Handbook of Research on Computer Mediated Communication

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Chapter XX
Reviewer Motivations, Bias, and Credibility in Online Reviews

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ABSTRACT

In the emerging CMC genre of online reviews, lay people, as opposed to professional writers, evaluate products and services, and they receive no pay for their time or effort. This chapter examines possible motivations for writing reviews, particularly efficacy and altruism. In addition, this chapter examines a sample of 640 online reviews to see whether a positive bias existed; indeed, over 48 percent of reviews bestowed the highest rating—5 stars. Finally, the chapter investigates how reviews manifest reviewers' concern for establishing credibility by examining four reviews' varying degrees of careful editing: use of low-frequency vocabulary, planned content, prescription-adhering grammar, correct punctuation, and correct spelling. Detailed analysis of the four online reviews—reviews of a recipe, a camcorder, a tour guide service, and a book—according to the extent to which they displayed careful editing, revealed that the reviews displayed spelling and punctuation errors. However, two of the four reviews showed careful

INTRODUCTION

This chapter focuses on a particular variety of computer-mediated communication (CMC): the "online review." Such an analysis becomes more important as consumers more frequently write and post their evaluations of products and services on Web sites like Epinions.com and specialized sites like Allrecipes.com. Indeed, the ubiquity of online reviews written by laypeople, as opposed to professional review writers, generated this headline in the satirical newspaper The Onion: "Majority of Human Discourse Now Occurring in Online Product Reviews" (2003). Certainly, online reviews constitute an emerging variety of CMC that is worth analysis.

One question that arises in relation to online reviews' increased availability and frequency is this: why do consumers look to online reviews for advice? After all, in most cases, consumers—the readers of the online reviews—do not know the reviewers of the products and services.

Yet, as Chevalier and Mayzlin (2006) point out, online reviews "have become an important source of information to consumers, substituting and complementing other forms of business-to-consumer and offline word-of-mouth communication about product quality" (p. 345). That is, as is the case in word-of-mouth communication, online reviews help consumers reduce perceived risk, that is, their perceptions of uncertainty and adverse consequences of engaging in an activity," such as making a purchase (Wang 2005, p. 111).

Previous research suggests that if a product or service is new, such as a new electronic gadget, or must be sensed or experienced to be appreciated, such as a tour guide service, consumers will look more often for the evaluations of others, particularly evaluations that seem credible (Holbrook & Hirschman, 1982, p. 134). In fact, one study found that over a third of Americans ask friends for advice when making a decision about which movie to see (Walker, 1995). This finding clearly shows consumers value the opinions of other lay people, particularly as the perceived risk of selecting a product or service increases. Consumers even use reviews to reduce the effort of making choices about products that are essentially free, such as the recipes listed in recipe Web sites like Allrecipes.com, but they particularly try to minimize the effort of making a choice when making decisions about risky products and services, such as lawnmowers or veterinary services.

In online reviews, reviewers evaluate a broad spectrum of products and services like PlayStation 3 video game systems and TaylorMade golf clubs, as well as services like child care or dance lessons. Online reviewers also evaluate literary and artistic creations like books or movies. In the example below, taken from the site Epinions.com, nokia721032, one pseudonymed reviewer out of thousands, evaluates a Microtek film scanner:

I was looking for a dedicated slide scanner to replace a mid range model scanner that I was using before and was glad to find this one af-fordably priced. It has calibration software that lets me calibrate my monitor, scanner and printer using the same color scheme which is very helpful when you need the color to be as close to perfect as possible. Some of my clients are very picky and since I have started using the 4000tf I have not had any complaints with regards to the work. I would highly recommend this scanner to anyone out there looking for dedicated slide use.

Reviews like nokia721032's raise interesting questions. First, knowing that reviewers are not compensated by the producers and providers whose goods and services they evaluate, what motivates reviewers to write online reviews?

Second, to what extent are online reviews positive, like nokia721032's review of the film scanner? Research suggests that reviews manifest a positive bias, called the positivity effect. Chevalier and Mayzlin (2006) write that "a consumer chooses to read a book or watch a movie only if he or she believes that there is a high probability of enjoying the experience" (p. 345). This study examines a sample of 320 online reviews of recipes from the site Allrecipes.com to determine whether the online reviews of this popular site display positive bias. This analysis is interesting in that recipes are in general low risk products: consumers who use these online reviews do not need to trust in them as much as they do reviews of riskier products. This chapter also examines 320 online reviews of riskier products, such as laptop computers and DVD players, from the reviews site Epinions.com.

