

# ANALYZING THE USE OF WORDS IN AUTO INDUSTRY

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## INTRODUCTION

One of New York Times Bestsellers is *Freaknomics*, a book by Stephen J. Dubner and Steven Levitt that explores the phenomenons in everyday life through applying economic theory. One chapter in particular details the complexities of word choice in real estate. An agent, Dubner and Levitt explain, wants to make a seller accept a lower offer and for buyers to offer quickly. They want the maximum efficiency. The standard commission for a real estate agent is around 3%, so while a buyer might lose \$20,000 by not holding out for a better offer, the real estate agent only loses \$600, and stands to gain a week's worth of time where they might be able to sell another house.

For this purpose, real estate agents use certain keywords to convey their hidden goals. The world "well-maintained," to a homeowner, might mean that their house is sturdy and kept up. However, to potential buyers and agents, "well-maintained" can mean that the house is old but still standing. The word encourages buyers to offer low, ensuring more and quicker offers for the real estate agent, but on the flip side, they will be lower.

Words are powerful in marketing. The way they are phrased together have connotations that buyers might not notice but have a subconscious effect. I decided to look at how they affect car sales.

Cars are carefully marketed towards certain groups of people. While once in a while, man with shabby clothes and a \$30,000 salary might walk into a dealership and buy a Lamborghini Murcielago, it isn't very common. Car companies know this. They know their customers, they know their cars, and they know sale trends. It isn't quite hard to imagine, then, that the formula Porsche uses to name their newest model differs from the marketers at Honda.

I set out to find out was whether the way these car companies named their cars was actually effective.

## RESEARCH

The first thing I had to do was learn more about cars. Before this project, I fancied myself interested in cars. I liked to look at pretty and shiny cars and watch clips of them driving through the streets. I could recognize common models of cars driving down the street. But I didn't know much about the naming of them.

Some brands of cars have traditions in naming their cars. BMWs, for example, always feature an i in the names of their cars. While it originally was meant to denote a fuel-injected engine, its only remaining purpose is as an artifact of a time when carburation in cars was common. Mercedes boasts a nomenclature made up of numbers and letters depicting the class of the vehicle and the engine type.

Another trend is naming the car for its personality. Take the Ford Mustang for example. It is a sleek muscle car with 300 to 435 horsepower that is commonly featured in racing all over the world.



The Mustang is quite aptly named. Mustangs, according to Google, are small feral horses native to America. Ford is an American automaker founded by one of the greatest industrialists America has seen. The Mustang is sporty and fast—hence, feral—however, it is also small. The Mustang is one of the first of pony cars, a class of automobile that is compact and stylish with a sporty or performance-oriented image.

Other cars are named after a place or a race, like the Chrysler New Yorker. The New Yorker was, for a few years, the flagship of the Chrysler brand, and helped establish its place in the ranking of automakers: a luxury brand, above names like Ford and Pontiac, but lesser than Cadillac and Lincoln.



The name New Yorker helped established Chrysler as a real American Brand. New York was the heart of the country, with the Statue of Liberty and Ellis Island and all the democracy and freedom that the country had fought for. But New York was also a place of luxury and excess and the name conveyed that—a sophisticated, limousine and leather seats feel.

What I decided to do for my experiment was to collect the name of thirty or so cars and randomly survey people about them. I asked them to rate them on things like luxury and price and speed. Because I wanted the responses to be a reaction to the name of the car, and not the knowledge of the car, I only surveyed those that had little previous knowledge or experience with cars..

The cars I chose included the Lamborghini Murcielago, Toyota Corolla, Ford Mustang, Chevrolet Spark, Jeep Wrangler, Jeep Renegade, Ferrari Spider, Porsche Panamera, Toyota Tundra, Honda Pilot, Chevrolet Volt, Chevrolet Malibu, Maserati GranTurismo, Maserati Quattroporte and Nissan Frontier.

## RESULTS

The main discovery I made was that automakers generally did bestow upon the cars a name that evoked the same personality/appearance that they wanted the car to have. There was one strange trend in the data. I found that there was a correlation between foreign names, e.g. Lamborghini Murcielago, and an associated higher price.

Because I split these cars up based on speed, strength, luxury and price, I also ranked these cars based on these attributes, as well. Here are the lists I came up with. To rank them by speed, I simply used their top speeds. For price, I used their manufacturer's suggested retail price. For luxury, my qualifications were a bit more subjective. I ranked them based on added amenities and whether the car was marketed as a luxury or sports car.

