

What's "Funny" about Technology Adoption? Humorous Appropriation of Online Review Platforms

Completed Research Paper

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Abstract

The open nature of online review platforms allows for use of the technology in unexpected ways, attracting some visitors with an objective other than aiding other consumers' purchase decision. These consumers are exhibiting a particular form of adoption called technology appropriation by writing humorous reviews that often make fun of the products or telling absurd stories. This study conceptualizes humorous appropriation of an online review platform through a content analysis of 33,987 reviews for 14 products on Amazon.com. We find reviews written for products where the review platform has been appropriated for humor differ from "regular" reviews across three dimensions: narrativity, emotionality, and impropriety. These humorous reviews tend to be more narrative, more negative, and contain more words about inappropriate or sensitive subjects. Our model of humorous appropriation extends the technology appropriation literature and has implications for how online retailers and sellers manage this emerging form of digital performance.

Keywords: Online reviews, Technology appropriation, Humor, Text analysis

“I swear this milk is from a unicorn! After drinking this milk, I felt as powerful as a one horned stag standing guarding over a rainbow full of treasures. Thank you!”

- One of the over 1,800 reviews for a gallon of Tuscan Milk posted to Amazon.com

“I tried the banana slicer and found it unacceptable. As shown in the picture, the slicer is curved from left to right. All of my bananas are bent the other way.”

- One of the over 5,500 reviews for the Hutzler 571 Banana Slicer posted to Amazon.com

Introduction

Technology adoption in the context of online reviews seems straightforward. An underlying assumption of online review platforms such as Amazon and Travelocity is that their purpose is to inform consumers during the purchase decision-making process (Chevalier and Mayzlin, 2006). Consumers, as potential users, adopt the technology when they read, interact or post reviews on the site. The stakeholders, including the product or service provider, the online retailer, and the consumer, have a shared interest in encouraging adoption. An online retailer’s review platform can provide value to both the selling firms and the customers. For sellers, the review platform provides detailed product information that informs consumers and drives sales. For consumers, the platform enables them to search for and evaluate products and to share views with other customers.

However, the open nature of review platforms – any registered user can leave a review – allows for the use of the technology in unexpected ways. This attracts visitors with an objective other than to inform the purchase decision. As the opening quotes illustrate, the review platform is sometimes used to entertain, not to inform. For some products on Amazon and other sites, thousands of consumers using the technology are exhibiting a particular form of adoption called *technology appropriation*.

Technology appropriation can be defined as the alteration of the use and meaning of a technology by a user or group of users (DeSanctis and Poole, 1994), and has been shown by Oiry et al. (2010) to differ from technology adoption. Appropriation reflects how users actually use or reinvent the technology in practice (Orlikowski, 2000). Technology appropriation is often context-specific. Reinvention has been seen in other contexts, such as the adoption and use of ERP systems (Boudreau and Robey, 2005). With review platform appropriation, users reinvent the platform as an outlet for humorous comments on specific products. The platform’s purpose can be seen as shifting to digital “performance” (Blank, 2015). Individuals use the site with the intention of entertaining, and perform through posting funny reviews and comments. Similar to other content communities such as YouTube (Johnson et al., 2015), contributors share creative content, and hope to encourage others to engage and interact with the content by commenting and voting on favorite posts. Visitors seek out the digital “performance,” look for reviews that will make them laugh, and gain social currency by being “in the know” for future online and offline conversations with others.

This raises interesting new questions regarding technology adoption and appropriation in the context of online retailers. Generally, technology appropriation is strongly discouraged. Fake reviews alter the use and meaning of the review platform, and online retailers do not want consumers to appropriate the platform for deceptive purposes. For example, in 2015, Amazon sued over 1,000 people who wrote paid product reviews that misled consumers about product quality (Wattles, 2015).

However, it is less clear how to deal with “faux reviews” (Blank, 2015) that are not meant to mislead consumers. No one would argue that the author of the banana slicer review featured above is truly upset that it faces the wrong way. However, even though the review does not deceive consumers, it does not offer utility to the consumer decision-making process. Ironically, although some of the reviews poke fun at or mock the products or its users, these funny reviews can lead to more sales than the firm could have ever anticipated. For example, when a series of humorous reviews of the “Three Wolf Moon T-Shirt” went viral, that shirt became the best-selling item in Amazon’s apparel line (Wright, 2009). Amazon’s brand image and site visits improve when traditional media and social media give thousands of potential customers an additional reason to visit the Amazon website.