Third, to what extent do the reviewers use language that appears designed to build and maintain readers' trust? In other words, to what extent do reviewers try to construct credibility, the "characteristics that affect the receiver's acceptance of a message" (Ohanian, 1990, p. 41)? After all, reviewers will have little effect on the world or little influence on readers if their evaluations are not perceived to be credible. Indeed, studies of third-party testimonials have shown that

source credibility is a clear determining factor in the extent to which readers attend to and follow reviewers' advice (Ohanian, 1990). Wang (2005), equating "credibility" with "believability," found that a decrease in believability had an adverse effect on consumer trust (p. 120). To investigate these questions, this chapter analyzes the credibility of four online reviews of products and services that theoretically would require quite different levels of consumer trust: a recipe, a camcorder, a tour guide service, and a book. In investigating credibility, this chapter analyzes language characteristics that signal the amount of editing involved in writing the review (see Petelin, 2002).

After discussing possible reasons that might motivate online reviewers to write online reviews, this chapter investigates positive review bias and language characteristics that signal reviewers' concern for credibility in their online reviews.

THE MOTIVATIONS OF REVIEW WRITERS

The question to begin with, then, is this: what motivates people like nokia721032 to write online reviews? What motivates people to take time from their lives to tell other people about their experience in using a recipe or some other product or service? One possible explanation is that people share information because they seek a sense of efficacy, a feeling that one can affect that world (Cabrera & Cabrera, 2002; Kollack, 1994; Van de Kragt, Orbell, & Dawes, 1983). Addressing this question on the blog related to the book Freakonomics (Levitt & Dubner, 2005), some blog contributors said that reader reviews posted to the Amazon.com site strongly influenced their purchasing choices; in fact, one blogger said that reviews influenced 75 percent of his or her book-buying decisions. Because these bloggers understood the influence of online reviews, they wrote and submitted their own. Another blogger commented that the chance of being the person

who generates a "tipping point" (Gladwell, 2000) that changes wider opinion lead him or her to write reviews. This reason falls under the aegis of efficacy too. Influencing others motivates people to write reviews.

The idea of efficacy as a motivator for online reviews falters, though, in the face of reviewers who write and submit reviews that will receive little or no attention. For example, efficacy likely does not strongly motivate reviewers like JS-CLO21, who wrote the 413th review of the recipe for Downeast Maine Pumpkin Bread:

This recipe is awesome!! I have made it twice in the last week. It is so moist and I have no words to describe the flavor. It is very easy to make. You must try this recipe!!!

As is the case with many other online reviews of products and services, JSCLO21's review of the bread recipe adds little new information about the product under review and may very well not be seen and read by many other users because it soon gets lost in a long list of reviews. Efficacy will be fleeting for a review of a product or service that has generated and will likely continue to generate many reviews. Indeed, the 413th review for this pumpkin bread soon faded into an ever-lengthening list of reviews for the popular recipe. It is important to point out, however, that in most online review sites, readers can sort reviews by how useful they are (as determined by other readers) or by the ratings they assign to products and services (e.g., reviews assigning high ratings first). When readers sort reviews in these ways rather than by date, they can get advice from reviewers other than those who most recently reviewed the product or service. Perhaps reviewers like JSCLO21, reviewers who add their evaluation to a list of reviews already 412 reviews long, count on readers' ability and willingness to sort reviews.

Another possible motivation for writing online reviews is altruism (Kollack, 1994; Walsh, Gwin-

ner, & Swanson, 2004). Under this theory, people contribute reviews to improve the experiences of others. Altruistic reviewers might read reviews to obtain the opinion of others—particularly expert or insightful opinions—and then want to repay their debt by improving the experiences of others in the same way that their own decisions about products and services have been facilitated. Writing reviews, one contributor to the Freakonomics blog noted, becomes more important when few other reviews for a particular product or service are available or when the reviewer has relevant experience in the subject matter that might help others. One blog contributor said about writing reviews: "It gives joe shmoe your average, everyday boring guy a chance to feel like their opinion is valued as an expert" (Levitt, 2005).

Finally, another possible motivation for writing online reviews is, as another Freakonomics blog contributor noted, a strong need to socialize: "PEOPLE CRAVE ATTENTION." Another contributor, along similar lines, wrote, "Ego should not be overlooked" (Levitt, 2005).

Whether motivated by efficacy, altruism, or a need for attention, more people are going public with their evaluations of products and services by writing online reviews. The next section examines the extent to which a sample of reviews displays a positive bias.

