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Why do we believe our horoscopes?

The **Barnum Effect**, explained.

Bias

WHERE THIS BIAS OCCURS



What is the Barnum effect?

The *Barnum effect*, also commonly referred to as the Forer Effect, describes when individuals believe that generic information, which could apply to anyone, applies specifically to themselves.¹

Where this bias occurs

Examples of the Barnum effect are everywhere. Have you read your daily horoscope and noticed how strangely accurate the prediction was? After all, you *did* receive words of wisdom and reconnect with an old friend today, just as Co-Star said you would.

Even though it is well known that horoscopes are intentionally vague to appeal to as many people as possible, some are still amazed at how perfectly these descriptions apply to themselves. The Barnum effect tricks us into believing that a particular horoscope was meant for just us, encouraging us to find nonexistent parallels between the text and our own lives.

Beyond astrology, people working in “New Age” professions, such as tarot card readers, magicians, and psychics, are notorious for employing the Barnum effect to convince customers of their predictions.

Individual effects

The Barnum effect becomes dangerous when it interferes with our decision-making. Believing that general information applies directly to ourselves prevents us from being able to logically analyze our options and choose the best outcome possible. For example, what if you refused to date someone because their zodiac sign was “not compatible” with your own? Or what if you refused to leave the house because your horoscope foresaw tragedy in your impending future? If we trust these vague predictions too much, they can change the course of our lives by steering us clear of decisions we would otherwise make.

Systemic effects

Within an organization, the Barnum effect may determine how willing employees are to accept or reject feedback. As explained below, we are more likely to believe that positive generalized statements apply to us. This means that when a manager applauds their team for their good work, employees may be inclined to proudly accept the compliment—even if their boss is not referring specifically to them.

Conversely, we are resistant to negative generalized statements and often refuse to see them as applying to us. Due to this tendency, employees may find it difficult to incorporate criticism when a manager offers constructive feedback to their team, choosing to believe it applies to everyone else but not to themselves.

With this in mind, higher-ups may want to prioritize providing individual feedback to each employee to guarantee they will accurately relate the feedback back to themselves, rather than amplifying their achievements or brushing off their shortcomings.

How it affects product

The Barnum effect can impact how larger companies interact and form relationships with customers. As commonly seen in marketing campaigns, this cognitive bias exaggerates the impression of a uniquely personalized experience. When executed correctly, the Barnum effect can encourage customer buy-in and strengthen brand loyalty. On the other hand, this bias allows companies to effectively deceive consumers into feeling as though they are personally interacting with the brand—when in reality, that brand was intentionally designed to appeal to a broad audience. As companies develop more sophisticated tactics to target their customers, we should expect more examples of the Barnum effect to be integrated into our goods and services.

The Barnum effect and AI

Although AI software such as ChatGPT often generates generic results, the Barnum effect may prompt us to believe that their answers are tailored specifically to our questions. Users may perceive the incorporation of technical terms as personalized instead of a standard output of the machine learning model. This misinterpretation enhances the Barnum effect by tempting us to view ChatGPT as our private expert, rather than an automated response.

Why it happens

The Barnum effect is a very common phenomenon resulting from our natural tendency to attach personal meaning to general statements.² It's rooted in another cognitive bias known as subjective validation (sometimes referred to as the validation effect). Subjective validation is when we consider information to be correct if it has personal significance because we subconsciously identify a relationship between two unrelated events.³ Like subjective validation, the Barnum effect results from taking a vague statement and finding meaning specific to ourselves by connecting completely separate entities.

Interestingly enough, the Barnum effect seems to happen most often with positive statements. For example, we are more likely to think our horoscope is accurate if it contains positive information. On the other hand, this means that we are typically more skeptical of critical statements, and are less likely to think they pertain to us.⁴ So if our horoscope points out any personality flaws about our zodiac sign, we might brush it off as being nonsense.

This trade-off makes perfect sense. After all, people like to be complimented, and will more likely accept positive feedback about themselves as accurate, even if it is general and vague. We can better describe this phenomenon with the Pollyanna Principle, also commonly referred to as the positivity bias, which occurs when an individual assumes better accuracy of descriptive statements when they are positive.⁵ Subconsciously, individuals are biased to eagerly accept praise—and in turn, swiftly reject criticism. After all, who would want to believe that negative comments refer directly to themselves when it is so much easier to dismiss them?

Why it is important

By being aware of this effect, we can be attentive to any potential scenarios where we could be easily influenced and think twice before applying vague information to ourselves. For example, those who are skeptical of horoscopes and wary of psychic advice tend to not let these predictions dictate their lives, and choose to follow their own paths instead.

How to avoid it

As in many situations, awareness and skepticism are crucial to avoiding certain cognitive tricks. Even though you may enjoy checking your horoscope for fun, knowing about the Barnum effect can prevent you from believing it directly applies to you. Rather, you can move forward with your life by making informed decisions.

Though merely being aware of cognitive effects such as the Barnum effect cannot ensure that we will not fall prey to its illusion, awareness does provide a starting point. That way, both individuals and organizations can learn how to identify Barnum statements and how they are subconsciously affected by this bias.

How it all started

The Barnum effect is named after the famous 19th-century entertainer P.T. Barnum, whose life story inspired the film *The Greatest Showman*. Barnum famously said that “a sucker is born every minute.” His statement refers to how people’s gullible nature prompts them to believe what they are told about themselves, explicitly referring to the elaborate hoaxes in the circus industry that Barnum dominated. 6

that Barnum dominated.

