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Assertions of Expertise in Online Product Reviews

Jo Mackiewicz[1]

Abstract

In online consumer reviews on Web sites such as Epinions, laypeople write and post their evaluations of technical products. But how do they get readers to take their opinions seriously? One way that online reviewers establish credibility is to assert expertise. This article describes 10 types of assertions that online reviewers used (along with the three broader categories of these types), explaining the method used to test the types for reliability. This testing revealed that the types are reliable. This study lays the groundwork for understanding how reviewers construct expertise and, therefore, credibility and for gauging readers' perceptions of reviews that contain these assertions.

Keywords

consumer reviews, credibility, expertise, online reviews, product reviews

With the advent of Web 2.0, the interactive Web, people expect Web sites to allow them to interact with the site content and with other users. People expect to be able to voice their opinions. Nowhere on the Web are people's opinions more evident than in Web sites that specialize in reviews of

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products and services, sites such as Epinions (www.Epinions.com). At Epinions, laypeople submit reviews of thousands of diverse services and products. For example, reviewers evaluate the services of travel agencies and florists. Most reviews, however, are of products, such as laser printers, lawn mowers, dollhouses, video games, and golf clubs. Here is a short review of a digital camera, the subject of the online consumer reviews that I examine in this article. The reviewer, compwhiz67, begins by asserting her experience with the camera. (Here and throughout, I use feminine pronouns in referring to Epinions reviewers.) That is, compwhiz67 asserts the length of time she has used the camera and number of pictures she has taken with it:

> I purchased this camera about 7 months ago for 984.00. I have already taken around 15000 images with this camera. It still works just as good as when I got it . . . . With its very durable magnesium alloy chassis it will stand up to some abuse and is splashproof and dust proof. Sensor dust is only a mild problem with this camera as the flourine coating makes all you have to do use a blower (such as the rocket blower) . . . . I recommend this as an all around semi-professional camera that would be good for any amateur or semi-pro photographer. If you're looking for a camera with all the features that the pros use this is the one for you. It will take professional quality images that will wow anyone who looks at your images.

In this review, as in many other online reviews, the reviewer begins by asserting her qualifications to evaluate the product. In this case, compwhiz67 asserts that she has owned the camera for some time (7 months) and that she has taken quite a few pictures with it (about 15,000). With such assertions, online reviewers relate the relevant expertise they bring to the evaluations that their reviews contain, constructing a credible persona and providing reasons that readers should take their reviews seriously (Richardson, 2003, p. 172). Indeed, after these assertions, compwhiz67 evaluates the camera (using some technical terminology such as ''fluorine'') and recommends the camera for a particular subset of readers.

In this article, I describe and discuss 10 types of assertions that online reviewers like compwhiz67 used to tell (as opposed to show) readers about their expertise. Reviewers' character and good intentions are components of credibility, but credibility requires knowledge (i.e., expertise) too. Given the need to examine reviewers' construction of an expert persona and given the challenge, as Beason (1991) stated, ''in deciding what does *not* qualify as an appeal to a communicator's character, knowledge, or good intentions'' (p. 327), a reliability measure is important. I explain the method by which I tested the 10 assertion types for reliability. With this study, I lay the

groundwork for understanding the effects of laypeople's reviews of products, particularly technical products, on readers—potential consumers of those products. Then, with reliable assertion types, we can examine readers' assessments of reviewers' expertise and, thus, credibility. In addition, this study prepares us for understanding the relationships between those assertions and other variables related to expertise, such as reviewers' use of specialized terminology, and allows us to examine the positivity or negativity of reviewers' evaluations in relation to the strength with which they assert expertise. My goal is to build on this study, examining the extent to which reviewers use certain types of assertions of expertise when negatively evaluating a product and the extent to which readers judge reviewer evaluations to be more or less credible based on the type of expertise the reviewer asserts. In short, this study takes a step toward gauging laypeople's evaluations of technical products and the effects of those evaluations on readers.

The Purposes of Online Reviews

In online reviews of products and services, laypeople write and post their evaluations on Web sites such as Epinions, and the goal of such product-review Web sites is clear: to help people "make informed decisions" (*About Epinions*, n.d.). Other review sites such as Rateitall.com and Yelp.com serve similar purposes. According to Chevalier and Mayzlin (2006), the online reviews that laypeople post to such sites "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).

By providing a forum in which readers can help each other make decisions, review sites help readers lessen the effects of information asymmetry, a common buyer–seller relationship characterized by the seller having greater access to product information than the buyer has (Brynjolfsson & Smith, 2000; Mishra, Heide, & Cort, 1998). In such asymmetrical relationships, consumers are vulnerable to risk (Lee, 1998). When they look at online reviews, they become "naïve scientists" (Folkes, 1988; Mizerski, Golden, & Kernan, 1979) who are attempting "to assess whether the message provides an accurate representation" (Grewal, Gotlieb, & Marmorstein, 1994, p. 147). Online reviews help consumers reduce their perceptions of risk, of the "uncertainty and adverse consequences" of engaging in an activity such as purchasing a product (Wang, 2005, p. 111). Indeed, previous research suggests that if a product is new, such as the latest version of a

digital camera, or if a product must be sensed or experienced to be appreciated, consumers will look more often for the evaluations of others, particularly evaluations that seem credible, in making their purchasing decisions (Holbrook & Hirschman, 1982, p. 134). In sum, such review sites help balance access to product information.