METHOD OF ANALYZING RECIPE REVIEWS

To consider briefly a possible positivity effect in reviewers' evaluations, this chapter examines 320 reviews of 320 recipes from the recipe site Allrecipes.com. To gather this sample, 20–22 recipes appearing as "Recipes of the Day" for 15 randomly selected days were chosen. (Each day, 20–22 recipes from different content categories, such as "Appetizers and Snacks," "Main Dish," and "Drinks" appeared as recipes of the day.) The reviews were preceded by star rating on a scale

Figure 1. A 5-star rating from Allrecipes.com

★★★★★

of 5 stars (best) or 1 star (worst). Figure 1 shows a 5-star rating.

Similar rating scales appear in most other sites that invite user reviews, such as Amazon.com. The status of these recipes as recipes of the day was not correlated to the recipes' overall star rating (evident in the fact that recipes with an average 1-star rating were listed as recipes of the day).

This study also examines a sample of 320 reviews from Epinions.com. These reviews were about computers and electronics products that ranged in price from $500 to $4,000. On Epinions.com and some other sites devoted to consumers' reviews of products and services, reviewers can rate products on several criteria; for example, in Epinions.com, reviewers can rate an Audiovox portable DVD player for sound, ease of use, picture quality, and durability. These criteria ratings are averaged to create one overall rating, and the products' overall ratings were the ones used in this study.

Allrecipes.com and Epinions.com reviewers can modify their reviews (and the star ratings they assign) as many times as they like, but they cannot respond directly to comments written in other users' reviews the way that users can respond to each other in blogs, chatrooms, or forums. Therefore, online reviews are not fully "interactive" in Rafaeli's (1988) sense of the word because they do not facilitate discourse that coheres with the discourse of other users (see also Brown & Yule, 1983; Zack, 1993). Reviews on Allrecipes.com fall into Rafaeli's category of "reactive" communication: they respond to the original discourse, in this case a recipe, and refer only to that discourse. Reviews in sites like Epinions.com differ slightly in that its reviewers do not respond to a common, online text, like Allrecipes.com reviewers do in

responding to an online recipe. Rather, Epinions.com reviewers respond to a shared experience with a product or service, a product or service that resides outside of the site.

Sites that allow online reviews have varying levels of rigor in their editorial policies aimed at warding off objectionable content. Allrecipes.com screens reviews with an automated tool that deletes reviews containing obscene terms. Then, the remaining reviews are assessed by editors for "inappropriate" content. Of these reviews, Allrecipes editors find less that 10 percent require editing, and they delete less than 5 percent. Indeed, just 0.5 percent of reviews are so egregious that it is necessary to delete the user's account ("Allrecipes.com's Recipe Review Approval Policy" 2006). Thus, given that editors intervene in the review process, reviews on the Allrecipes.com site are mediated by careful watching and filtering.

In contrast, reviews on Epinions.com are not assessed by human editors. Rather, the site states that reviewers should refrain from using "offensive language or content," in addition to making accurate statements and refraining from plagiarism. Like reviews in Allrecipes.com, though, Epinions.com reviews undergo a language check before online publication.

To gauge possible positive bias in the 640 Allrecipes.com and Epinions.com reviews, frequencies of star ratings, such as 5-star ratings, were tallied.

RESULTS OF RECIPE REVIEW ANALYSIS

The results of this study correspond with Chevalier and Mayzlin's (2006) findings in their study of book reviews on Amazon.com and Barnesand-Noble.com: based on reviewers' star ratings from Allrecipes.com and Epinions.com, the reviews in the present study were overwhelmingly positive. In fact, 507 reviews (79.1 percent) assigned a 4-star or higher rating, and 309 (48.2 percent) assigned a 5-star rating, as Table 1 shows.

Table 1 also shows that in terms of 5-star ratings, reviews from Allrecipes.com were more frequently positive than the Epinions.com reviews of riskier products: 174 of the Allrecipes reviews assigned 5-star ratings (54.3 percent), whereas 135 (42.1 percent) of the Epinions.com did the same. This result may stem from Epinion.com reviewers' ability to use a more nuanced rating system. That is, Epinions.com reviewers could rate products on several scales, and those ratings factored into an overall rating, an overall rating that could manifest a half star (e.g., a 4.5-star rating).

Even so, both sites contained mainly positive reviews. In Allrecipes.com, 273 recipes (85.3 percent) received either a 4 or 5-star rating; in Epinions.com, 234 (73.0 percent) received a 4-star or higher rating. In addition, less than 3 percent contained a 1-star rating. Table 1 shows the results.

