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Surprising Syntax Sells!

Vineet Paidisetty, BBA

Memorable literature is known for beautifully constructed sentences, incredible choice of words, and innovative form. The same can be said for successful marketing campaigns such as American Dairy's "Got Milk?" or Nike's "Just Do It." Marketing messages can improve brand awareness, but these messages, regardless of their length, are not as simple as they seem. Their quality and efficacy depend on syntax, semantic content, and linguistic style, among other factors.



Syntax is the grammatical formulation of words in a sentence and is vital to the memorability and persuasiveness of marketing messages. The construction of these short phrases or sentences can determine the extent to which audiences will interact with the message. Our environments are constantly inundated with incredible amounts of information; thus, it is vital that firms, authors, and other creators project their messages

effectively. Linguistic style can also affect the perceived sincerity of a message while language structure can alter how individuals understand and interact with literature.

In a recent *Journal of Marketing* study, "Creating Effective Marketing Messages Through Moderately Surprising Syntax," Dr. A. Selin Atalay, Dr. Siham El Kihal, and Dr. Florian Ellsäßer hypothesized that using messaging with a medium level of unexpectedness in the syntax, or syntactic surprise, would be effective in marketing messages. The authors believed that there would be an inverted-U relationship between syntactic surprise, the unexpectedness of the syntax, and the message's efficacy with low- and high-surprise being less effective than medium-surprise messages.

What Is Syntactic Surprise?

Language is processed word by word through sentence parsing. Within this process is the automatic assessment of syntactic relationships between words, allowing individuals to extract meaning. Since sentence parsing is mostly automatic, surprise is possible if the syntactic relationships between the words do not meet our expectations. This results in syntactic surprise: the unexpectedness of a syntactic element occurring given previous syntactic elements that were encountered in the sentence. Differences in syntactic surprise are not restricted to differences in grammatical accuracy, meaning that two sentences that are both grammatically correct could

have different levels of surprise and, thus, efficacy. Here is an example of two similar sentences that differ in syntactic surprise: “Apply today to join a great team!” or “Join a great team, apply today!” Although these sentences have the same meaning, the first is straightforward and, therefore, has a lower syntactic surprise, while the second sentence has a more unique sentence structure that increases its unexpectedness. Increasing syntactic surprise can be accomplished by revising versions of sentences until the adequate level of surprise is reached.

Innate to human learning is the attention-getting advantage of novel stimuli. People pay more attention to unexpected stimuli or, in this case, messages with more syntactic surprise. However, language with extremely high surprise can overload our working memory or our ability to process new information, reducing the impact of the message. Therefore, it is easy to see that surprise in excess is too much of a good thing, possibly reducing the efficacy of messaging. This understanding led to the authors to a belief in a positive relationship between syntactic surprise and attention and a negative relationship between syntactic surprise and processing ability. There is a sweet spot found within medium levels of surprise that create the most effective messages.

Study Background

Since the authors hypothesized a specific relationship between syntactic surprise and message efficacy, they also needed the ability to measure syntactic surprise. With this in mind, they developed a model to measure syntactic surprise that could work with a large variety of sentences and, thus, marketing messaging. The authors tested this model in real world situations simulated through six studies.

Research Study

Four primary studies were conducted to test generalizability and predictability of syntactic surprise. The results confirmed that syntactic surprise is applicable to multiple data sets, contexts, and text lengths, making it widely applicable. The inverted relationship between syntactic surprise and message efficacy was also confirmed—once again, indicating that medium-surprise messages are ideal.

Study 1 applied the developed model to the public Persuasion for Good Data set, which is a set of interactions between online individuals with one side trying to persuade the other side to make a donation. The model measured how the syntactic surprise of the persuasive messages influenced the success of the message in inciting donations. Results confirmed that syntactic surprise is most effective at the medium level in persuading viewers to donate.

Study 2 was similar to study 1 but in a different context. Thousands of Amazon reviews in the six largest product categories of books, movies & TV, electronics, CDs & Vinyl, Kindle Store, and Apps for Android were investigated. The authors compared each review’s helpfulness based

on the ratio of helpful votes to total votes per review with syntactic surprise, once again finding that medium-surprise was the most correlated with the most helpful reviews.

Study 3 manipulated advertisements through Facebook advertising. Six versions of the same advertisement, each with a different level of syntactic surprise, were released to the public. Next, measurements of the number of interactions with each advertisement based on viewer clicks were collected. Results indicated that accounting for syntactic surprise improves the efficacy of marketing messages as determined by click-through rate. Additionally, this confirmed that the authors' syntactic surprise model is applicable to social media advertising. Study 4 expands on the results of study 3 with more versions of the same advertisement, increasing the number from six to 17. For this study, the authors partnered with a fashion brand to design the advertisements prior to use. Again, confirmation of the value of syntactic surprise for improving the efficacy of marketing messages was found.

Lastly, follow-up studies 5 and 6 paralleled studies 3 and 4. Copies of fashion brand advertisements on Facebook and Instagram were used with minor grammatical changes to alter the syntactic surprise to see how differences would affect consumer interaction. Once again, their hypothesis was substantiated with the middle syntactic surprise being the most effective at inciting interaction from viewers, while the higher and lower levels of surprise were less effective.

With these studies and results, a range of syntactic surprise was identified to be the most effective. A syntactic surprise value of 1.9-2.2 is optimal based on the studies referenced above. To identify if your messages are within this range, the authors developed a syntactic surprise calculator for public use at this [link](#).

Conclusion

This research underscores the significance of various elements in crafting effective messages with language playing a pivotal role. Through the exploration of syntax and the development of a novel measure termed "syntactic surprise," the profound impact of this concept on message effectiveness was



demonstrated across diverse contexts from advertising to product reviews. Notably, these findings confirm the hypothesis and reveal an inverted U-shaped relationship between syntactic surprise and message effectiveness, offering actionable insights for marketers to optimize their communication strategies. Moreover, the referenced study opens avenues for future research, suggesting the need to explore boundary

conditions and interactions with other linguistic features. Importantly, this work pioneers the integration of advanced natural language processing techniques into marketing research, providing marketers with scalable tools to enhance their communication efforts in an era of heightened consumer expectations. By leveraging these findings, practitioners can refine their messaging strategies to better meet the evolving demands of consumers, thereby achieving communication goals with greater precision and efficacy.

Recommended Reading

Atalay, A. Selin, Siham El Kihal, and Florian Ellsäßer (2023), “Creating Effective Marketing Messages Through Moderately Surprising Syntax,” *Journal of Marketing*, 87(5), 755-775.

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Vineet Paidisetty graduated from Baylor University with a Bachelor of Business Administration in Finance and Baylor Business Fellows. During his undergraduate tenure, he engaged in a research internship at Baylor College of Medicine in Houston, Texas. Additionally, he served as a Venture Capital Research Intern with Bios Partners in Fort Worth, Texas. Vineet is currently a medical student at the Baylor College of Medicine with an interest in specializing in sports medicine and orthopedics while actively engaging in the healthcare startup arena.



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