Although the goal of review sites such as Epinions is clear, what motivates people to write reviews is an open question. Reviewers like compwhiz67 are not professional writers like the writers who review books, theater productions, movies, and new cars in newspapers and magazines. Lacking the incentive of a paycheck, these lay reviewers do not have clear motivations. Presumably, they think that their reviews, their recommendations, will receive at least a little attention from some audience. As one contributor to Levitt's (2005) blog noted in a thread about why people use their time evaluating products, "PEOPLE CRAVE ATTENTION." Prior research suggests that reviewers are also likely motivated by efficacy (see, Cabrera & Cabrera, 2002; Kollock, 1994), the desire to make an impact on the world, and altruism (see Mackiewicz, 2008; Walsh, Gwinner, & Swanson, 2004), the desire to help others. By helping readers choose products, reviewers make an impact. They also help readers who own a product avoid potential problems with it. Such altruism is particularly important in light of research showing that a majority of people blame themselves (as opposed to the product itself or its user manual) for problems they have when trying to use a product (Schriver, 1997).

Finally, online reviewers do work—review writing—that may in the long term improve their own lives. As Geisler (2003) pointed out in her analysis of the PalmPilot PDA, work relationships and personal relationships can begin to blur as people incorporate technologies into their lives. This move toward technology-infused lives can create an impulse in people, including online reviewers, to improve those technologies in any way they can, such as by writing online reviews.

Reviewer Credibility

But in the online environment of review sites such as Epinions, the extent of a reviewer's expertise is not certain. Screen names like missgussie and dkozin withhold reviewers' identities, and even if reviewers use names that appear to be real names, readers cannot be certain that these names are the reviewers' actual identities. Indeed, Bennett (1999) claimed that online messages are judged via the question "Who is telling me this?" (p. 4). Given all of this uncertainty, why should readers take seriously

what reviewers write? Or in other words, how do reviewers convey credibility?

Whether consciously or unconsciously, readers of online reviews look for signs that reviewers have credibility, and reviewers convey credibility in several ways. But what exactly is credibility? Although researchers have elaborated the construct of credibility (e.g., Berlo, Lemert, & Mertz, 1969; Kenton, 1989; Munter, 1986), seminal work by Hovland, Janis, and Kelley (1953) and Ohanian (1990) makes clear that *credibility* is essentially a two-part construct. First, trustworthiness generates credibility. People who are considered trustworthy generate in others confidence that they intend ''to communicate the assertions [that they] consider most valid'' (Ohanian, 1990, p. 41). Trustworthiness, then, relates to Beason's (1991) claim that ethos (i.e., credibility) rises out of character and good intentions, as well as knowledge (i.e., expertise). More to the point of this research, though, is the second component of credibility: expertise. When people are perceived to have expertise, they are perceived ''to be a source of valid assertions'' (Ohanian, 1990, p. 41). These ''valid assertions'' are also called ''warranted assertions'' (Schultz, 1964) or ''warranting strategies'' (Richardson, 2003, p. 172) because they supply reasons or evidence for taking a person, such as a reviewer of a digital camera, seriously.

In itself, expertise is complex, as Berlo et al. (1969) delineated in their study of source credibility. They listed criteria by which message receivers evaluated expertise (which they termed ''qualification''), finding four dimensions of expertise that depend on context: trained, experienced, informed, and qualified. For instance, online reviewers might assert that they have no formal training or education related to digital cameras, but they might assert that they have spent time doing online research on digital cameras, thus signaling that they are informed.

Specialized Terminology to Convey Expertise

Besides making assertions directly about their expertise, reviewers can convey their expertise by employing specialized terminology about the relevant topic. Discussing a writer's sense of belonging to an academic community, Ivanič (1998) pointed out that joining and participating in a community involves acquiring the vocabulary of that community. Writers use a ''specialized discourse'' that ''positions its users as interested in the objects of study and knowledge-making activities'' of a certain group (p. 287). In reviews of digital cameras, terms such as *chromatic aberration* and *hot shoe*

and abbreviations such as *EVF* (*electric viewfinder*) and *AF* (*auto focus*) suggest to readers that reviewers know something about the topic. A reviewer's use of the term *aperture* signals not only that the reviewer is informed about the topic but also that the reviewer is intelligent enough to employ a low-frequency word (i.e., a word that occurs infrequently in the language, as compared to *the* or even *camera*). Indeed, use of specialized terminology is one warranting strategy that Richardson (2003) outlined in her analysis of credibility in health-related newsgroups. In conveying expertise via specialized terminology, a reviewer constructs an expert persona—one whose opinion should be taken seriously.