The purpose of this paper is to better understand this phenomenon of review platform appropriation in the context of humorous reviews written on the Amazon review site. We use content analysis to compare

reviews for a set of products where the platform has been appropriated (i.e., the overwhelming majority of reviews are intended to entertain) to reviews for a set of products where the platform has not been appropriated (i.e., the overwhelming majority of reviews are intended to inform). The results of our analysis provide insight into content differences across these two types of reviews, and affords a better understanding of how the appropriation of the online review platform takes place. We also provide several narrative examples to illustrate the appropriation of the review platform.

Literature Review

Online reviews are considered an important source of information for consumer decision making (Chevalier and Mayzlin, 2006). A large body of research on online reviews has shown that diagnostic reviews written by credible reviewers are helpful for consumer decision making (Weathers et al., 2015). More specifically, researchers have found that review length, emotion and rating impact the perceived helpfulness of an online reviewer (Mudambi and Schuff, 2010; Yin et al., 2014). Other studies have also looked at the impact of affective content of the reviews on conversion rates (Ludwig et al., 2013) and the impact of discrete negative emotions on perceived helpfulness (Yin et al., 2014). The reporting bias by consumers (Dellarocas and Wood, 2008; Ghose and Ipeirotis, 2011) can also matter.

Scholars have long investigated consumer motivations for word of mouth (WOM). A classic study found customers can be motivated by a strong feeling about a product (product-involvement), a desire to gratify certain emotional needs (self-involvement), a wish to help other consumers (other-involvement) or by advertisements or other communications (message-involvement) (Dichter, 1966). More recently, research has examined the motivation behind posting online reviews (Dellarocas et al., 2010; Hennig-Thurau et al., 2004). Reviewers seek both notoriety and community, as they are more likely to review for lesser known products, and also at the other end of the spectrum, for products that are more popular and have received a large number of reviews (Dellarocas et al., 2010).

Prior literature on electronic word of mouth (eWOM) has been mostly concerned with identifying the relationship between eWOM and sales. More specifically, prior studies have shown how the volume and valence of online reviews impact sales (Babić Rosario et al., 2016). However, prior literature has mostly remained silent in understanding the emerging narratives of eWOM by contributors who have different intentions when writing reviews. Building on this past literature, in this study we investigate how the narrative style, emotionality, and word choice differ between reviews with the intention to entertain and reviews with the intention to inform. Next, we create and test a conceptual model of humorous appropriation of online review platforms to better understand the key drivers of this phenomenon.

Conceptual Model

Technology appropriation

Following the work of DeSanctis and Poole (1994), many studies have used the concept of appropriation to describe processes of technology adoption that are subject to a specific context at a specific point in time. One important notion in the appropriation view is that technology design does not necessarily determine appropriation, but it is the people who decide how to use the technology (DeSanctis and Poole, 1994; Orlikowski, 2000). Accordingly, users may appropriate the technology faithfully (consistent with the spirit of the technology) or unfaithfully (not consistent with the spirit of the technology) (DeSanctis and Poole, 1994). Most studies in this area have investigated appropriation of technology in workplaces (Dennis and Garfield, 2003). More recently, studies have also looked at the appropriation of social media technologies (e.g., microblogging) in a workplace (Riemer and Johnston, 2012).

In the context of online reviews, it is a potential cause for concern when individuals and firms appropriate the review platform for disinformation. A growing body of research to identify fake or fraudulent reviews spans multiple disciplines, including computer science, psychology, economics, information systems, and marketing (Anderson and Simester, 2014; Mayzlin et al., 2014; Ott et al., 2013).

Past research has generally investigated online reviews from the perspective of review platforms as tools that aid the consumer purchase decision. However, there has been little examination of how review platforms can be appropriated for use as entertainment, although Reyes and Rosso (2012) developed a

process for detecting irony by using Amazon reviews of the Three Wolf Moon T-shirt, Tuscan Whole Milk, and other products. Another notable example is Blank (2015), who examined intentionally humorous reviews as folklore, focusing on a narrative description of the collaborative and subversive nature of this phenomenon. To our knowledge, there has yet to be a large-scale, comparative content analysis of how reviews intended for entertainment (when the review platform has been appropriated) differ from reviews intended to inform (when the review platform has not been appropriated). In the next section, we review past research regarding online reviews to identify relevant dimensions for comparing these two types of reviews.

