to evaluate information about high involvement products such as audio and video devices  
254 systematically rather than heuristically. We aimed to find a product with a medium degree of  
255 involvement, which would be modestly relevant to the participants in order to avoid a  
256 moderating effect possibly associated with product involvement. We selected a backpack of  
257 Oakley, since it is not a famous brand, respondents were less likely to have specific  
258 preconceived notions about it. The backpack used for this study was the black Gearbox 22  
259 Oakley backpack. Next to the review (either concrete or abstract) four pictures of different  
260 angles of the backpack were presented, to visualize the backpack. (see Figure 1). This should  
261 help respondents to give their own product description without specifications. The pictures  
262 were stock-images downloaded from the platform bol.com. Participants in both conditions  
263 viewed those pictures but read an accompanying review differing in language abstraction.  
264 Participants were not provided with any additional product details, as we wanted them to rely  
265 only on the product descriptions in the prior review. Giving product details next to the  
266 pictures would prime them too much, prior research even showed that details about product  
267 specifications are persuasive (Herr et al., 1991), which could lead to more concrete review  
268 writing.



269

270 *Figure 1.* Stock-images of the reviewed backpack in Study 1.

271 *3.1.2. Participants.*

272 Data were collected online from 101 respondents through a convenience sample from  
273 Dutch-speaking Belgian men and women. By using this non-probability sampling technique  
274 subjects were selected because of their convenient accessibility and proximity to the  
275 researcher. The respondents consisted of the general public were personally invited through  
276 email (by the first author) to participate in the study. No incentives were used to stimulate the  
277 participation of the respondents. They all read an online consumer review of a backpack that  
278 was either written in a concrete ( $N = 53$ ) versus abstract ( $N = 56$ ) language style. Subject  
279 anonymity and confidentiality of the data was guaranteed by not asking participants' names.  
280 Upon presentation of an informed consent form, respondents were given the option of opting  
281 out of the study by simply clicking out of the web browser that contained the online  
282 questionnaire. The average age of the participants was 24 years ( $M_{age} = 23.84$ ,  $SD_{age} = 3.15$ ,  
283  $Min_{age} = 18$  and  $Max_{age} = 34$ ). 51 of them were male, 50 were female.

### 284 3.1.3. Procedure

285 Those who agreed to participate were provided a link to a questionnaire on Qualtrics.  
286 Qualtrics is an online software application that hosts electronic surveys. All respondents were  
287 invited for an experiment on consumer behavior and were randomly assigned to one of two  
288 conditions. In the study instructions, participants were told that they would be participating in  
289 a study on how people think when writing a review and how this could impact readers. After  
290 reading the survey instructions respondents were directed to the questionnaire. They first  
291 needed to fill out demographic variables (gender and age). Respondents were then asked to  
292 look at the product pictures and read the accompanying review of the Oakley backpack.  
293 Immediately after reading participants were asked to answer a series of questions about the  
294 reviewer, the product and their willingness to buy or recommend the product. Then they were  
295 asked to write a review their own. After writing, they were asked how much they write or  
296 read reviews and how abstract they think.

## 297 3.1.4. Measures

## 298 3.1.4.1. Dependent variables

299 After exposure to one of two conditions, participants were asked to indicate *their*  
300 *agreement with the reviewer* on a one-item seven-point Likert scale (To what extent do you  
301 agree with the reviewer? Indicate on a scale ranging from “not at all” (1) to “totally” (7)),  
302 followed by *their attitude towards the reviewer* on a five-item 7-point differential scale  
303 (Madden, Allen & Twible, 1988). Participants rated the five items in a seven-point scale with  
304 one anchored to “boring/ unpleasant/ bad/ unappealing/ artless”) and seven anchored to  
305 “interesting/ pleasant/ good/ appealing/ artful” ( $\alpha = .90$ ). Next, *their attitude towards the*  
306 *product* was assessed with the same scale ( $\alpha = .85$ ). Participants then *evaluated the product*  
307 *on a seven-point star scale*, they had to assign one to seven stars to the product. Star ratings  
308 are commonly used in online product reviews and can be processed with minimal cognitive  
309 effort (Chevalier & Mayzlin, 2006). Participants were also *asked how likely they would be to*  
310 *buy and to recommend the product* on the one-item 11-point Juster scale (Wright & MacRae  
311 2007). Next, they were asked *to write a review* about the backpack. Language abstraction in  
312 participants’ reviews was rated by five independent judges, who were blind to the  
313 experimental conditions. The independent coders were trained in seeing the difference  
314 between concrete language and abstract language and were provided with examples. The  
315 coded language abstraction ( $\alpha = .79$ ) in the participants’ reviews provided a good level of  
316 intercoder reliability. The rating of language abstraction in the open-ended descriptions was  
317 done by a one-item seven-point scale from “concrete” (1) to “abstract” (7) (Schellekens et al.,  
318 2010).