Preconfigurations of Credibility in Online Reviews

Online reviewers also convey that they should be taken seriously through preconfigurations of their credibility (i.e., reputation). According to Beason (1991), reputation is an "extra-textual" variable that shapes ethos; it "precedes the text" (p. 327). In earlier days of online discourse (and still today in some domains, such as Internet newsgroups), contributors could not "rely upon their reputation or upon any prior introduction to underwrite that information" (Richardson, 2003, p. 175). Contributors could not show that others in the community vouched for them, but that is no longer the case. Preconfigurations of credibility do occur in today's complex online discourses. Sites such as Epinions have developed elaborate systems to signal that certain reviewers have proven themselves to be credible. For example, Epinions confers "Advisor," "Top Reviewer," and other status signals on reviewers. Because readers can rate the quality of reviews (very helpful, helpful, somewhat helpful, not helpful, off topic), Epinions can use these ratings to select reviewers to receive recognition, and such comments are another source of information for determining reviewer credibility. The reviews of those reviewers with such status receive more prominent placement and are indicated by a Top Reviewer icon, called a badge. But Epinions also helps readers make decisions about reviewer credibility, via its Web of Trust, through which readers vouch for reviewers' credibility and via reviewer biography pages. Finally, Epinions promotes reviewers' construction of credibility via incentive programs such as Income Share, which pays reviewers for "how often their reviews were used in making a decision" (*Earnings*, n.d.). In short, besides giving financial incentives to reviewers to generate good reviews, Epinions publicly recognizes reviewers who provide useful reviews.

Assertions to Tell About Expertise

Even though these preconfigurations of credibility are available, online reviewers tell readers about their expertise in relation to products. For example, in her review of the Canon EOS 400D, Milesnassah, the reviewer, asserts that she has spent a good amount of her free time learning about photography and, thus, would call herself a ''serious amateur.'' She is a hobbyist, she says, but a devoted one:

> First, a bit about myself. I am a serious amateur and I define that as a person who loves her hobby, spends a moderate amount of money to build a system ... [and], spends adequate time with her equipment.

Milesnassah's experience, she implied, has provided her with some amount of expertise. She noted this expertise presumably to lend credibility to her subsequent review of the digital camera.

Assertions of expertise have been noted before in the technical and business communication literature. For example, studying collaboration in writing groups, Wolfe and Alexander (2005) showed how (male) students' assertions of technical expertise (in Web design) contributed to their work being highly evaluated and regarded as most important.

Like Milesnassah, online reviewers often begin their reviews with an assertion of expertise, constructing a persona of expertise from the outset. But assertions of expertise do not necessarily appear at the beginnings of reviews. For example, some reviewers, such as kurtles, begin by relating a narrative, such as about how they came to recognize their need for the product or service:

> Due to an impending holiday overseas, I was looking for a fairly inexpensive and easy to use digital camera, I didn't think I'd need anything particularly full of feature[s], just something that would take a quick holiday snap, and for use at parties and special occasions. I'm happy to say that the Canon Powershot A300 has lived up to these requirements and more.

That reviewer did not assert her expertise but instead explained why she needed the product. Such narratives, as Jameson (2001) pointed out in her study of managerial communication, can have important persuasive effects. Jameson found that managers ''used histories to influence action'' (p. 489). She alluded to Ricoeur (1983/1984), saying that managers' stories ''made sense only if one understood the implicit temporal connection between the past and the future; that is, they talked about the past, but their unstated focus was the future'' (p. 489). Similarly, reviewers link the future (their

readers' potential purchase and use of the product) and the past (their own history with the product). In fact, some reviewers go further, explicitly stating their intent to relate a story about their need or want of the product or service. For example, one review begins, "My little history of why I went digital . . . ." Such narratives may help construct credibility to the extent that they create trust. After reviewers relate these narratives, they often move on to an assertion of expertise.

Indeed, online reviewers value expertise so much that they may explicitly acknowledge when they lack it, as myeopinion4u did:

> I am not an expert on digital cameras or digital photography and this review is not intended to suggest otherwise.

In making clear her own lack of expertise, the reviewer acknowledged that knowing something about the subject matter under review adds value to what the reviewer has to say. Of course, reviewers' assertions of nonexpertise lend them a sort of credibility too—credibility that comes from being sincere and similar to the audience to which the review is intended, people who are new to taking digital pictures (see Pornpitakpan, 2004, for an overview of similarity and other components of credibility). Also, when reviewers acknowledge their lack of expertise, they signal that readers can trust them.

Clearly, online reviewers are aware of credibility and its importance. In the sections that follow, I describe my analysis of reviewers' assertions of expertise.

Methods

My purpose in classifying assertions of expertise was to gain an understanding of laypeople's descriptions and evaluations of technical products—laypeople's technical communication. My long-term goal is to study the relationship between reviewers' credibility (expertise and trust) and their politeness (in their criticism and suggestions).