Speed	Luxury	Price
1. Lamborghini Murcielago	1. Lamborghini Murcielago	1. Lamborghini Murcielago
2. Ferrari Spider	2. Ferrari Spider	2. Ferrari Spider
3. Maserati GranTurismo	3. Porsche Panamera	3. Maserati GranTurismo
4. Maserati Quattroporte	4. Maserati GranTurismo	4. Maserati Quattroporte
5. Ford Mustang	5. Maserati Quattroporte	5. Porsche Panamera
6. Porsche Panamera	6. Ford Mustang	6. Chevrolet Volt
7. Jeep Renegade	7. Honda Pilot	7. Honda Pilot
8. Toyota Corolla	8. Toyota Corolla	8. Toyota Tundra
9. Nissan Frontier	9. Chevrolet Malibu	9. Ford Mustang
10. Honda Pilot	10. Chevrolet Volt	10. Jeep Wrangler
11. Chevrolet Malibu	11. Nissan Frontier	11. Chevrolet Malibu
12. Jeep Wrangler	12. Toyota Tundra	12. Nissan Frontier
13. Toyota Tundra	13. Jeep Renegade	13. Jeep Renegade
14. Chevrolet Volt	14. Jeep Wrangler	14. Toyota Corolla
15. Chevrolet Spark	15. Chevrolet Spark	15. Chevrolet Spark

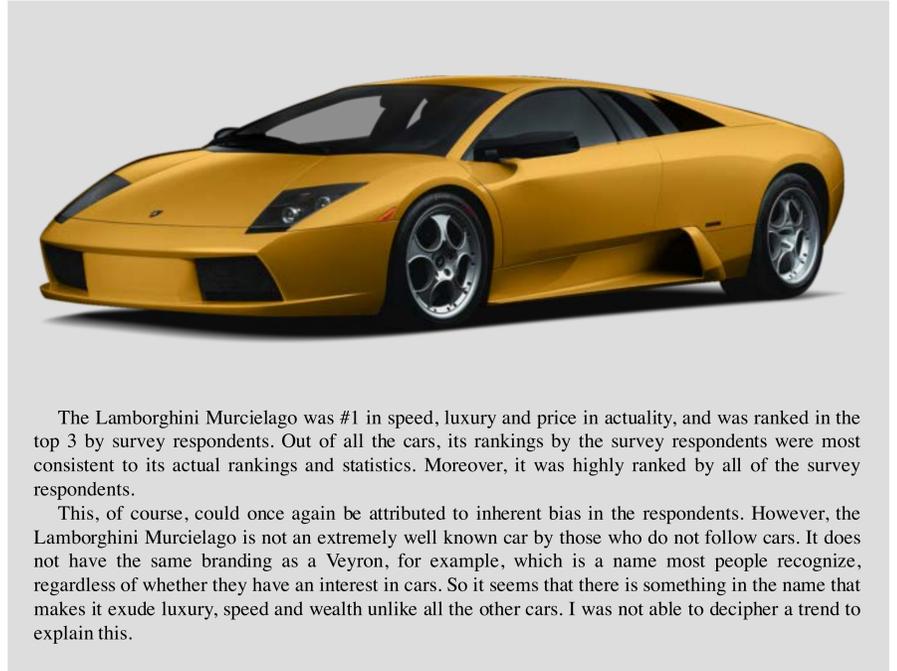
Here is their rankings by the average of their ratings.

Speed	Luxury	Price
1. Ford Mustang	1. Lamborghini Murcielago	1. Ferrari Spider
2. Ferrari Spider	2. Ferrari Spider	2. Lamborghini Murcielago
3. Lamborghini Murcielago	3. Ford Mustang	3. Ford Mustang
4. Chevrolet Volt	4. Chevrolet Malibu	4. Chevrolet Malibu
5. Chevrolet Malibu	5. Maserati Quattroporte	5. Toyota Corolla
6. Maserati GranTurismo	6. Maserati GranTurismo	6. Maserati Quattroporte
7. Porsche Panamera	7. Chevrolet Volt	7. Porsche Panamera
8. Chevrolet Spark	8. Porsche Panamera	8. Chevrolet Volt
9. Maserati Quattroporte	9. Chevrolet Spark	9. Maserati GranTurismo
10. Jeep Renegade	10. Toyota Corolla	10. Chevrolet Spark
11. Jeep Wrangler	11. Honda Pilot	11. Honda Pilot
12. Honda Pilot	12. Jeep Renegade	12. Toyota Tundra
13. Toyota Corolla	13. Nissan Frontier	13. Jeep Wrangler
14. Toyota Tundra	14. Toyota Tundra	14. Nissan Frontier
15. Nissan Frontier	15. Jeep Wrangler	15. Jeep Renegade