In addition, in the sites' combined reviews, only 29 contained 1-star or 1.5-star ratings (4.6

Table 1. Star ratings of recipes in online reviews

Star rating	Allrecipes		Epinions		Overall	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
5	174	54.3	135	42.1	309	48.2
4.5 – 4	99	31.0	99	31.0	198	31.0
3.5 – 3	27	08.4	47	14.7	74	11.5
2.5 – 2	11	3.4	19	6.0	30	4.7
1.5 – 1	9	2.9	20	6.2	29	4.6
Total	320	100.0	320	100.0	640	100.0

percent). Epinions.com reviewers, reviewing higher risk products, were more likely to give low ratings, a result that stems from a stronger sense of responsibility for users' decisions about higher-risk products. Just 9 (2.9 percent) of the Allrecipe.com reviews contained one star, but 20 (6.2 percent) of the Epinions.com reviews displayed 1- or 1.5-star ratings.

Clearly there was a bias toward positive reviews in both the Allrecipes.com and the Epinions.com samples. One example is dc01039's 5-star, positive review of a 42-inch Haier plasma television. He or she gave the recipe in a 5-star rating and wrote this review:

I mounted on my LR wall yesterday, hooked up a new Sony Surround DVD system, and the picture quality and color are absolutely stunning with a DVD. I haven't hooked up my Dish network to it yet, but it should be good also. I have a 2006 Samsung 47" LCD Projection TV sitting right next to it that I have been watching for 8 months or so...and there is no comparison. The Samsung is great for a projection TV, but the Haeir just blows it away. The color is super! I highly recommend this one. The remote is a little cheesy and there is NO tuner, just component inputs, one for the DVD, and the other for Cable or Satellite...but what the hey, the price of $1399.00 at Sears was fine. This model 42EP24S has great specs, even though it is only EDT instead of HDTV, I tell you the picture is really crisp and sharp. Save your money for something else!

In contrast, texascorner08 wrote a rather negative review of the recipe for Roll About Sugar Cookies, giving the recipe a 1-star rating:

This dough was very sticky and hard to work with. I had to add extra flour. I thought the cookie had a bitter taste to it. I used a lot of frosting in order to cover up the bitter taste!

Evaluations and their commonly concomitant justification and explanation appeared in nearly all reviews, positive and negative. Both dc01039 and texascorner08 justify their reasons for their star ratings and their evaluations; dc01039 says the television's color is "super" and its picture is "crisp" and "sharp." Texascorner08 says the recipe creates something that is "sticky."

Reviewers of these products—products involving very different levels of consumer risk—displayed positive bias in their reviews. The next section explores differences in how reviewers of low-risk products like recipes and high-risk products like tour services displayed credibility.

METHODS OF ANALYZING CREDIBILITY OF ONLINE REVIEWS

Myriad factors determine the extent to which consumers consider a source of information about a product or service to be credible. In studying third-party testimonials, Bart, Shankar, Sultan, and Urban (2005) found that among other factors important in generating source credibility, frequency of contact between the reviewer and the consumer and similarity between the reviewer and the consumer (e.g., in social class or gender) strongly influenced readers' perceptions of credibility. Because online reviews are anonymously written, such determiners of credibility were not available. To gauge credibility, this study relied instead on the language of the reviews. The extent to which a text appears to have been carefully written is an important contributor to its author's credibility (e.g., Anderson & Kleine, 1988; Canavor & Meirowitz, 2005; Petelin, 2002). Thus, to operationalize credibility, this study used the extent to which reviews showed certain characteristics of edited language, which is associated with written language, as opposed to less-edited language, which is associated with

Figure 2. Language characteristics used to operationalize credibility

More Edited

- planned content
- prescription-adhering grammar
- low-frequency vocabulary
- correct punctuation
- correct spelling

Less Edited

- spontaneously created content
- prescription-breaking grammar
- high-frequency vocabulary

spoken language (see Biber, 1988, Crystal, 2001, Walker, 2001). Four online reviews were examined for these characteristics, which are listed in Figure 2.

According to Crystal (2001), Walker (2001), and others, spoken language, language that is usually less edited than written language, tends to be informal and spontaneously created (or less planned). Because online reviews can be generated spontaneously, they may contain spelling and punctuation errors, and they may break prescriptive rules of grammar, such as "do not split infinitives" or "do not end a sentence with a preposition" (Mackiewicz, 2003; Riley & Parker, 1998). Online reviews also can be composed entirely (or almost entirely) of high-frequency vocabulary, words that get used most often in a language. In the case of English, a few high frequency words are "know," "next," and "three" (Fry, Kress, & Fountoukidis, 2004). These characteristics suggest that a review was generated less carefully than those that manifest more characteristics of careful editing.