## 319 3.1.4.2. Covariates

320 To control for possible effects of reviewing habits, participants were first asked to  
321 indicate *how much they write and read online reviews*. This was done on two 7-point items  
322 ranging from “very little” (1) to “very much” (7): “I write ... online reviews” and “I read ...  
323 online reviews”. Both measures were used as covariates. Next, *brand familiarity* was  
324 included as a covariate as well. Subjects indicated how familiar they were with the brand  
325 Oakley via a one-item seven-point Likert scale from “I am not at all familiar with this brand”  
326 (1) to “I’m very familiar with this brand” (7). We also controlled for chronic mental construal  
327 tendencies using the *Behavior Identification Form* (BIF; Vallacher & Wegner, 1989), a  
328 personality measure of how abstractly or concretely individuals represent action. It is  
329 composed of 25 items, each question requires participants to describe an activity (e.g.,  
330 “taking a test”) by choosing an option that represents the action abstractly (“showing one’s  
331 knowledge”) or concretely (“answering questions”). After writing their own review,  
332 participants were *asked to evaluate this review*. They had to indicate to what extent they were  
333 convinced of their own review via a one-item seven-point Likert scale from “I am not at all  
334 convinced” (1) to “I’m very convinced” (7) and to what extent they would post their own  
335 review online via a one-item seven-point Likert scale from “I would not at all post it online”  
336 (1) to “I would totally post it online” (7). This was included because the previous review  
337 could be seen as an example of the consensus among posters. Prior research found that when  
338 people belong to the majority of opinion holders (Woong Yun & Park, 2011) or when the  
339 consensus is positive (Wu, Mattila, Wang, & Hanks, 2016) they are more willing to post  
340 online. Next, they were *instructed to evaluate their own review* via a two one-item seven-  
341 point Likert scales on language abstraction ranging from “concrete” (1) to “abstract” (7). The  
342 last three covariates were only used in the analyses regarding the participants’ written product  
343 descriptions. Demographic variables such as participants’ age and gender were not controlled

344 for in the final analysis, preliminary analyses indicated that demographics did not impact the  
345 results.

### 346 *3.1.5. Pretest and manipulation check*

347 In a pretest (20 students) we examined familiarity with Oakley as a brand for  
348 backpacks. Familiarity was measured on a scale from "I am not at all familiar with this  
349 brand" (1) to "I am very familiar with this brand" (7). As anticipated, participants were not  
350 that familiar with the brand ( $M = 4, M = 1.55, SD = 1.23; t(19) = -8.876, p < .001$ ). In this  
351 pretest we also examined participants' perceptions of the language abstraction for both online  
352 reviews in a within-subjects design. Participants were asked to indicate the language  
353 abstraction for each review on a 7-point scale from "concrete" (1) to "abstract" (7). We also  
354 assessed the valence of the manipulated online reviews from "negative" (1) to "positive" (7),  
355 because they should be similarly positive. An independent sample t-test confirmed that the  
356 manipulated level of language abstraction had a significant effect on the perceived language  
357 abstraction ( $t(38) = -6.883, p < .001$ ), the concrete written review ( $M = 2.45, SD = 1.05$ ) was  
358 seen as significantly more concrete than the abstract written review ( $M = 5.30, SD = 1.53$ ).  
359 However both reviews did not significantly differ in valence ( $t(38) = -.992, p = .328$ ). The  
360 concrete ( $M = 5.55, SD = .76$ ) and the abstract one ( $M = 5.80; SD = .83$ ) were mildly positive.  
361 We checked if the manipulations of the perceived language abstraction and valence were  
362 correctly in the experimental study. Similar to the pretest this indicated a successful  
363 manipulation of review abstraction ( $t(99) = -9.753, p < .001$ ), while not affecting perceived  
364 valence ( $t(94.590) = 1.197, p = .234$ ). The abstract written review ( $M = 5.36, SD = 1.43$ )  
365 received a higher abstraction score than the concrete written review ( $M = 3.12, SD = 1.29$ ).  
366 Again, both the concrete review ( $M = 5.96, SD = .88$ ) and the abstract review ( $M = 5.75, SD$   
367  $= 1.16$ ) were mildly positive.