I developed and revised types of assertions of expertise through analyzing over 750 online reviews of electronic products, such as global positioning (GPS) systems, camcorders, voice recorders, and digital cameras; then I focused on digital cameras in order to add an analysis of specialized terminology to the present study. I looked for reviewers' explicit statements of reasons that readers should take their opinions seriously. Digital cameras constitute a particularly interesting product on which to focus. Because they are technical tools, they generate reviews that display extended coverage of quite technical subject matter to a far greater extent than services, such as

guided tours, or products, such as books, do. Reviews of digital cameras make explicit Durack's (1997) argument that technical communication occurs everywhere and that ''placing it strictly within the workplace denies . . . a larger past—and future—where the household is a primary location for the economically productive activities of women and men'' (p. 257). Laypeople's reviews influence the economy by helping readers (consumers) gain information symmetry with product sellers.

I tested these assertions of expertise for reliability with five raters. Although the types of assertions may not be comprehensive, particularly across the vast variety of products reviewed online, they achieve a breadth of coverage of the kinds of assertions from which reviewers choose in telling their readers about their expertise. After analyzing the results of the interrater testing of the types, I derived 10 types of assertions of expertise, which are listed in Table 1, and placed them into three broader categories based on previous research on credibility (e.g., Berlo et al., 1969; Richardson, 2003). Table 1 also presents both a constructed example and a natural language example of each assertion type.

Then, four new raters read 40 assertions of expertise that were excerpted from online reviews of digital cameras, and these four raters assigned each assertion to 1 of the 10 types. In this test, all four raters agreed on the types of 33 of the 40 assertions (82% agreement), which is a sufficient level of type reliability. Of the 40 rated assertions, 6 achieved agreement from three of the four raters. Only 1 assertion achieved agreement from just two of the four raters.

Categories and Types of Assertions of Expertise

While developing the types of assertions and testing them for reliability, I realized that the assertions tended to fall into one of three broader categories: (a) assertions of product-specific experience, (b) assertions of familiarity with related and relevant products, and (c) assertions of a relevant role, which related to the expertise subcategories of Berlo et al. (1969): trained, experienced, informed, and qualified. In this section, I describe each category and the assertion types it comprises, discussing the apparent strength with which each type can assert expertise.

Assertions of Product-Specific Experience

Perhaps the most obvious category of assertions is the category containing warrants to personal experience. Berlo et al. (1969) noted the experienced

Table 1. Categories and Types of Assertions of Expertise in Online Reviews

Assertion Categories	Assertion Types	Constructed Example of a Review of a Canon PowerShot SD400	Natural Language Example Used in the Test Instrument
Assertions of product-specific experience	Regular experience with (using) the product (i.e., regularly using the product over some duration)	I have had my Canon SD400 for about 9 months now and I have been stunned at the difference over my last digital camera.	My husband and I purchased this camera almost 4 years ago and it is still working great. It has taken thousand of pictures over the years.
	Testing of the product (i.e., using it to see what it can do, how well it performs)	I played with this camera extensively at a local retailer, using most of the available modes, including Beach, Sunset, Night, Flower, Landscape, Party, and Portrait. I tried the manual mode to take panorama photos.	I have put my PowerShot SD850 through its paces. I have experimented with a wide range of conditions (light, temperatures, distance) and have been quite happy with my SD850.
Assertions of familiarity with related and relevant products	Familiarity or ownership of previous versions of the specific product under review	This SD400 is the fourth one that I have owned in the PowerShot SD series.	I have owned several cameras in the Canon PowerShot SD series, including the SD750, which I will refer to frequently as it compares to the SD850.
	Familiarity or ownership of comparable product model	I already own several digital cameras, including a Fuji and an Olympus.	After owning digital cameras from Sony (3), Panasonic (3), and Nikon (2), I would have to say that I am very impressed overall with the SD850 as a point and shoot camera.
	Familiarity with the brand and brand's products (as opposed to the specific product under review)	I have used and appreciated Canon products for over 20 years.	I had invested quite a bit of money into Canon Point and Shoot digital cameras so I was most comfortable with Canon products and their quality.

Assertions of a relevant role		
Received or receiving formal training or education relevant to the product	I have been using this camera in the photography classes I have taken these past two years in college.	I have taken many photography classes, and I found out recently that this is an elite camera.
Relevant experience from a hobby (i.e., nonprofessional experience)	I have been taking pictures of friends and family in my spare time since I was young.	I have been a great lover of cameras and the sport of taking pictures since I was a kid. I have always loved going outside just to find those perfect pictures and still do.
Employment in a profession relevant to the product	In my line of work, wedding and special event photography, durability and adaptability are critical.	I do both wedding and wildlife photography and often shoot 1,000 pictures in a session. I need a camera that can stand up to the elements and shoot in any situation. The SD850 never misses a beat.
Association with someone who has expertise relevant to the product	My friend, a professional photographer, told me that this camera captures color well.	The Canon PowerShot SD850 was such a big hit that now my husband (who is a professional photographer) wants one for our casual photos too.
Conducted research on the product (e.g., online research)	I read numerous online reviews and opinions of other cameras before I bought this one.	I researched many different brands, and this camera was the one I chose because it has the features I wanted.