Written language is more likely to be edited, and reviewers likely use more careful editing when they are attempting to generate trust and construct credibility. One important characteristics of edited language is that it is more likely to follow "the codification of rules in grammars, handbooks and style guides," a codification that "encourages people to believe that if they follow such rules they will be doing the right thing" (Walker, 2001, p. 35). When writers feel pressure to create credibility via editing, their writing is likely to demonstrate concern for spelling, punctuation, and prescriptively correct grammar. In relation to prescriptive rules, for example, edited language is more likely to follow the rule about using the subjunctive "were" instead of "was" in a hypothetical statement, such as "If I were going to teach a grammar class, I would …." These language characteristics imply more careful consideration of in generating a review and thus constitute one framework for operationalizing credibility.

RESULTS OF ANALYZING FOUR REVIEWS FOR CREDIBILITY

This section of the chapter analyzes four online reviews—each requiring a different level of credibility from the reviewer because of the trust required from the consumer.

A(nother) review of a recipe. This analysis of credibility in online reviews begins with another recipe review. This 5-star review of Banana Banana Bread displays many characteristics of speech and a relative lack of editing:

MOOOOOOVE OVER GRANDMA'S RECIPE….. here comes the new traditional banana bread recipe that will go down in your family generations to come!!!!!! MOIST MOIST MOIST! I knew if I kept looking I'd find the ultimate banana bread recipe! We ate 1/2 the loaf when it came out of the oven and my 3 and 4 year old girls were pushing eachother to get to the pieces on the plate!

I added 1/2 tsp baking powder, 1/2 tsp nutmeg and 1 tsp vanilla. Next time I make it (tomorrow :D) I'll be adding 1 tsp of nutmeg and same of cinnamon... just to give it a different flavour. I'm giving this recipe 5 stars because it's the BEST BASIC RECIPE I have ever found! I also set a timer for 40 minutes and losely placed a tin foil over the bread as I don't like crusty banana bread. This was perfect. Total time of baking was: 70 minutes Well, well, well, worth it. Bravo Shelley! (ps... it took 5 large bananas)

This review by Lebanese Cuisine appears to have been spontaneously created. That is, it is not organized in any particular order or around a central theme. For example, a sentence about the reviewer's search for a good banana bread recipe is followed by a sentence about how much of the bread the family ate. That sentence is in turn followed by a sentence about the ingredients that the reviewer added. It seems that Lebanese Cuisine made no attempt to subordinate ideas or to group them.

The reviewer's lack of editing is evident in his/her punctuation errors, such as the lack of a sentence-ending period after "70 minutes," as well as in spelling errors ("eachother," "losely").

This recipe review displays few of the characteristics of edited language that help generate credibility. In short, the reviewer has not signaled credibility to establish readers' trust, but this finding is not very surprising given that it is a review of a product that brings little risk to the consumer. That is, reviewers' drive to signal credibility may not be strong, given that readers do not have much at stake in the product being reviewed.

A review of a camcorder. As noted before, many reviewers write about rather expensive electronic equipment, such as camcorders. Such reviews appear commonly on Web sites created specifically for the purpose of displaying online reviews, such as RateItAll.com. That is, the main content of RateItAll.com is reviews. One reviewer with the username Lavender slug wrote a review

of a Sony CCD Series camcorder on that review site and his/her review displays just of few characteristics of careful editing:

This camcorder is small and light which makes it easy to carry to all candid camera moments. You can flip the screen out and around and replay the moment to an audience right after it was recorded. There are features such as backlight and night shot which allow for the best picture at any given time.

The review, like Lebanese Cuisine's review of a banana bread recipe, shows little content planning; the review is not organized in any particularly beneficial way, such as around an overarching evaluation, and it does not indicate importance of the camcorder's features, such as its ability to do night shots. It breaks the prescription of using "that" rather than "which" in a restrictive relative clause ("backlight and night shot which allow"), but this prescription is fading from common usage anyway (Mackiewicz, 2003).

That said, the jargon terms like "night shot" and "backlight" are fairly uncommon in everyday language and help create credibility.

This analysis accords with the far greater risk involved in trusting a review of a camcorder versus trusting a review of a recipe. Consumers seeking information about camcorders are more vulnerable than those seeking information about a recipe, even accounting for the ingredients and time recipes can require. To rely on information about a camcorder requires far greater "perceived credibility and benevolence of a target of trust" (Doney & Cannon, 1997, p. 36). It makes sense, then, that this reviewer would use more edited language.