## 368 3.2. Results

369 To test hypothesis one, an ANOVA compared the mean language abstraction rating  
370 between reviews that were written in a concrete way versus an abstract way. An ANOVA on  
371 language abstraction rating, with language abstraction (concrete vs. abstract) in the previous  
372 review as independent variable revealed that participants' reviews were affected by the prior  
373 review. Participants wrote more concretely after reading a concrete review ( $M = 3.89$ ;  $SD =$   
374  $1.04$ ) compared to an abstract one ( $M = 4.65$ ;  $SD = .92$ ;  $F(1,99) = 18.191$ ,  $p < .001$ ;  $\eta p^2 =$   
375  $.145$ ), confirming our first hypothesis.

376 A separate ANOVA also demonstrated the expected difference in agreement ( $F(1,99)$   
377  $= 11.920$ ,  $p = .001$ ;  $\eta p^2 = .107$ ). In line with hypothesis 2a, we found that respondents agreed  
378 significantly more with the previous reviewer when exposed to a concrete review ( $M = 5.14$ ;  
379  $SD = .91$ ) than when exposed to an abstract review ( $M = 4.44$ ;  $SD = 1.11$ ). We also found a  
380 difference in attitude towards the reviewer, with respondents being significantly more  
381 positive when exposed to a concrete review ( $F(1,99) = 15.641$ ,  $p < .001$ ;  $\eta p^2 = .136$ ;  $M =$   
382  $4.76$ ;  $SD = 1.08$ ) compared to an abstract one ( $M = 3.85$ ;  $SD = 1.21$ ). These results support  
383 H2b. A mediation analysis tested H2c. Specifically, this hypothesis stated that agreement  
384 with the reviewer mediates the effects of language abstraction on the attitude towards the  
385 reviewer. So, in this analysis, language abstraction in the previous reviews was the  
386 independent variable, attitude towards the reviewer was the dependent variable, and  
387 agreement with the reviewer was the mediator. The analysis used 5000 bootstrap samples  
388 (Hayes, 2009), in order to estimate a 95% confidence interval. If zero falls outside the  
389 confidence interval, the indirect effect is significant and mediation is present. The analysis  
390 shows that the indirect effect of language abstraction on the attitude towards the reviewer is  
391 significant ( $B = -.319$ ,  $SE = .123$ , 95% CI =  $[-.607, -.121]$ ). These results confirm H2c, they



392 suggest that reviewer agreement mediates the relationship between language abstraction and  
393 attitude towards the reviewer.

394 For hypothesis 3, we analyzed the effects of exposure to a concrete versus abstract  
395 review (i.e. language abstraction in reviews) on product evaluations. We only found a  
396 significant difference of language abstraction on product rating ( $F(1,99) = 4.924, p = .029;$   
397  $\eta p^2 = .047$ ), participants' rating in the concrete condition was higher ( $M = 4.96; SD = 1.17$ )  
398 than in the abstract one ( $M = 4.40; SD = 1.33$ ). We observed no main effects of language  
399 abstraction on product attitude ( $F(1,99) = .229, p = .634; \eta p^2 = .002$ ), willingness to buy  
400 ( $F(1,99) = 1.129, p = .290; \eta p^2 = .011$ ), and willingness to recommend ( $F(1,99) = 1.327, p =$   
401  $.252; \eta p^2 = .013$ ). Thus, the results showed a positive effect of abstraction on product  
402 evaluations in the form of star ratings (H3a), but not on other evaluation scales (H3b,c,d).

403 The same *univariate two-way analyses of variance* (ANOVA's) were carried out with  
404 the addition of following covariates: frequency of writing online reviews, frequency of  
405 reading online reviews, mental construal (BIF), and brand familiarity. None of those  
406 covariates were significant ( $F < 1$ ) and the main effect of our manipulations did not lose  
407 significance after including those covariates.

## 408 **4. Study 2**

### 409 *4.1. Methods*

410 In Study 2, we used a different product (a smartphone). The purpose of Study 2 was  
411 threefold. We wanted 1) to confirm and generalize the effects of concrete elements in reviews  
412 for other products, 2) to test the role of valence in this earlier found effect, and 3) to expand  
413 the methodological design to another type of measurement in order to preclude that the  
414 results were an artifact of the design of Study 1. That is why in Study 2 participants were  
415 asked to imagine that the review was about the smartphone that they owned themselves – this

416 approach was adapted from branding literature, where researchers often ask subjects about  
417 perceptions of a liked or disliked brand that they can choose themselves (e.g., Batra, Ahuvia  
418 & Bagozzi, 2012; Park, MacInnis, Priester, Eisingerich & Iacobucci, 2010). One potential  
419 limitation of the first study is low ecological validity. On review websites, participants are not  
420 only exposed to positive online consumer reviews. Often, they get an overview of both  
421 positive and negative reviews. We added valence as a between-subjects factor to assure that  
422 the effects found in our first study are not only limited to positive reviews. As we cannot  
423 predict the way in which valence influences the abstractness effects on the reader and the  
424 subsequent reviewer, we propose the following research question: “Does valence in a prior  
425 online review have an impact on how abstractness/concreteness of prior reviews affects how  
426 people think about and write online consumer reviews?”.