Hypotheses development

Technology appropriation involves the violation of the norms of behavior associated with the technology. Behavioral norms exist on sites like Amazon, beyond the stated guidelines on language and content, and affect reviewer behavior (Forman et al., 2008; Ren et al., 2007). Amazon monitors reviews, and removes severe violations, yet content that more subtly violates norms typically remains, and often receives additional attention (Barbro, 2012). The general assumption is that when individuals seek to appropriate the review platform in order to write an entertaining review, they will superficially follow the structure of typical reviews (Blank, 2015), but will incorporate different narrative style, and will differ in emotionality and word choice. Following the patterns often found in comedies and other humorous writing, we have the following expectations, summarized in Figure 1.

Narrativity—Humor is often about telling a story. Storytelling in a review can satisfy emotional needs and the need for self-expression (Hennig-Thurau et al., 2004). The need for self-expressive humorous storytelling is likely to result in text written with great detail in order to relay the experience with the product, whether that experience is real or imagined. Prior studies have found that fake reviews tend to be longer (Anderson and Simester, 2014). Therefore, we expect reviews to be more verbose in the case of products where the review platform has been appropriated.

Humorous stories can describe a personal experience or somebody else's experience. Two of the most common types of humor are self-deprecating and other-deprecating (Greengross and Miller, 2008). Both of these modes of storytelling are likely to result in text that is written as a first-person or third-person account, as they will either tell a story about oneself, or others, or both. As a reflection of this, we expect reviews for products where the review platform has been appropriated to involve more first-person and third-person pronouns. On the other hand, reviews that aim to inform purchase decisions are likely to involve a narrative that explains various aspects of the functionality of the product (Mudambi and Schuff, 2010). These reviews are more likely to use impersonal pronouns as they are focused on describing an inanimate object. Therefore, we hypothesize:

H1: Reviews written for products where the review platform has been appropriated (with the intention to entertain) will be longer than reviews written for products where the review platform has not been appropriated (with the intention to inform).

H2: Reviews written for products where the review platform has been appropriated will use more first-person pronouns than reviews written for products where the review platform has not been appropriated.

H3: Reviews written for products where the review platform has been appropriated will use more third-person pronouns than reviews written for products where the review platform has not been appropriated.

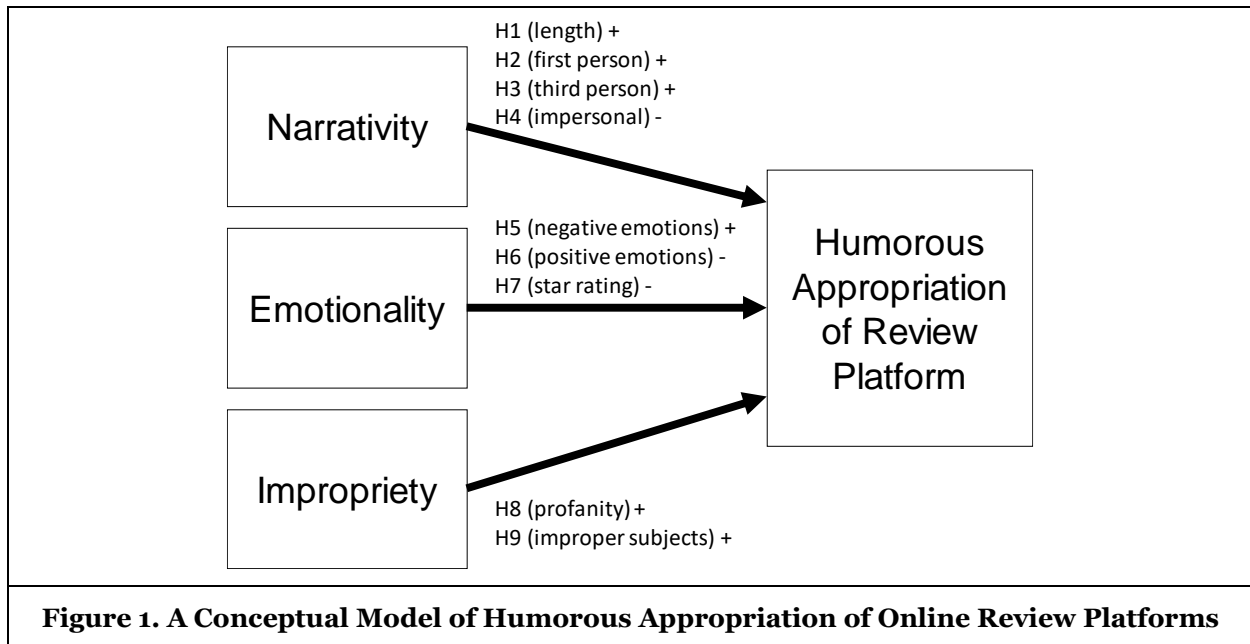
H4: Reviews written for products where the review platform has been appropriated will use fewer impersonal pronouns than reviews written for products where the review platform has not been appropriated.