A review of a tour guide service. At Epinions.com, reviewers can rate not only electronics and computers, but also nearly any product or service, including service providers like tour guides. The Epinions.com review below, written by the reviewer sewell1591 about a tour service

in Beijing, China, is longer than the Allrecipes.com and RateItAll.com reviews (and hence has been shortened from the original; ellipses mark the places where words have been cut):

I've made several trips to China, including Beijing, over the past 3 years, including tour (with a different operator) and independent travel. For this trip (March 2005), I selected General Tours (GT) to coordinate with friends who'd already booked with them and to give GT a try.... We were met, as promised, just outside immigration at the Beijing airport by a representative of GT, who spoke very good English and had us whisked off to our hotel right away. We stayed at the Prime Hotel, at the northern end of Wangfujing, about a 10 minute walk from the main shopping district and convenient to restaurants My group had scheduled some extra days, and the extensions were at the same rate at the hotel as on the tour and were quite reasonable. Some members took advantage of a $400 add-on and took a day trip to Xian, which included transfers to and from the airports, guide services in Xian, roundtrip airfare from Beijing, and lunch. All reported this to have been a good value and well handled. . . . The only problems experienced were related to the reservations system, which I primarily did over the phone. There was some confusion about coordinating with other members of my party and the exact days we'd be touring. It all got worked out once we got to Beijing, but GT contracts with CYTS in China for the guides. This results in some difficulties when last minute issues arise before departure. When I reported these problems in a followup after the trip, GT was very apologetic and provided an extra travel credit for another trip. I was satisfied with the professional and speedy way they acknowledged the glitch and feel they have likely taken steps to eliminate the issue in the future. . . . I'm very satisfied with GT and would recommend them to anyone wanting a tour in China! I plan on using them again, myself.

In terms of its editing, this review contains spelling errors ("knowlegable" and "followup"). It also uses mostly high frequency vocabulary; however, it also contains low frequency words, place names, like "Wangfujing" and "Xian." These uncommon words help generate a credible ethos; they build and sustain readers' trust.

In addition, this review displays far more content planning than the two other reviews analyzed thus far in this section; sewell1591 seems to have organized the review by content type. First, the reviewer relates his/her prior experience in China and with other tour services. Then, the reviewer groups positive evaluations together (e.g., the GT representative "spoke very good English" and the prices of extensions were "quite reasonable"). Then he or she explains the negative evaluation (i.e., there was "some confusion" about the tour dates). Finally, sewell1591 concludes with an overall evaluation of the tour: "I'm very satisfied…" In ending with a general, positive evaluation after stating and explaining a negative evaluation, the reviewer follows a review pattern seen in other discourse genres in which one participant evaluations: face-to-face tutoring interactions (Mackiewicz, 2005) and academic book reviews (Mackiewicz, 2007). Besides the organization of its content, judging by sheer number of words, this review took more time to write than the shorter recipe and camcorder reviews, suggesting the reviewer's altruism and, thus, credibility.

A review of a book. It is interesting to contrast a longish review of an expensive tour of China with a review of a rather inexpensive product such as a book. As noted before, more expensive products and services generate more consumer risk, and this increased consumer risk might lead reviewers to establish and maintain credibility by using edited language. It seems, though, that book reviewers might employ editing in ways that surpass the risk inherent in the product. If online book reviews manifest more careful editing than

the risk of the product requires, it may be for one of two reasons: first, book reviews—as opposed to most other product reviews—have a rich scholarly history, manifested in their frequent occurrence in newspapers like New York Times and magazines like Harper's Bazaar. Even people who do not read the book reviews in these venues are aware that professional writers generate reviews for such venues. Second, and perhaps more importantly, lay people who write book reviews for Amazon.com or other sites may attempt to establish credibility because they want to maintain a credible identity in ongoing participation within the online community. In fact, in the Amazon.com reviewing community, reviewers earn "badges" such as "Top 1000 Reviewer" for contributing reviews that other users designate as "helpful."