#### 427 *4.1.1 Design and stimuli*

428 The design for this study was a 2 (language abstraction in review: concrete vs  
429 abstract) x 2 (valence: negative vs. positive) between-subjects design. We again focused on  
430 the effect of language abstraction, but also the valence of a previous review, on the mental  
431 construal of a next reviewer. To this end we carefully constructed online reviews, as in Study  
432 1, based on an existing review from the website bol.com. Each respondent was randomly  
433 assigned to view one of the four product descriptions (see Appendix).

#### 434 *4.1.2 Participants*

435 Students ( $N = 189$ , 47 male,  $M_{age} = 20.75$ ,  $SD_{age} = 3.19$ ,  $Min_{age} = 18$ ,  $Max_{age} = 36$ )  
436 participated in this study in return for course credits. Anonymity and confidentiality were  
437 guaranteed as the students did not have to fill out their name but their student digit code  
438 number, but the surveys and numbers were processed separately to warrant anonymity. Social  
439 science students were retrieved out of a database of a large European university and received

440 an email on their student mail account inviting them to participate in the study. As in Study 1,  
441 they were given the option of opting out.

#### 442 *4.1.3. Procedure*

443 The procedure was similar to the procedure of Study 1. However, instead of a  
444 backpack, the participants were asked to read a review of a product—a smartphone—and  
445 imagine this was a review of their own smartphone, which is an approach adapted from  
446 branding literature (e.g., Batra, Ahuvia & Bagozzi, 2012; Park, MacInnis, Priester,  
447 Eisingerich & Iacobucci, 2010). Electronic experience products, such as smartphones, are  
448 frequently purchased through online shopping websites and consumers tend to rely on  
449 comments from previous users due to the fact that they have various functionalities (Park &  
450 Lee, 2009). As in Study 1, participants received an email containing a link, which led them to  
451 an online questionnaire. Each participant was randomly assigned to one of the four  
452 experimental conditions.

#### 453 *4.1.4. Measures*

454 The measures of Study 2 were the same as in Study 1, except from brand familiarity  
455 which was not measured. And again, we did not control for demographics, because  
456 preliminary analyses indicated that demographics did not impact the results. In addition, in  
457 the open-ended descriptions we coded language abstraction, but valence as well. This was  
458 done by a one-item seven-point scale from “concrete” (1) to “abstract” (7) for language  
459 abstraction and from “negative” (1) to “positive” (7) for valence (Schellekens et al., 2010).  
460 Reading positive evaluations can lead to more favorable attitudes (Tsang & Prendergast,  
461 2009), we include valence to control for this possibility. We also have to remark that the  
462 coding was differently from Study 1. Various raters coded 10 open-ended descriptions which  
463 were randomly chosen from the initial sample of the 189 generated reviews. This means that

464 raters did not receive all descriptions to code but just a randomized subsample of 10. This  
465 method has been used before via MTurk to get large samples of data into a content analysis  
466 (Biel & Gatica-Perez, 2013). Using this method, we intended to explore the possibility of an  
467 affordable and fast completion method that could truly scale to the annotation of large  
468 amounts of written comments. Moreover, we obtained ratings of on average 10 coders for  
469 every review. By keeping the task short we could obtain spontaneous impressions. Next, we  
470 did not give any particular instructions to coders to fill the questionnaire apart from 1)  
471 reading the review and 2) answering the questionnaire. All participating raters received at the  
472 start of the survey a quick training on the level of language abstraction and valence.