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dimension of expertise in their study of source credibility. And in a study about "establishing credibility online," Richardson (2003) acknowledged that a person (such as an online reviewer) "can reasonably expect to be given some credit for statements about his own observable bodily reactions to the use of the technology" (pp. 178-179). Indeed, researchers in text mining and data retrieval have used product-specific experience to operationalize "opinion quality" (Aciar, Zhang, Simoff, & Debenham, 2007). In my study, reviewers who made assertions that fall into this category explicitly stated that they have experienced (i.e., used) the product being reviewed. Explicitness is important, given that other assertions and indeed much other review content imply that the reviewer has used the product. For example, plumber4578 explicitly states that she has owned and used the Canon PowerShot S5 for about 3 weeks:

> I just bought this about 3 weeks ago and, so far it's great. I haven't had any problems so far.

Of course, the expertise that a reviewer constructs with such an assertion—the reader's perception of the reviewer's expertise—may be related to the length of time the reviewer has been exposed to and has interacted with the product. The reviewer sockdrawer, for example, asserts that she has had her camera for over a year and has used it quite a bit:

> I've owned the G5 for about a year now. I've taken over 2,000 photos, mostly of a couple toddlers around the house and outside. . . . I've used it to take sports photos (soccer) as well as portraits of my kids.

More exposure to and interaction with a product imply greater qualification to provide accurate information about the product. Indeed, Aciar et al. (2007) accounted for amount of reviewer experience in their test of an automatic informed recommender that mines the text of online reviews to produce a recommendation about a product or service.

Close analysis of reviews provides benefits that text mining cannot. For example, close analysis of assertion types reveals that some reviewers do more than assert that they have used the product on a daily basis in a typical manner. Some reviewers assert that they have tested the product, consciously experimenting with the camera to test its limits and potential Missgussie, a reviewer of the Rebel XTi, asserts that she has used the camera in a variety of conditions to see how well it functions in them:

> I have put my Digital Rebel 6mp through it[s] paces. I've experimented with a wide range of conditions (light, temperatures, distance) and have been quite happy with my Rebel.

With such assertions, reviewers signal to readers that they have done investigative work, putting the product "through it[s] paces," and that they are demonstrating goodwill (see Beason, 1991; Munter, 1986) by reporting back their results in order to help readers make good decisions and lower their sense of risk. My finding that reviewers show expertise by detailing their product testing contrasts with the finding of Latour and Woolgar (1986) that scientists signal certainty or a lack of uncertainty by limiting their description of their research testing.

Assertions of Familiarity With Related and Relevant Products

Besides asserting their experience with the specific product under review, reviewers also asserted their familiarity with other related and relevant products, such as earlier versions of the same product model. Also, they asserted that they were familiar with other brands of the same product (e.g., a digital camera). These assertions recall not only Berlo et al.'s (1969) experienced dimension of expertise but also their informed dimension. In my study, reviewers' assertions of familiarity with related and relevant products signaled that they were informed about a wider range of products. For example, reviewers of a Canon PowerShot G5 might assert that they have in the past used a Nikon D40, suggesting that although they may not be an expert with the product model currently under review, their expertise comes from having used another, closely related product. Reviewers also asserted familiarity with different products from the same brand as the product under review (e.g., familiarity with Sony's electronic products in general).

Reviewers stated that they were familiar with (generally, that they owned) previous versions of the specific product (in this case, a digital camera) under review. For example, a reviewer writing about the Canon PowerShot G5 asserted that she owned the G3 and wanted to upgrade. Another reviewer made clear that the Canon PowerShot SD400 was one in a long line of Canon PowerShot cameras that she had owned:

> This camera is the 5th that I have owned in the PowerShot series.

Such assertions signal that the reviewers have a diachronic understanding of the product. Familiar with prior versions of the particular model under

review, the reviewers can relate how the product has changed and, perhaps, improved from one version to another (as opposed to asserting how long they have owned the camera or how often they have used it, as is the case with assertions of product-specific experience).

This kind of longitudinal information is not possible from reviewers who assert expertise based on their familiarity with similar products, such as riw777 did in this review of the Canon Digital Rebel XT:

> I've previously owned multiple point-and-shoot digital cameras, a Canon S410 (which I still use), Olympus C8080, several Kodaks, etc. I've also owned several SLRs in the past, all Minoltas of various flavors.

But this assertion of familiarity—familiarity or ownership of comparable products—signals expertise as well. Indeed, it is a variable used to operationalize opinion quality in Aciar et al.'s (2007) study. Aciar et al. account for the number of different cameras that reviewers claim that they have owned or used. Riw777's assertion, however, does not provide the pointed expertise of familiarity with prior versions of the specific product model being reviewed. Rather, with such assertions as riw777's, reviewers show the breadth of their familiarity and thus their expertise.