Unlike the other reviews analyzed in this section, H. F. Corbin's Amazon.com review of John Irving's novel Until I Find You shows many signs of careful editing. It not only shows planning, such as the planning manifested in its organization, but also in the research needed to write it (ellipses mark the places where words have been cut):

John Irvin's new novel UNTIL I FIND YOU covers the life of the protagonist Jack Burns from the age of four until his early 30's.... Jack spends over 800 pages searching for his absent father. As you would expect from an Irving novel, it is replete with literally dozens of extraordinary (a nice word for weird) characters.... I won't give away much more of the wondrously convoluted plot here.... Mr. Irvin has said that parts of the novel are autobiographical. For instance, he never met his own father; and he said in a recent newspaper interview that he first had sex with an older woman when he was only eleven. . . . While the book may appear univiting by its sheer size, the 800 plus pages actually fly by rapidly for the most part. If you are wondering if Mr. Irving can tie up all the loose ends with so many characters and story lines, indeed he does and very well. He pulls out all the stops about 500 or so pages into

the novel and holds the reader hostage for the remainder of the book.... Mr. Irvin is famous for his repetition of words and phrases throughout his novels. There are many here: "Not around Jack," "Sleeping in the Needles," "It's a good job to lose," etc. Having finished Tom Wolfe's latest tome recently, as I read the last two hundred or more fantastic pages of this novel, I keep thinking: "Mr. Wolfe, you're no John Irving."

To support his argument about Updike's book, H. F. Corbin has counted (or estimated) numbers of pages to discuss the book's content (e.g., "Jack spends over 800 pages searching for his absent father" and "about 500 or so pages into the novel"). He or she has also, it seems, roughly counted the number of characters in the book ("literally dozens"). Also, this reviewer does not just discuss Irving's book, but he or she also discusses comments that Irving made in other venues (i.e., Irving's comments about his early sex life in a newspaper interview). Perhaps most importantly in terms of planning and establishing a credible ethos, H. F. Corbin shows familiarity with what critics have said about Irving's work (i.e., "famous for his repetition of words and phrases"); then, he continues on to support his statement with evidence of a repeated phrase: "'Not around Jack.'"

The review also contains some low-frequency words that signal careful word choice: words like "replete" rather than "filled," "remainder" rather than "rest," and "tome" rather than "book." Unlike the low-frequency words in the other reviews, these words are not specialized, words that are useful mainly in a restricted context and with a particular audience. Rather, these words are less common variants of words that are relevant to most any context.

In short, this book review displays more characteristics of edited language than the other reviews; even so, it displays a few characteristics of less edited, speech-like language too. In particular, the reviewer interestingly seems not to

have edited the review for spelling errors. Most egregiously, the reviewer has misspelled Irving's name ("Irvin" but note also "univiting"). This Amazon.com book reviewer did more in terms of language characteristics to establish credibility than the consumer risk invited. This analysis suggests that consumer risk is not the only motivating force behind a reviewer's displays of credibility: the history and conventions of the genre—such as the book review genre—will influence the reviewer's language choices as well.

To sum up the findings of this section, reviewers may not be concerned with spelling and punctuation errors: three of the four reviews examined here display such errors. That said, reviewers of higher risk products used some low-frequency vocabulary, such as jargon and place names, but also uncommon words (like "tome") that have come common synonyms. Finally, the reviews showed differences in the extent to which they had been planned. These findings indicate that reviewers may increase the thought and care they use while editing in part to convey credibility.

CREATING CREDIBILITY WITH SIGNALS OF EXPERIENCE AND EXPERTISE

This analysis has shown that writers of online reviews use a variety of language strategies related to editing to create credibility. It is important to point out that besides these characteristics, online reviewers establish credibility by asserting their experience with a product or service or expertise in a topic related to the product or service. To justify their evaluations, whether positive or negative, reviewers asserted their expertise—their right to make claims: for example, in a review of Broiled Tilapia Parmesan, ELVIS PRESLEY 99 relayed that he or she had made the recipe not just once, but several times:

Simply delicious. Made this for my sister-in-law who swears she cannot stand fish...ANY KIND... but she was willing to give it the ol' college try to see if her tastes had changed. She loved it so much she went back for 2nds. This is the 3rd time I have made this, and it turns out great every time. Thanks for a great recipe.

In asserting experience with the recipe ("This is the 3rd time I have made this"), ELVIS PRESLEY 99 indicated that readers could trust his/her evaluation. It is interesting that recipe reviewers like ELVIS PRESLEY 99 note their experience in the same way that reviewers of more costly—and thus more risky—products do. That they point out their experience attests first to the usually cost of testing recipes, but it also attests to reviewers' sense of themselves as establishing and maintaining an identity, particularly an expert identity, within an online community.

In his or her review of General Tours, sewell1591 constructed the same credibility display. He or she begins the review by noting that he or she has traveled to China before ("I've made several trips to China, including Beijing, over the past 3 years") and by noting that he or she used a tour on one of those previous trips ("including tour (with a different operator) and independent travel"). This background knowledge establishes sewell1591's qualifications for reviewing.