The name “Barnum effect” was first coined in 1956 by American clinical psychologist Paul Meehl. He adopted this term after expressing his frustration towards other psychologists who were persistently making general statements about their patients.⁷ Meehl saw this as negligent practice, and advocated for individuation of diagnoses instead.

Later on, the Barnum effect was first officially investigated by American psychologist Professor Bertram R. Forer, explaining why the bias is also commonly referred to as the Forer effect. He conducted what is thought to be the first experiment testing the cognitive effect in 1948, during which he provided his students with personality surveys. He informed the class that each survey would be analyzed and then returned to the students with personalized feedback on their scores. Secretly, the professor instead gave the students the same general, unspecific feedback, regardless of their personality test results.

The feedback included general phrases such as, “You have a great need for people to like and admire you,” or, “You have a tendency to be critical of yourself.” After receiving the initial feedback, the students evaluated its quality, giving it a score ranging from zero (not accurate at all) to five (incredibly accurate). The experiment was a success at proving the Barnum effect since the average student rating was 4.26. This means that most of the class viewed their feedback as impressively accurate to themselves, even though the comments provided were the same general statements for all of the students.⁷

Example 1 – Horoscopes

One of the oldest and most common examples of the Barnum effect lies in astrology. This practice can be traced back nearly 2,000 years ago to ancient civilizations when horoscopes were first used for their predictive powers.⁸ Since then, professionals such as magicians and palm readers have succeeded in convincing many people of their foreseeing abilities.

By using the Barnum effect to describe common personality traits in ways that seem unique to a singular individual, astrology has garnered incredible popularity all around the world. Horoscopes provide “readings” or predictions for twelve different types of profiles called zodiac signs, which split up the sun’s path into equal sectors. The zodiac signs include Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn, Aquarius, and Pisces. Everyone falls with one of these signs depending on the time and location of their birthday within a sector. Horoscopes can vary in content but usually provide descriptions of a sign’s typical personality traits, while also offering future predictions that range in topics such as career, love life, family, and personal development.⁹

Susan Miller, the famous astrologer and horoscope writer, publishes lengthy horoscopes for each zodiac sign on a monthly basis. Although historically Miller has wrongly predicted many famous world events, she still is one of the most renowned horoscope writers. Her website is the most heavily trafficked astrological online resource in the world. Miller’s success is rooted in her talent for writing lengthy and uplifting vague passages for her readers. Using the Barnum effect, Miller forges a sense of connection between her readers and the text convincing thousands of people around the world that her predictions are relevant to themselves in particular.¹⁰

Example 2 – The “For You” Page

Digital products provide a modern-day example of how the Barnum effect can engage customers and provide them with enhanced user experiences.

Customers commonly favor digital providers such as Netflix and Spotify because of the personalized features incorporated in their products’ design, such as recommended movies and customized music playlists. It is as if the content was handpicked “just for them.”

Though digital companies give users a false sense that the applications cater to each client’s tastes, in reality, they only offer slightly personalized services.

Yes, it may be true that machine learning somewhat aids in developing these general recommendations. However, the Barnum effect amplifies the perceived personalization of these products to guarantee customer satisfaction.

Technology is currently not advanced enough to give everyday users the endless amount of customizable content we demand from our products.

Hence, the Barnum effect provides a sense of curation without technology companies having to fully tailor to each customer. The perception that these services are completely customized, in turn, makes a customer feel valued, and more likely to continue streaming movies and music from these companies.

Summary

What it is

The Barnum effect is a cognitive bias that occurs when individuals believe that generic personality descriptions and statements apply specifically to themselves when in reality, they could apply to almost everyone.

themselves which in reality, they could apply to almost everyone.

Why it happens

The Barnum effect occurs due to our brains' inherent tendency to attach personal meaning to general statements. In particular, positive comments are naturally more accepted by the average person as relevant to themselves, while critical statements are deemed less relevant.

Example #1 – Horoscopes

Horoscopes serve as a classic example of the power of the Barnum effect. Astrology provides 12 different zodiac signs based on one's location and time of birth, categorizing personality traits and providing future predictions regarding career, love life, family, and personal development. The Barnum effect helps readers make connections between the vague descriptions and their own personal lives.

Example #2 – How Netflix and Spotify pretend to know us

Personalized digital products provide a modern-day example of ways the Barnum effect is used to engage stakeholders and create better products and services for customers. Netflix's "Just for You" movie lists and Spotify's "Discover Weekly" playlist give software users a sense of customization and personalization.

How to avoid it

Skepticism is vital in recognizing the Barnum effect in your everyday life. Though merely being aware of this cognitive effect does not ensure that one will not fall prey to its illusion, awareness does provide a starting point to ensure that both individuals and organizations avoid using the Barnum statements maliciously or are affected by the bias subconsciously.

Related TDL articles

We've Got Something For Everyone: How The Business World Can Leverage The Psychology Behind Horoscopes

This article explores the history of horoscopes and our fascination with believing their predictions. The author notes how horoscopes rely heavily on the Barnum effect, by providing vague personality descriptors that individuals believe apply to themselves. The article later touches on how the Barnum effect can be applied to businesses and how they interact with their customers.

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