A different flavor of this familiarity type of assertion is that of reviewers' assertions of familiarity with the manufacturer's brand and that brand's products in general as opposed to a specific product (e.g., a specific digital camera) from that brand. Prior research shows that brands have a strong impact on consumer behavior because consumers associate certain brands with reliability and quality (e.g., Erdem & Swait, 1998), and brands have been shown to have a strong effect on buyers' perceptions of products (e.g., Resnick & Zeckhauser, 2002). In studying shopbots that collected search results from online book retailers, Smith and Brynjolfsson (2001) found that customers care "a great deal" about brand (p. 556). I found that reviewers asserted expertise on the brand's quality—knowledge that encompasses more products than the one under review. For example, yusakugo began her review by making clear that her expertise stems from being "comfortable" with Canon:

> I had invested . . . quite a bit of money into Canon Point and Shoot digital cameras so I was most comfortable with Canon products and their quality.

By asserting their familiarity with relevant and related products, reviewers signaled that their reviews were informed by a broader knowledge that pertains to the specific product under review.

Assertions of a Relevant Role

To signal that their reviews should be taken seriously, reviewers constructed an identity for themselves that included a role particularly relevant to the product: student, hobbyist, or professional. Aciar et al. (2007) used "professional" as a level in operationalizing consumer skill—another variable that they used to assess the review's opinion quality. Such identity construction falls under Berlo ed al.'s (1969) dimension of qualification. Parting from findings of prior research, though, my study showed that reviewers asserted other, less straightforward roles, too—those of instant expert and secondhand expert—both of which I explain later.

Reviewers asserted that they were receiving relevant formal training or education. For example, reviewers asserted that they either had taken or were in the process of taking classes in photography, as ueadian did:

> I've had it for about 2 months now and I am using it in my college photography class.

Beason (1991) exemplified this same kind of expertise, but her study lumps such assertions together with other "appeals to expertise" (p. 337). In one example, taken from a conference speech by an AT&T division manager, the speaker appealed to technical instruction in school: "I just returned from a computer course at MIT" (p. 337). With such assertions, reviewers explicitly stated that they had formal training that placed them in an expert role. Some products lend themselves to reviewers' appeals to their formal training better than others do. For example, the cell phone is not a typical classroom technology or artist's tool.

More commonly, though, reviewers asserted that they were hobbyists. In this study, reviewers described their experience as amateur photographers. For example, lucie30, reviewing an Olympus Camedia D-360L, explains how she had been interested in photography years ago and lists the accoutrements of photography to support her claim:

> Many years ago, I was deeply in 35mm photography. I had a full gadget bag with several lenses, filters, sunshades, reflectors, flashgun, tripod, exposure meter, and of course several different cans of film. I also had a darkroom with an enlarger and all the chemicals and trays. I even had a developing tank and a place to hang drying prints. Now all this was just for black and white photography. Today, I've replaced all that with a few ounces of fully integrated digital camera that easily fits in a pocket.

As with the duration and amount of the reviewers' product use (in the experience category), the duration and depth of reviewers' hobby experience tempered the expertise that they asserted. Lucie30's description of the duration and depth of her hobby suggests greater expertise in photography than do other reviewers' hobby assertions. That is, not all hobbyists assert that they have been engaged in photography (or some other hobby relevant to a different product) for "many years." No matter the duration of their hobbyist experience, though, these reviewers constructed not only an expert persona but also a trustworthy one. A person who loves and engages in a hobby is motivated by love of the activity, not by money, and thus love of the activity can translate to good intentions and trustworthiness. The detail with which lucie30 describes her hobby supports her claim of having a strong hobbyist's interest in photography and lends her credibility even though her expertise does not extend to digital cameras.

Besides asserting a hobbyist role, reviewers asserted that they are professionals (e.g., professional photographers) in a field relevant to the product. Some research suggests that relevant professional status affords credibility in a way other roles do not. For example, in a study of behavioral change based on information from a source titled "Mr." versus a source titled "Dr.," Crisci and Kassinove (1973) found that compliance varied directly with the perceived level of expertise that the courtesy titles suggested. According to Sarangi and Clarke (2002), who studied uncertainty in risk communication, people who assert professional status claim greater legitimacy and "institutionally sanctioned" authority (p. 141). Also, in asserting a professional role, reviewers differentiated themselves from other reviewers by implying that they possess uncommon, specialized knowledge. For example, liarphoto, reviewing a Fuji Finepix S7000, asserts that she is a professional photographer:

> I'm more of a studio/portrait photographer, and so far this camera [has] been . . .
> nice even though I'm used to medium format film. I've been really impressed
> by the way it handles color and light, even skin tones and reds are nice.

Liarphoto's assertion that she works professionally as a "studio/portrait photographer" lends credibility to her assessments of skin tone, color, and light in pictures taken with the camera.

Reviewers' assertions of professional expertise may not have the intended effect on readers, however. Vermeulen and Seegers (2009) tested the perceptions of travel reviews written by "a former hotel manager and six-year veteran hotel reviewer" and "a secretary." They found that

reviewer expertise had only a limited effect on persuading participants to book a hotel room. The experts' reviews did not change participants' attitudes toward hotels any more than the nonexperts' reviews did. In contrast, in relation to hotel consideration, nonexperts' reviews had little effect, but experts reviews had a positive overall effect. But this result might have been generated by a knowledge bias (Eagly, Wood, & Chaiken, 1978). Negative reviews from experts were found to be least persuasive; thus, expert reviews had an overall positive effect. "Possibly," Vermeulen and Seegers surmised, "respondents expected professional hotel reviewers to be critical of issues that are of little interest to the average traveler" (p. 126).