#### 473 *4.1.5. Pretest and manipulation check*

474 A pre-test ( $N = 23$ ) checked the manipulation of language abstraction and valence by  
475 means of a within-subjects design. As anticipated, an independent sample t-test indicated that  
476 the manipulated level of language abstraction had a significant effect on the perceived  
477 language abstraction ( $t(84.546) = -5.080, p < .001$ ), the manipulated concrete review ( $M =$   
478  $2.57, SD = 1.28$ ) was seen as significantly more concrete than the manipulated abstract  
479 review ( $M = 4.13, SD = 1.66$ ). The t-test revealed as well that the manipulated level of  
480 valence had a significant effect on perceived valence ( $t(90) = -18.457, p < .001$ ), the  
481 manipulated negative review ( $M = 1.61, SD = .93$ ) was seen as significantly more negative  
482 than the manipulated positive review ( $M = 5.96, SD = 1.30$ ). We also checked for these  
483 manipulations in the actual study which revealed significant effects on the perceived  
484 language abstraction ( $t(187) = 2.158, p = .023$ ), and on valence ( $t(187) = -28.893, p < .001$ ).  
485 The manipulated concrete review ( $M = 3.77, SD = 1.60$ ) received a significant lower  
486 abstraction score than the manipulated abstract review ( $M = 4.29, SD = 1.70$ ). And again, the  
487 manipulated negative review was rated as significantly more negative ( $M = 1.72, SD = .95$ )  
488 than the manipulated positive review ( $M = 5.89, SD = 1.04$ ).

## 489 4.2. Results

490 We used a *univariate two-way ANOVA* with language abstraction (concrete vs.  
491 abstract) and valence (negative vs. positive) as between-subjects variables. This analysis  
492 revealed a main effect of language abstraction. Again, on the open-ended response  
493 abstraction index with language abstraction (concrete vs. abstract) as between-subject factor  
494 we found a main effect. Reading abstract reviews resulted in more abstract review writing  
495 ( $F(1,185) = 12.497, p < .01, \eta p^2 = .063$ ), with a prior concrete review resulting in a  
496 subsequent concrete review ( $M = 3.53; SD = .69$ ) as compared to a prior abstract one  
497 resulting in an abstract one ( $M = 3.87; SD = .62$ ). Thus we again found evidence for H1. A  
498 marginally significant main effect of valence on abstraction in participants' reviews was  
499 found as well ( $F(1,185) = 3.709, p = .056, \eta p^2 = .020$ ). When respondents read prior negative  
500 reviews they wrote significantly more abstractly in their own review ( $M = 3.80; SD = .68$ )  
501 than when they read prior positive reviews ( $M = 3.61; SD = .66$ ). But no interaction of  
502 language abstraction and valence on rated abstraction occurred ( $F(1,185) = .437, p = .509,$   
503  $\eta p^2 = .002$ ). No main effects of language abstraction ( $F(1,185) = 1.156, p = .284, \eta p^2 = .006$ )  
504 and valence ( $F(1,185) = 2.081, p = .151, \eta p^2 = .011$ ), nor an interaction effect of language  
505 abstraction and valence was found on rated valence of the participants' reviews ( $F(1,185) =$   
506  $.122, p = .728, \eta p^2 = .001$ ).

507 In addition, we found that participants did not agree significantly more with the  
508 reviewer in the concrete condition than in the abstract condition ( $F(1,185) = .171, p = .679,$   
509  $\eta p^2 = .001$ ). However, a main effect of valence on agreement with the reviewer occurred  
510 ( $F(1,185) = 170.042, p < .001, \eta p^2 = .479$ ). Participants agreed significantly more in the  
511 positive condition ( $M = 2.26; SD = 1.39$ ) as opposed to the negative one ( $M = 4.86; SD$   
512  $= 1.36$ ). A language abstraction by valence interaction was found as well ( $F(1,185) = 4.209, p$   
513  $= .042, \eta p^2 = .022$ ). In the negative condition, participants agreed significantly more when

514 exposed to a previous concrete review ( $M = 2.51$ ;  $SD = 1.49$ ) as compared to a previous  
515 abstract one ( $M = 2.02$ ;  $SD = 1.25$ ). The *univariate two-way ANOVA* on attitude towards the  
516 reviewer also revealed a main effect of language abstraction with participants in the concrete  
517 condition having a more positive attitude towards the reviewer ( $F(1,185) = 12.201$ ,  $p = .001$ ,  
518  $\eta p^2 = .062$ ;  $M = 4.05$ ;  $SD = 1.13$ ) compared to the abstract condition ( $M = 3.54$ ;  $SD = 1.26$ ).  
519 We also found a main effect of valence ( $F(1,185) = 96.990$ ,  $p < .001$ ,  $\eta p^2 = .344$ ), with  
520 respondents having a significant more positive attitude towards the reviewer when exposed to  
521 a positive review ( $M = 3.10$ ;  $SD = .99$ ) than when exposed to a negative one ( $M = 4.50$ ;  $SD =$   
522  $1.01$ ). We did not observe an interaction between language abstraction and valence on  
523 attitude towards the reviewer ( $F(1,185) = 1.813$ ,  $p = .180$ ,  $\eta p^2 = .010$ ). These results do not  
524 support H2a, but do support H2b. The mediation hypotheses (H2c) was done in the same way  
525 as in Study 1. Specifically, this hypothesis stated that agreement with the reviewer mediates  
526 the effects of language abstraction on the attitude towards the reviewer. The bootstrap  
527 confidence intervals of indirect effects were estimated using a level of confidence of 95% and  
528 5,000 samples (Hayes, 2009). The analysis shows that the direct effect of indirect effect of  
529 language abstraction on the attitude towards the reviewer is not significant ( $B = -.041$ ,  $SE =$   
530  $.110$ , 95% CI =  $[-.253, -.176]$ ). The mediation hypothesis (H2c) cannot be confirmed.