Many of the cars ended up in or near the spots where they belonged. This could be attributed to many factors, one of which is that the people surveyed, although consciously did not have any knowledge or familiarity of car names and automakers, could have subconsciously formed associations with some of the names through media exposure, conversations, etc. There is no real way to work around this besides to survey people who have never been exposed to cars at all, whether in the street, on the TV, or any other way. This is nearly impossible, so I will dismiss this as a potential lurking variable.

There were a few cars that were quite overestimated or underestimated by the survey, one of which was the Porsche Panamera. Although it was actually ranked #3 for luxury and #5 for price, it was ranked significantly lower by the surveyed participants, only hitting #8 for luxury and #7 for price.

Another car was overestimated. The surveyed participants seemed to draw a positive correlation between speed, luxury and price. Ford Mustang was (rightfully) ranked high on speed and luxury, and thus was ranked #3 on price. However, in reality, the Ford Mustang MSRP is around \$24,000, ranking only around #9 in reality. In contrast, the Maserati GranTurismo flip-flopped with the Mustang. The GranTurismo is ranked #3 for price but replaced Mustang for the #9 spot.



The Lamborghini Murcielago was #1 in speed, luxury and price in actuality, and was ranked in the top 3 by survey respondents. Out of all the cars, its rankings by the survey respondents were most consistent to its actual rankings and statistics. Moreover, it was highly ranked by all of the survey respondents.

This, of course, could once again be attributed to inherent bias in the respondents. However, the Lamborghini Murcielago is not an extremely well known car by those who do not follow cars. It does not have the same branding as a Veyron, for example, which is a name most people recognize, regardless of whether they have an interest in cars. So it seems that there is something in the name that makes it exude luxury, speed and wealth unlike all the other cars. I was not able to decipher a trend to explain this.

## SUMMARY

It seems there is a tried and true formula for naming cars. If the car is expensive, luxurious and/or flashy, name it some exotic or rich city, e.g. Malibu, or some foreign word, e.g. Murcielago. Malibu is a wealthy beach city in California, and Murcielago is Spanish for butterfly. Although generally sports cars are named after quick and lithe animals such as the Toyota Impala, impala being an African antelope, the name Murcielago, according to the survey, seems to be doing all right for itself. The animal butterfly also evokes a sense of grace, an interesting departure from the cliché fast and powerful animals.

There is an exception to the foreign words rule, especially when it comes to marketing in foreign countries. In one of the most famous marketing blunders in history, Chevrolet released a new model called the Chevrolet Chevy II / Nova, which eventually became called the Chevrolet Nova. While nova to an English speaker simply signifies a type of star, to Spanish speakers, the word "Nova" means "no va," or "it doesn't go." It is said that there were poor sales in Spanish-speaking countries. This is an urban legend, but still an important concept to keep in mind while naming cars.

If a car is some type of industrial, sports utility vehicle/all-terrain vehicle, name it something woody and masculine. Take the Jeep Renegade, for example, or Jeep Wrangler. Jeep as itself has come so far into branding that the name "Jeep" itself evokes that—a camping trip in the woods, a hike up the mountain.

While the Chevrolet, which named two of its electric or fuel efficient cars Volt and Spark, seemed to be on the right path, to non-car enthusiasts, Volt and Spark evoked something different. Volt, despite being one of the slowest cars out of the fifteen, second only to its counterpart the Chevrolet Spark, was ranked #4 by survey respondents. It was also boosted 6 places in luxury and 5 places in price by its respondents. While having a car seem luxurious, pricey and speedy might sound like a good thing, the car will be marketed to the wrong people. People who are not knowledgeable of cars will read the name and pass it over for a more average, cheap car, and people who actually do want a fast and flashy car will be turned off once they see the actual car. This is an instance of naming gone wrong.

In the end, however, most of the cars were in similar spots to where they belonged, and when asked about the connotation of a car, most respondents gave a response that was usually similar to the automakers' description of the car. The Murcielago is a fast, expensive car. The Pilot is a sturdy, cheap car. The automakers did, in most cases, come up with a name that appealed to the group they wanted to market the car to. In a surprising turn of events, it turns out that professional marketers can do their job better than a high schooler can.

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