Emotionality – Emotions have been shown to play an important role in word-of-mouth (Berger and Milkman, 2012). Past research has found that affective content is important for evaluating online reviews (Ludwig et al., 2013; Yin et al., 2014). Past research on humor is mixed. Some humor is more emotionally flat or deadpan, while other humor is excessive or over-the-top. McGraw et al. (2015) examined the concept of “humorous complaining” about consumer products and found humor is more common in complaints than praise. Therefore, we hypothesize:

H5: Reviews written for products where the review platform has been appropriated will contain more words reflecting negative emotions than reviews written for products where the review platform has not been appropriated.

H6: Reviews written for products where the review platform has been appropriated will contain fewer words reflecting positive emotions than reviews for products where the review platform has not been appropriated.

H7: Reviews written for products where the review platform has been appropriated will have a lower star rating than reviews written for products where the review platform has not been appropriated.



Impropriety - There is little reason to expect that product reviews will have a legitimate reason to utilize words that are generally considered improper in polite company. These include profanity, and words related to sensitive topics such as sex or religion. Research on humor and comedy has often relied on the use of profanity and improper words to shock and entertain (Sewell, 1984), as humor arises from a perceived benign violation (Warren and McGraw, 2015). According to the benign violation theory, people perceive things as humorous when they seem wrong, yet are safe or unthreatening (McGraw and Warren, 2010; Warren and McGraw, 2015). Benign violation of moral norms is more likely to elicit laughter than behavior that does not violate moral norms (McGraw and Warren, 2010). One study found that use of swear words among adolescents is perceived to be more humorous because it violates school rules (Sanford and Eder, 1984). According to Benwell (2001), language that is informal, and insulting, yet creative, is funny. Therefore, we hypothesize:

H8: Reviews written for products where the review platform has been appropriated will contain more profane words than reviews for products where the review platform has not been appropriated.

H9: Reviews written for products where the review platform has been appropriated will contain more words associated with improper or sensitive topics than reviews written for products where the review platform has not been appropriated.

Methodology

Data Collection and Measures

We collected a data set consisting of 33,987 product reviews available through Amazon. The product reviews represent seven examples of review platform appropriation. To identify the appropriation, we chose

seven products from Amazon’s “Funniest Reviews” list.¹ In each instance, we verified that the platform had been appropriated by determining that the overwhelming majority of the reviews are intended to entertain, not to inform. In order to make that claim, we selected a random sample of 50 reviews for each of the seven products. Three coders read the reviews and rated each review according to their assessment of the intention of the reviewer to entertain or to inform. In our random sample, 90% of the reviews were indeed intended only to entertain. Second, for each of those seven products we found a matching product in the same product subcategory for which the review platform was not appropriated; their reviews are generally written to inform. Similarly, we selected a random sample of 50 reviews for each of the seven products in our dataset and used a similar coding scheme. We found 95% of these reviews were indeed intended only to inform.² The selected products span a wide range of categories, including kitchen and dining, office products, groceries, and clothing. In this way, we reduced potential bias due to the selection of particular product categories. Table 1 presents the list of products, the category, subcategory, and the number of reviews at the time of data collection.

	Product name	Category	Subcategory	Platform Appropriated?	Number of reviews
1	Hutzler 571 Banana Slicer	Kitchen and dining	Food Slicers	Yes	5,411
2	Spiralizer Tri-Blade Vegetable Spiral Slicer	Kitchen and dining	Food Slicers	No	3,572
3	BIC Cristal For Her	Office products	Ballpoint Pens	Yes	2,148
4	BIC Round Stic Xtra Life Ball Pen	Office products	Ballpoint Pens	No	2,443
5	Samsung UN105S9	Electronics	LED/LCD TVs	Yes	2,123
6	VIZIO E32-C1 32-Inch 1080p Smart LED TV	Electronics	LED/LCD TVs	No	2,785
7	Haribo Gummi Candy	Grocery/gourmet food	Gummy candy	Yes	3,509
8	Albanese 12 Flavor Gummy Bears	Grocery/gourmet food	Gummy candy	No	407
9	Tuscan Dairy Whole Vitamin D Milk	Grocery/gourmet food	Dairy milk	Yes	1,781
10	Organic Valley White 1 % Milkfat Lowfat Milk	Grocery/gourmet food	Dairy milk	No	670
11	The Mountain Three Wolf Moon Short Sleeve Tee	Clothing	T-shirts	Yes	3,267
12	Carhartt Men’s Workwear Short-Sleeve T-Shirt	Clothing	T-shirts	No	3,294
13	AutoExec Wheelmate Steering Wheel Attachable Work Surface Tray	Office products	Desks	Yes	1,197
14	LapGear XL Laptop LapDesk	Office products	Desks	No	1,380