531       Regarding product evaluation, we again only found a significant difference of  
532 language abstraction on product rating ( $F(1,185) = 4.914$ ,  $p = .037$ ,  $\eta p^2 = .023$ ). Respondents'  
533 rating in the concrete condition was higher ( $M = 3.90$ ;  $SD = 1.68$ ) than in the abstract one ( $M$   
534  $= 3.52$ ;  $SD = 1.65$ ). Similar to Study 1, the effects of language abstraction on product attitude  
535 ( $F(1,185) = 1.141$ ,  $p = .287$ ,  $\eta p^2 = .006$ ), willingness to purchase ( $F(1,185) = 2.622$ ,  $p = .107$ ,  
536  $\eta p^2 = .014$ ) and willingness to recommend ( $F(1,185) = 2.847$ ,  $p = .093$ ,  $\eta p^2 = .015$ ) were not  
537 significant in Study 2. However, a main effect of valence occurred for product star rating  
538 ( $F(1,185) = 163.095$ ,  $p < .001$ ,  $\eta p^2 = .469$ ), product attitude ( $F(1,185) = 47.377$ ,  $p < .001$ ,  $\eta p^2$

539 = .204), willingness to purchase ( $F(1,185) = 31.810, p < .001, \eta p^2 = .147$ ) and willingness to  
540 recommend ( $F(1,185) = 31.369, p < .001, \eta p^2 = .145$ ) with respondents being significantly  
541 more positive in the positive compared to the negative condition. No significant interactions  
542 were found, nor on star rating ( $F(1,185) = .448, p = .504, \eta p^2 = .002$ ), product attitude  
543 ( $F(1,185) = .000, p = .987; \eta p^2 = .000$ ), willingness to purchase ( $F(1,185) = 1.955, p = .164;$   
544  $\eta p^2 = .010$ ) and willingness to recommend ( $F(1,185) = .115, p = .735; \eta p^2 = .001$ ). Again,  
545 these findings showed a positive effect of abstraction on product evaluations in the form of  
546 star ratings (H3a), but not on other evaluation scales (H3b,c,d).

547         The same *univariate two-way analyses of variance* (ANOVA's) were performed with  
548 the addition of the covariates as in Study 1, except from brand familiarity. In Study 2 we did  
549 not use a non-familiar brand but asked participants to imagine that the review was about the  
550 smartphone that they owned themselves. None of those covariates were significant ( $F < 1$ ) and  
551 the main effect of our manipulations did not lose significance after including those covariates.

## 552 **5. General discussion**

553         Yet, despite the increased prevalence of consumer reviews, an increased availability  
554 of measures to index a review's popularity, but also an increased consumer skepticism, little  
555 is known about the effect of language abstraction in reviews. Our studies addressed this and  
556 examined language use and its effects on both sides of the word-of-mouth communication  
557 twain. First, we assessed the impact of language abstraction on the reviewer's writing  
558 behavior. Second, we gained insight in the impact of language abstraction in online consumer  
559 reviews on the reader's attitudes about the reviewer and the product.