One of the most interesting types of assertions is what I call assertions of secondhand expertise, in which reviewers, rather than asserting their own expertise, asserted their connection to another person who had some relevant expertise and then stated that other person's evaluation of the product. In the following excerpt, Chunchu, asserting that her father is a professional photographer, reports her father's evaluation of the camera:

> I bought this camera for my father, who was a professional fashion photographer, and later ran a commercial photo lab. He was extremely pleased with the quality. I knew he wanted a 28mm or better, and the S40 really fit the bill.

With such assertions, reviewers use the expertise of another person to lend credibility to their own reviews. In linguistic terms, such a recitation of another person's statement, in this case, an expert's evaluation, is called *reported speech*. It is reminiscent of the reported speech that has long been studied in sociolinguistics research. Reported speech is a complex interweaving of an individual's own utterances with those of another: "a reproduction of distinct speech or thought that is reported by the reporting utterance" (Vincent & Perrin, 1999, p. 291). Much research on reported speech has examined its narrative function, the role it plays in people's recounting of what happened in the past (e.g., Coulmas, 1986), but other researchers have examined its functions in nonnarrative discourse. Vincent and Perrin discussed its authority function (in relation to its narrative, appreciative, and support functions) in which a speaker "assumes responsibility for the quoted words, and detachment of one voice from another gives way to fusion. The reporting of speech becomes an argumentative act of appealing to authority" (p. 301). In the preceding example, the reviewer reported her father's expert evaluation and, in doing so, added credibility to the review.

Indeed, the instinct to connect their review with professional status and its concomitant expertise appears to be so strong that reviewers even assert

expertise that is twice—not just once—removed. Jjbunk reports the speech of her coworker, but she invokes the expertise of her coworker's husband, who is a professional photographer, in her review of a Hewlett Packard Photosmart 945:

> I brought the pictures into work and a co-worker was amazed at the quality of the photos—and her husband is a professional photographer.

To be fair, Jjbunk could have been alluding to the knowledge of photography that has ''rubbed off'' on her coworker via the close relationship of marriage. But the reviewer did feel the need to point out the coworker's connection to expertise; that connection makes the coworker's evaluation more valuable than that of others.

Another role that online reviewers asserted in order to show their expertise and thus credibility was that of instant expert—the role of a person who has done homework about the product and similar products, thereby acquiring expert knowledge and the ability to discuss competently the differences between the product under review and its competitors. In contrast to professionals, trained amateurs, hobbyists, or secondhand experts, instant experts gathered a body of knowledge about a type of product, such as a digital camera, and asserted that they had done the research to facilitate making a good decision. For example, a reviewer of the Canon Digital Rebel XT, stevo27, wrote that she had conducted Internet research to make a good decision about buying it:

> Prior to purchasing I did my home work and found a site called www.alatest.com, which had both user reviews as well as expert reviews from many well know[n] and trust worthy sources, plus they rated it with what they call the alaSCORE.

Instant experts supported their reviews by asserting that their recommendations were not created in a vacuum; they claimed that they had compared products, which warranted their evaluations. Sometimes, as the following reviewer does, they claimed that they worked hard to make a choice:

> I researched this one long and hard. I set a price of $200 dollars and as usual wanted the best. I looked at many sites, compared actual pictures, looked at features, etc.

In sum, online reviewers used 10 types of assertions to tell readers about their expertise and, thus, their credibility. These assertions fit into three broader categories. The assertion types were reliable and thus will be useful

in future research that investigates relationships between reviewers' evaluations and their readers' perceptions of their credibility.

Conclusion

Testing the reliability of the types of assertions that online reviewers use to show that their evaluations should be taken seriously revealed that such types are reliable. Thus, assertions of online reviewers can be reliably classified into types, and these types fit into three broader categories that have their roots in previous research on credibility in online commerce. Other types of assertions may exist, particularly in relation to different varieties of products available online. With an understanding of the assertions that reviewers make, technical communicators can help their organization determine the effect of laypeople's reviews on their organization's products. Technical communicators, for example, can gauge whether a reviewer's assertion of employment in a field relevant to the product will affect how readers perceive that reviewer's credibility and whether the review shifts readers' willingness to take a risk on the product. Toward that end, after testing these 10 assertion types for reliability, I tested them for potential differences in the expertise and credibility that they conveyed to readers. I asked 79 participants (see Appendix A for demographic information) to read 11 versions of a review (one for each of the types and a review that did not include an assertion of expertise) of a digital camera (see Appendix B). I found no significant differences between the 10 assertion types in the expertise that they conveyed to the participants. But the review I used in the experiment contained just one (or no) assertion of expertise. (The review began with the assertion then moved on to describe and to evaluate the product positively, so each type was tested alone.)