We used the web scraping tool WebHarvy to retrieve the pages containing all customer reviews for the 14 products, as of March 2016. For each review, we extracted the review text and its star rating. The final

¹ From <http://www.amazon.com/gp/feature.html?docId=1001250201>

² While we recognize that it is possible a review could be both entertaining and informative, the analysis of our sample revealed only 2% of the reviews fell into this category.

sample contains 19,436 “entertaining” reviews from an appropriated review platform, and 14,551 “informative” reviews that are not appropriated.

We used Linguistic Inquiry and Word Count (LIWC) to operationalize the characteristics of the review text described in our hypotheses. The software, developed by Pennebaker et al. (2015), is widely used in psychology and linguistic studies (Cohn et al., 2004; Kacewicz et al., 2014). The software counts the occurrence of words within a block of text that match with a set of dictionary-defined categories. For example, if LIWC analyzed a block of text with 1,000 words and found that there were 150 pronouns and 84 “positive emotion” words within that text, the software would report 15% pronouns and 8.4% “positive emotion” words (Pennebaker et al., 2015).

For narrativity, we collected data on review length (word count), frequency of first person pronouns (such as “I” and “we”), frequency of third person pronouns (such as “she,” “he,” “they”) and impersonal pronouns (such as “it”). For emotionality, we collected data on the frequency of negative emotion (such as “hurt” or “nasty”), the frequency of positive emotion (such as “nice” or “sweet”), and the star rating associated with the review. For impropriety, we collected data on the frequency of profanity (such as “damn”), words related to sex (such as “horny”), and words related to religion (such as “altar” or “church”). We also included a measure of words related to death (such as “coffin” or “kill”). It should be noted that while words related to religion, sex, or death are not necessarily improper in all product review situations, these categories are sufficiently unrelated or irrelevant to the product categories and products in our sample.

Descriptive statistics for the variables in the full data set are included in Table 2. A comparison of the descriptive statistics for the two review subsamples – where the review platform was appropriated (reviews that intend to entertain) and where the review platform was not appropriated (reviews that intend to inform) – is included in Table 3.

Table 2. Descriptive Statistics for Full Sample						
Review Characteristic	LIWC Category/ Variable Name	N	Min	Max	Mean	Std. Deviation
NARRATIVITY						
Word Count	WC	33987	0	2868.000	80.756	113.283
First Person Pronouns	1stperson* (i, we)	33987	0	50.000	6.092	4.883
Third Person Pronouns	3rdperson* (shehe, they)	33987	0	50.000	1.451	2.926
Impersonal Pronouns	ipron	33987	0	66.670	6.166	5.433
EMOTIONALITY						
Negative emotion	negemo	33987	0	100.000	1.322	2.752
Positive emotion	posemo	33987	0	100.000	8.695	14.561
Star rating**	stars	33984	1	5.000	4.182	1.356
IMPROPRIETY						
Profanity	swear	33987	0	50.000	0.107	0.913
Sex-related words	sexual	33987	0	28.570	0.089	0.617
Religious-related words	relig	33987	0	100.000	0.162	0.999
Death-related words	death	33987	0	33.330	0.064	0.473
* 1stperson and 3rdperson are composite variables made up of the listed LIWC categories						
** Star rating was collected separately, not using LIWC						