560         Overall, the findings of our two studies validate our proposition that exposure to  
561 concrete written reviews results in concrete written comments of a subsequent reviewer.  
562 Perceived language abstraction in online consumer reviews was systematically influenced by

563 language abstraction in previous reviews. These findings suggest that language abstraction is  
564 contagious, so that the presence of more concrete reviews leads new reviewers to use more  
565 concrete language too. Earlier studies demonstrated that people mimic each other's behavior  
566 (Adank et al., 2010; Cappella, 1996; Chen et al., 1998). Our studies suggest as well that  
567 people match each other's behavior, and more in particular match each other's language  
568 when writing written comments and adapt to the level of mental construal (Cappella, 1996;  
569 Trope & Liberman, 2010). Answering our research question, we identified an effect of  
570 valence on language abstraction. When reading a positive review, people will write more  
571 concretely. Next, we also found evidence for the positive relationship between concreteness  
572 in a review and attitudes towards a reviewer. Our findings suggest that a reader agrees more  
573 with and has a more positive attitude towards the previous reviewer when that review was  
574 written concretely compared to abstractly. Moreover, agreement with the reviewer mediated  
575 the relationship between language abstraction and attitude towards that reviewer. And as  
576 anticipated, when reviews were written positive, readers rated the reviewer as more positive.  
577 This can be explained by the fact that reviews which contain more information are more  
578 appreciated and seen as useful by the reviewer (Herr et al., 1991). The next finding is perhaps  
579 even more relevant to the consumer behavior context. In our studies we show that  
580 participant's star rating for a product will be higher after reading an online review that is  
581 more concrete as opposed to abstract. It could be, as earlier mentioned, that concrete reviews  
582 are seen as more useful, resulting in a higher rating (Bansal & Voyer, 2000; Herr et al., 1991;  
583 Jiménez & Mendoza, 2013). It could be that we only found an effect on star rating as a  
584 measurement of product evaluations because ratings provide the reader with shortcut means  
585 to quickly evaluate the product (Tsang & Prendergast, 2009) in contrast to the other  
586 measurement scales. And as earlier widely demonstrated, positive prior reviews lead to more  
587 positive attitudes towards the product (Chevalier & Mayzlin, 2006; King et al., 2014). This



588 study clearly illustrates the contagious effect of language abstraction in the online review  
589 context. Further research should also investigate the implications of this effect. This is  
590 important because concrete (vs. abstract) reviews induce more favorable evaluations of  
591 reviewers, reviewed products.

### 592 *5.1. Implications*

593 Our findings, which suggest that language abstraction is contagious, have important  
594 implications, not only for researchers, but also for marketers and consumers. On the one  
595 hand, our findings confirm that linguistic style matching can be acquired through language  
596 abstraction in prior online comments. In other words, reviewers that express their product  
597 experience in a certain way can influence subsequent reviewers. Moreover, our findings  
598 could be applied in the context of service reviews such as experiences with hotels, events,  
599 music concerts etc. On the other hand, online consumer review platforms may be effective  
600 platforms for seeking product information, as readers perceive through this online platform  
601 what they are searching for. And more in particular, we found that concrete reviews have a  
602 positive effect on readers' opinions about products. Thus it may be valuable for future  
603 research to explore the role of other concrete review elements as well. Analyzing the level of  
604 abstractness of the language that consumers use in product reviews could help review  
605 websites to build their website in such a way that consumers make the best thoughtful  
606 decisions. For example, a marketer attempting to generate traffic to a review web site or an ad  
607 should add concrete elements in or next to online consumer reviews. It could even be argued  
608 that when consumers are invited by e-mail to write an online consumer review after purchase,  
609 a concrete example should be added to that e-mail. Review platforms could capitalize on this  
610 too by seeding concrete reviews, by building in features that promote the use of concrete  
611 language, or by explicitly instructing reviewers to use more concrete language. Indicators  
612 such as an instruction about the minimum length of the review or pictures about the product

613 could be used. The attractiveness of the content of the online consumer reviews will  
614 significantly enhance as the number of visits is gathering. Hence, the foregoing product  
615 evaluations are rather relevant for products that are difficult to assess before use.

616 Next to the online consumer review context, our findings could be used in other social  
617 media communication contexts. Previous research already demonstrated that posters adapt  
618 their writing style to the style of previous posters within the same discussion on internet fora  
619 (Welbers & de Nooy, 2014). Thus, it could as well be that the language style of, for instance,  
620 Twitter writing and blog writing depends on the language style used in a prior Tweet or blog  
621 one is exposed to. Our findings do not only enrich the theoretical knowledge about the  
622 writing of posts, but will also help social media experts and marketers to develop effective  
623 social networking and advertising strategies via online platforms.