This experiment did show, however, that the 79 participants did not perceive that assertions of employment conveyed any more expertise than did other types of assertions. This result is surprising, in that you might think that assertions of employment would create the most credibility. The result reflects a change on which technical communicators and other professionals concerned with consumers' perceptions must focus: the waning authority and influence of professional expertise. Drawing from Schultz (1964), Sarangi and Clarke (2002) stated that "expertise . . . implies an in-depth mastery of a field of knowledge." But the distinction between experts (and expert knowledge) and laypeople (and lay knowledge) gets more complex in online communication. With new communication technologies, "in the

postmodern society, pluralization of expert knowledge is readily acknowledged" (p. 140). With such pluralization, anyone can be an expert.

Clearly, more research on perceptions of credibility is needed to determine if reviewers bolster or diminish credibility based on the type of assertions they use. Perhaps more than one assertion of expertise or an assertion of expertise plus some other signal of credibility are necessary to affect readers' perceptions of reviewer credibility. Indeed, reviewers often use multiple and different types of assertions of expertise, one after the other. Perhaps reviews containing two or more assertions of the same type or different types in combination would generate a significant difference in readers' perceptions of credibility. In addition, the strength of the assertion could have an effect. For example, are assertions of 2 years of use perceived as having less credibility than assertions of 5 years of use (i.e., does duration of use matter)? Does the closeness of the relationship from which reviewers derive their secondhand expertise affect readers' perception of their credibility? Reviewers may use other credibility builders too. Further research will show how assertions of expertise correlate with other contributors to credibility, such as the specialized terms with which reviewers discuss product specifications.

No longer are assessments of technical products such as digital cameras the domain of professionals; with the emergence of online review sites, any layperson can evaluate a product. The extent to which laypeople are taken seriously in their evaluation of a product, however, depends on the extent to which they can construct (or coconstruct with readers) an expert and trustworthy persona and, thus, credibility. Reviewers can generate credibility in several ways. They may earn preconfigurations of credibility through a review site. For example, Epinions grants Advisor and Top Reviewer status to reviewers who write reviews that readers have judged to be very helpful. And some preconfigurations most likely carry more weight than others do. For instance, a Top Reviewer who writes a digital camera review may have achieved that status by writing helpful reviews of other products and services—not digital cameras. Future research must examine the effect of such preconfigurations on how readers assess a reviewer's credibility to review a given product.

Reviewers can also generate credibility by showing, as opposed to asserting, expertise. A clear method is through the use of product-relevant, specialized terminology. Use of specialized terminology shows expertise and thus creates credibility. Lists of words that occur infrequently (see, e.g., Bauer & Nation, 1993) can be juxtaposed against review content to determine terminology specific to camera (and other product) reviews. Does specialized

terminology correlate with higher review ratings and positive reader comments? Or does specialized terminology put off readers who do not share the reviewer's expertise? The reader who wrote this comment about a review (one that she rated as *helpful* as opposed to *very helpful*) clearly did not find such terminology useful:

> I am a TOTAL non techie so I wouldn't want all the specs, but just some more general info on the unit would have done it for me.

Finally, this study shows that reviewers can assert expertise, telling readers about why they should be taken seriously. Reviewers use different types of assertions to assert their experience with the specific product they are reviewing, familiarity with relevant and related products, and relevant roles. Understanding the types of assertions and the broader categories that they fit into can help in examining how credibility is constructed online and eventually the credibility of laypeople's evaluations. Although the types were reliable, they did not differ significantly in the effect they had on credibility. This finding shows that reviewers must do more to generate credibility than issue one assertion of expertise. In future research, I intend to examine how reviewers' assertions of expertise, use of specialized terminology, and preconfigurations of expertise affect readers' assessments of reviewers' credibility, particularly in relation to negative product reviews.

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Appendix A. Participants' Experience With Online Reviews

	Number of Participants	%	Number Who Read Reviews	%	Review Sites Read	Number Who Write Reviews	%	Products Reviewed
Males	31	39	28	90	amazon.com, cnet.com, arstechnica.com, buy.com, cnet.com, ebay.com, epinions.com, newegg.com, pcmagazine.com, slickdeals.net, thinkgeek.com, thomshardware.com, tigerdirect.com, woot.com, zdnet.com	6	19	CDs, cell phone, elliptical machine, exercise equipment, games, GPS system, hard drives, headphones, Ipods, Laptops, mp3, software, USB hubs
Females	48	61	33	69		4	8	
Total	79		61	77		10	13	

Appendix B

Review of Digital Camera Used in Experiment

[assertion here] If you have used a Canon camera before, you will be able to use this camera in no time. The SD850 has a solid feel and good build quality. The camera is convenient to hold and its compact size lets you put it in a jacket pocket or a purse easily. The major controls are within easy reach, and the tactile response is good. The controls are very intuitive. There are a lot of fun features you can use, such as panoramic shot, different settings for lighting, black and white. Shutter lag is no problem at all. Focusing with the face recognition feature is easy, and this feature eliminates pictures with sharp background but blurry faces. The video mode works well and allows you to zoom while shooting.

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