Table 3. Descriptive Statistics and Comparative Means for Subsamples							
Review Characteristic	LIWC Category/ Variable Name	Review Platform Appropriated (Intent to Entertain)			Review Platform Not Appropriated (Intent to Inform)		
		N	Mean	SD	N	Mean	SD
NARRATIVITY							
Word Count	WC	19436	108.127	133.070	14551	44.20	63.129
First Person Pronouns	1stperson* (i, we)	19436	7.049	4.528	14551	4.813	5.043
Third Person Pronouns	3rdperson* (shehe, they)	19436	1.584	2.604	14551	1.273	3.300
Impersonal Pronouns	ipron	19436	6.107	4.256	14551	6.246	6.688
EMOTIONALITY							
Negative emotion	negemo	19436	1.659	2.533	14551	0.872	2.960
Positive emotion	posemo	19436	4.977	8.906	14551	13.662	18.605
Star rating	Stars**	19433	3.943	1.522	14551	4.50	1.012
IMPROPRIETY							
Profanity	swear	19436	0.153	1.016	14551	0.045	0.750
Sex-related words	sexual	19436	0.147	0.796	14551	0.011	0.180
Religious-related words	relig	19436	0.245	0.998	14551	0.052	0.989
Death-related words	death	19436	0.104	0.609	14551	0.009	0.145
* 1stperson and 3rdperson are composite variables made up of the listed LIWC categories							
** Star rating was collected separately, not using LIWC							

Data Analysis and Results

We used a logistic regression model to examine whether a particular review content characteristic was more closely associated with review platform appropriation (intend to entertain) or with review platform adoption (intend to inform). This is operationalized in the model as the change in probability that a review belongs to a product for which the platform has been appropriated, based on each predictive variable. The dependent variable in our study is dichotomous (appropriated), equal to 1 if a review belongs to a product from a review platform that has been appropriated, and 0 if the review belongs to a product from a review platform that has not been appropriated. The explanatory variables are operationalized through the LIWC measures plus the star rating. The resulting model is:

$$\text{appropriated} = WC + 1\text{stperson} + 3\text{rdperson} + \text{ipron} + \text{negemo} + \text{posemo} + \text{stars} + \text{swear} + \text{sexual} + \text{relig} + \text{death}$$

The results of the model are presented in Table 4. When the parameter estimate is positive, an increase in that predictor means the review is more likely to be written as humorous appropriation. In other words, that review has more of that characteristic. Similarly, when the parameter estimate is negative, that

predictor is less likely to belong to a product from a review platform written as humorous appropriation, and that product review has less of that characteristic.

Table 4. Results from Logistic Regression						
Variable	LIWC Category/ Variable Name	Coefficient (B)	Standard Error	Wald Statistic	Sig.	Odds Ratio Exp(B)
Constant		0.007	0.000	1047.448	0.000	1.007
NARRATIVITY		0.062	0.003	552.466	0.000	1.064
Word Count	WC	0.025	0.004	38.370	0.000	1.026
First Person Pronouns	1stperson* (i, we)	-0.013	0.003	26.486	0.000	0.987
Third Person Pronouns	3rdperson* (shehe, they)	0.007	0.000	1047.448	0.000	1.007
Impersonal Pronouns	ipron	0.062	0.003	552.466	0.000	1.064
EMOTIONALITY						
Negative emotion	negemo	0.053	0.005	98.181	0.000	1.055
Positive emotion	posemo	-0.035	0.002	479.108	0.000	0.965
Star rating	stars**	-0.248	0.010	570.167	0.000	0.781
IMPROPRIETY						
Profanity	swear	0.113	0.024	22.866	0.000	1.120
Sex-related words	sexual	0.920	0.067	188.973	0.000	2.509
Religious-related words	relig	0.363	0.026	193.692	0.000	1.438
Death-related words	death	0.935	0.079	138.603	0.000	2.546
* 1stperson and 3rdperson are composite variables made up of the listed LIWC categories						
** Star rating was collected separately, not using LIWC						
N=33984 (excluding 3 reviews that are missing star ratings)						
Cox and Snell R Square = 0.228						
Nagelkerke R Square = 0.306						

For *narrativity*, we find that word count (WC) is positively associated with reviews where the platform had been appropriated ($p < 0.000$), thereby supporting H1. We also found that frequency of first person pronouns was positively associated with reviews where the platform had been appropriated ($p < 0.000$), providing support for H2. The frequency of third-person pronouns was positively associated with reviews where the platform had been appropriated ($p < 0.000$), supporting H3. This indicates that the reviews from humorous appropriation are indeed more reflective of a narrative, where either the author or others are the focus of the story. Finally, we find that the frequency of impersonal pronouns was negatively associated with reviews where the platform had been appropriated ($p < 0.000$), supporting H4.