#### 624 *5.2. Limitations and future research*

625 This study is the first to our knowledge that investigates the impact of language  
626 abstraction in online reviews on the next reviewer, uncovering a potential concreteness leads  
627 to concreteness effect. Next, our findings are consistent with the proposition that customers  
628 read and rely on information in written online consumer reviews during their decision making  
629 processes (Chevalier & Mayzlin, 2006). However, various limitations of our research provide  
630 worthwhile avenues for future research. First, although we consider the whole written  
631 comment, our empirical study featured only one linguistic style: the language abstraction.  
632 Other dimensions of written comments could also have an effect. Therefore, future research  
633 should include them and examine how factors such as the content, the source, the review  
634 context and the design of the platform could influence the persuasiveness of online consumer  
635 reviews. In this regard, it is especially interesting to look at factors that may influence  
636 construal level. Next to psychological distance, self-construal is an additional factor that may

637 come into play here (Bernritter, Loermans, Verlegh and Smit, 2017). Second, other  
638 moderators could impact both reviewers and readers of which one could be the volume of  
639 reviews. In our studies we presented participants towards just one review. Earlier studies  
640 showed that consumers base their opinion and thus their decision on the signaled consensus  
641 (Benedictus et al., 2010; Zhu & Zhang, 2010). Future studies should therefore employ  
642 different but balanced consumer reviews (Purnawirawan et al., 2012). Third, the use of single  
643 product categories in both studies may limit generalizability of the results. Although we  
644 limited ourselves to the use of two search products, their possess attributes can only be  
645 evaluated prior to their purchases. Meaning that those reviews can give consumers more  
646 wisdom about the product in contrast to experience products. Fourth, a potential limitation of  
647 the first study is low ecological validity. Consumers are not only exposed to positive online  
648 consumer reviews on review platforms. Usually, there is an overview of both positive and  
649 negative reviews. In the second study, negative reviews were as well included, however,  
650 participants were still exposed to only one review. Future studies should include more  
651 reviews to balance valence effects. Fifth, another limitation is that earlier research on word of  
652 mouth in the offline context seems to found opposite effects (Schellekens, et al., 2010). The  
653 difference might lie in the fact that we, as compared to the earlier mentioned researchers, did  
654 not use the *linguistic category model* (Semin & Fiedler, 1988) as a framework. This model  
655 was used for studying the language that people use to describe social events and thus not for  
656 studying the used language to describe product experiences. Instead of using descriptive  
657 action verbs in the concrete condition, our concrete contained more information and thus  
658 more details which are translated into more concrete features. The contrast between these  
659 findings highlight the need for further research.

660 *5.3. Conclusion*

661           In conclusion, these findings extend prior research on the relationship between the  
662 level of detailed information in online consumer reviews and readers' attitudes towards the  
663 reviewer and the product, by looking at the role of mental construal. The results demonstrated  
664 that readers' agree more and have a better attitude towards the reviewer when exposed to a  
665 prior concrete review. Reviewer agreement served as a moderator on attitudes towards the  
666 product. In addition, when presented such a concrete review, the reader rated the product  
667 higher via star rating. In spite of a large amount of research on word of mouth, there has been  
668 little attention on the language that consumers use to describe their experiences with products  
669 and services to others. Our studies addressed this and showed that concreteness in prior  
670 online consumer reviews leads to concreteness in subsequent online consumer reviews.

671

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847 **Appendix**

848 Examples of text in the manipulations.

## 849 Study 1

Concrete review	Abstract review
<p>“I recommend this backpack. The shoulder and back straps of the backpack are padded for extra comfort. In the various spacious compartments you can store a lot of stuff. There is a separate compartment to protect your laptop from scratches and other damage.”</p>	<p>“This backpack is recommended by me. In my opinion, the backpack sits great, which is also spacious. The use of this backpack is pleasant. The backpack has several times used by me and I will do this many times in the future too.”</p>

850 \* translations, original texts can be obtained from the authors

## 851 Study 2

	Concrete review	Abstract review
Negative review	<p>“A while ago, I bought this smartphone, which operates below par. The appliance has a low stand-by time and the Li-ion battery recharges slowly. I almost never have the maximum range, even with 3G internet connection. The camera on the back makes blurry photos and videos. ”</p>	<p>“This worthless smartphone was recently bought by me. The appliance will not last that long and has poor reception. I can hardly take pictures with this phone. The smartphone is inconvenient and is worse than my previous phone. I can do little with it, the appliance disappoints me.”</p>

Positive review	“A while ago, I bought this smartphone, which operates excellent. The appliance has a high stand-by time and the Li-ion battery recharges quickly. I almost always have the maximum range, even with 3G internet connection. The camera on the back makes clear photos and videos. ”	“This valuable smartphone was recently bought by me. The appliance will last very long and has good reception. I can easily take pictures with this phone. The smartphone is convenient and is better than my previous phone. I can do a lot with it, the appliance satisfies me.”
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852 \* translations, original texts can be obtained from the authors