Experience and its related expertise also played a role in H. F. Corbin's review of Updike's book. As H. F. Corbin discusses other sources of information related to Updike, he/she constructs an expert identity—the identity of a person who knows more than the book itself but also what critics have said about Updike. As with ELVIS PRESLEY 99's experience with the tilapia recipe, such statements of expertise are likely intended to instill trust. In discussing these outside sources of information about Irving's life and writing, H. F. Corbin gets the added benefit of signaling that

he/she has some expertise in relation to Irving's writing and thus can be trusted in his/her evaluation of this book at least and perhaps other books as well.

Clearly, just as reviewers create credibility with edited language, so too do the create credibility by displaying experience and expertise. Of course, the extent to which reviewers see themselves as part of the CMC community in which they have written their review will influence the extent to which they establish and maintain credibility.

CONCLUSION

This chapter analyzed an emerging variety of CMC—laypeople's online reviews of products and services. It examined of 320 recipe reviews and 320 reviews of electronics and computers to determine whether the reviews manifested the positive bias associated with self-selection of reviewed products and services (Chevalier & Mayzlin, 2006). The recipe reviews strongly displayed a positive bias: over 79 percent assigned 4-star or higher ratings, and over 48 percent assigned a 5-star rating. Thus, reviews of both low-risk and high-risk products generated the positivity effect.

This chapter also closely examined four online reviews to determine the extent to which they displayed characteristics of written language, namely characteristics of careful editing, which help create credibility. Analysis of these four reviews revealed spelling and punctuation errors, suggesting that the reviewers did not consider incorrectness in spelling and punctuation to be a threat to credibility. However, two of the four reviews displayed some planning in terms of organization. Indeed, one of these, a review of a book, suggests that reviewers of literary and artistic products that may write reviews that manifest edited language to a greater extent than the risk of their product demands, and reviewers may gain the concomitant credibility. Further research could investigate the

effect of culture—such as literary culture—on the way that reviewers signal credibility.

This analysis revealed some other language characteristics that might help determine the extent to which reviewers signal or fail to signal credibility, such as using emoticons (e.g., :D), which have been discussed previously in CMC literature (Krohn, 2004; Walther & Kuc 2001). The reviewers also used humor, such as Lavendar slug's reference to "candid camera moments," a comment that implies potential buyers might like to record practical jokes or other embarrassing moments. Identifying humor could help determine the extent to which reviewers planned their reviews. Besides spelling and punctuation errors, reviewers also employed spelling and punctuation in unconventional ways to achieve their aims. For example, Lebanese Cuisine's review of banana bread contains unconventional spelling (e.g., MOOOOOOVE) and punctuation (e.g., !!!!!!). That is, the reviewer used repetition of orthographic symbols for emphasis. Other reviewers achieved the same effect via repetition of words, such as "Yum, yum, yum." Identifying such repetitions could facilitate analysis of careful editing.

In sum, this study suggests that through their reviews, reviewers may indeed manifest a bias toward positivity. Even so, the reviews allow them a chance to affect the world (efficacy) and help others (altruism). To demonstrate credibility, reviewers may rely more on carefully edited language and may signal their expertise. Further analysis can investigate the extent of positive bias in other review Web sites as well as signals of reviewer credibility. People will likely not do the majority of their interacting with others via online reviews of consumer products, as the headline in The Onion announced; that said, this emerging variety of CMC is worthy of much further analysis as reviewers use it to change the world around them, help others, and at the very least, get people to pay attention to them.

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KEY TERMS

Altruism: Unselfish, charitable concern for others; benevolence.

Credibility: Believability; the state of being perceived as worthy of trust.

Efficacy: Power or capacity to produce a desired result or effect on the world.

High-Frequency Vocabulary: Words that commonly manifest themselves in a language, such as "are," "the," "above" in English.

Interactive Communication: Simultaneous and continually occurring messages that account for the manner in which previous messages react to other messages.

Low-Frequency Vocabulary: Words that uncommonly occur in a language, such as "apopemptic," "diaphoretic," and "rebarbative" in English.

Positivity Effect: The probability that a person who chooses a product or service and then evaluates or rates it will rate it higher than others in the general population because he/she sought it out in the first place.

Prescriptivism: A view of language that says norms and standards for correct and standard usage can and should be set and followed. The rule against ending a sentence with a preposition is an example.

Reactive Communication: A message sent by one discourse participant to address a message from another participant.

Risk: Perceptions of uncertainty and adverse consequences of engaging in an activity.