For *emotionality*, we found that the frequency of negative emotional words was positively associated with reviews where the platform had been appropriated ($p < 0.000$), thereby supporting H5. The frequency of positive emotional words was negatively associated with reviews where the platform had been appropriated ($p < 0.000$), supporting H6. Star rating also was negatively associated with reviews where the platform had been appropriated, providing support for H7.

We also found strong support for our hypotheses concerning *impropriety*. We found that reviews where the platform had been appropriated had higher occurrences of profanity ($p < 0.000$), thereby supporting

H8. We also found higher levels of improper words such as sex-related words ($p < 0.000$), religious-related words ($p < 0.000$), and death-related words ($p < 0.000$). This provides support for H9.

In summary, we found strong support for our model of humorous appropriation of online review platforms. Reviews written for products in cases where the review platform had been appropriated differed significantly on our three proposed dimensions of narrativity, emotionality, and impropriety.

Discussion and Narrative Examples

Our results show what is special or “funny” about reviews written for products where the review platform has been appropriated. A comparison of review text indicates differences along three key dimensions: narrativity, emotionality, and impropriety. On the narrativity dimension, we find that reviews intended to entertain are longer, use more first-person and third-person pronouns and have fewer impersonal pronouns. Furthermore, on the emotionality dimension, we find that reviews intended to entertain have fewer words reflecting positive emotions, more words reflecting negative emotions, and have lower star ratings. Finally, on the impropriety dimension, we find that reviews intended to entertain have more profanity and more words reflecting improper or sensitive topics such as sex, religion and death.

Our findings clearly demonstrate that reviews for which the platform was appropriated differ from the reviews for which the platform was not appropriated. To further illustrate the nature of this phenomenon, we provide two examples of humorous appropriation: Haribo Gummy Bears and the Three Wolf Moon T-Shirt. We examined and summarized the narrative that emerges about each product in order to show how the appropriation occurs.

Haribo Gummy Bears were first listed for sale on Amazon on June 17, 2006. Until January 25, 2014 (619 reviews in total), the reviews were almost all positive. The reviews were generally written by loyal customers of this product that had eaten the gummy bears since they were kids. The reviewers described Haribo gummies as the “original gummy bears” and also how much they liked this particular brand of gummy bears. Here is an example of a typical review:

“I have been eating these Haribo Gold-Bears since 1981. 25 YEARS!!! (kinda scary when I think about it!!! LOL) They have not changed at all over the years and I absolutely LOVE THEM. I have tried many other gummy products of varying shapes and flavors, but they simply do not compare to these bears!! The consistency and flavors cannot be beat! Mine, too, were shipped right away ... they must have had them on backorder at one point...”

However, after January 25, 2014 (1,669 reviews in total), the reviews became noticeably negative, describing how the gummies made people sick. We noticed that the purpose of the reviewers was not to objectively describe their negative experience with the product, but rather to describe exaggerated fictional experiences that are intended to entertain the readers. See below an example of such a review. Consistent with our general findings on narrativity, emotionality and impropriety, this review tells a story using a lot of first-person pronouns. It contains words and expressions that convey negative emotions such as ‘distracted’ and ‘sick’, and also has improper words such as ‘vomiting’.

“As soon as I popped a couple gummis into my mouth, it was like I transcended from my body and was looking down at myself. It was literally a flavor explosion and I was at ground zero!

I ended up not going to work that day in order to finish off the entire bag. Did I get sick? You bet. Three times. I found myself vomiting from the sheer amount of sweetness and the expansion of my stomach. As soon as I finished vomiting I went back to the bag for more!

Since that day I have purchased an additional 77 5 lb bags of Haribo Gummi bears. I find myself separating them by color so I can decide what flavor to get sick on next. I have managed to get back to work, albeit totally distracted. All I find myself doing is sitting in my office, dreaming about getting home and getting sick of Haribo Gummis. This is the closest thing to heaven I have ever experienced.”

Different from the Haribo Gummy Bears, the reviews on the Wolf shirt were intended to entertain from the beginning. After the first review on December 12, 2007 (which gave information on the quality of the shirt, and was intended to inform the readers), the Wolf shirt reviews described “magical” experiences that happened to people when they put the Wolf shirt on. These reviews described various imaginary benefits of wearing the Wolf shirt such as making men more attractive to women, healing health problems, and seeing God and angels. See below two examples of such reviews. In the first review, a man reports that he has become irresistible to women after putting the shirt on, and in the second review, the person describes how he saw God when he wore the Wolf shirt. Consistent with our general findings on narrativity, emotionality and impropriety, these reviews tell a story using a lot of first-person pronouns, contain words and expressions that convey negative emotions such as ‘terrible’, and also have improper words such as ‘condoms’.

“The effect that this t-shirt has on women is pretty impressive. Unfortunately its natural healing powers reversed my vasectomy and I impregnated nine women in two weeks before I realized. They all had twin boys. Now I have 18 sons and spend most of my money on child support and condoms.”

“I was born with a terrible deformity in my right hand - it is withered and rolled in on itself and useless. I ordered this shirt hoping that it would mend the hole that has grown in my soul over the years. When the package arrived, I opened it with my left hand and began to realize there was a strange tingling sensation in my right hand! Suddenly it rushed forth through my entire body. When it hit my head I saw God! When this sensation ended, I looked at my old, dead hand and, lo! and behold, it was still deformed. But the shirt fits really well.”

Conclusions and Directions for Future Research

This study investigates the nature of technology appropriation in the context of online review platforms. The humorous appropriation of online review platforms for the purpose of entertaining, instead of the original intent of informing, represents a special case of information system adoption. Past research has generally assumed that reviews are primarily for consumer decision-making, but that is not the focus of humorous reviews about the Hutzler banana slicer, Tuscan Whole Milk, and other products. Despite the deviation in intent, humorous reviews sometimes draw extra attention to a product and spur sales. This indicates that online reviews and online review platforms can and do play multiple roles.

This study makes several contributions to both theory and practice. We build on the technology appropriation literature (DeSanctis and Poole, 1994) by examining a particular type of appropriation of online review platforms. We show that when the review platform is appropriated for entertainment purposes, the reviews tell more personal stories, are more negative, and use more improper words. We contribute to emerging research in online reviews that looks beyond review volume and valence, but is concerned with understanding the rich information found in the reviews themselves (Pavlou and Dimoka, 2006; Yin et al., 2014). Our findings are also consistent with the literature on humor, in that humorous text is often about telling a story about one’s self or others (Greengross and Miller, 2008), is more likely to contain negative emotions (McGraw et al., 2015), and is also more likely to contain norm violations by using improper words (Warren and McGraw, 2015).

Our conceptualization of humorous technology appropriation has important implications for practice. First, humorous reviews have more potential to go viral than regular reviews, so learning about the nature of these reviews can help those that own and maintain online review platforms better understand what constitutes attention-getting content. Second, our three dimensions of humorous review appropriation (narrativity, emotionality, and impropriety) can provide a framework to help online retailers and sellers differentiate this humorous content, that can garner positive attention, from fraudulent reviews that can undermine site and product credibility. Third, online review platforms can use these dimensions to fine-tune their instructions for product reviewers. For example, the following is one of the guidelines on Amazon’s site:

“Be sincere: We welcome your honest opinion about the product or service. We do not remove reviews because they are critical. We believe all helpful information can inform our customers’ buying decisions.” (from “Customer Review Creation Guidelines” on Amazon)

There is no mention of the use of humor within the guidelines, and yet Amazon often promotes or showcases lists of the “funniest reviews.” Amazon could recommend that reviewers infuse narrative elements and humor into their reviews to make them more engaging. Yet, unlike some of the individuals who, in an attempt to be funny, very eagerly post convoluted reviews of gallons of milk, wildlife t-shirts or kitchen gadgets, Amazon perhaps does not want to try too hard to be cool or funny. The reviews emerging from the humorous appropriation of review platforms play a role and offer value to consumers and firms, and yet it is the informative, helpful reviews that reflect the heart and dominant norms of online review platform adoption.

There are several limitations to our study that offer multiple opportunities for future research. First, while we found differences in reviews across seven product categories, we did not examine product-level differences. Future studies could examine how humorous appropriation differs across products and product categories. Second, our study relied on a simple count of word types. Since LIWC does not capture meaning, we examined text characteristics reflective of our theorized differences in content. Future studies could employ a more detailed content analysis focused on meaning to verify our findings.

Future research could also explore how appropriation happens across different online retailers and review platforms other than Amazon. An interesting avenue to explore is how the impact of platform appropriation differs for services, as opposed to the physical goods examined in this study. For example, while the seller of the Wolf shirt may benefit from the humorous appropriation of the reviews and sell more shirts because of it, a restaurant owner or a medical doctor may have negative consequences if they receive humorous reviews of their services with absurd or insulting content.

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