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PLAYING WITH MEMORIES

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At its crux, I believe game design is about three things: understanding structure, understanding interconnectivity and, most importantly, understanding people. Today's column digs into an issue that deals with the last one. If you want to understand humans, you have to first understand how we all work.

I spend a lot of time in my column talking about psychology. (If you haven't read my [column](#) on the psychographic profiles, "Timmy, Johnny, and Spike" I urge you to do so.) I think it's crucial for a game designer to understand how the players think. It's also important, though, to understand how they function. That is why I've chosen today to talk about memory. What does memory have to do with game design? Keep reading.

Remember When

Let me start my discussion on memory by telling you the two most important things you need to know about memory:



I trust your memories.

#1 – People trust their own memories more than anything else. I'm not saying that people can't doubt their own memory because they can and they do. What I'm saying is that if you believe a memory to be true, you will believe that memory more than you believe anything else. The only thing that even has a fighting chance is physical evidence (photos, videos, etc.) and even those get put into doubt if the person believes their memory strongly enough.

Why is this? Because beliefs are dependent upon trust. You have to have trust in the thing you believe. You know what people trust more than anything else? Themselves. Other people can lie or have all sorts of motivations that are not in your best interest. You, on the other hand, are looking out for yourself. Thus, you will believe yourself more than you will believe anything else, including hard evidence.

#2 – People's memories are not very reliable. The reasons for this are threefold. One, the human brain, without training, is just not that great at remembering details. We tend to remember some aspect and then the brain fills in all the rest. That "filled in" part is our brain making the best guess it can with the information it has. The problem is that people don't know which part is the "filled in" part of their memories. Two, memories are fluid, meaning that they can change with time. Your memory of an event you have today may not be exactly the memory of the event you have a year from now. Three, memories degrade. Barring a strong emotional tie, memories simply weaken with time. Biologically there's just less need to remember ten years ago than there is to remember yesterday. As such, the brain lets memories get fuzzy over time.

How does this apply to **Magic** design? A trading card game is all about continuity. It is an ongoing ever-evolving game, in **Magic's** case one that is almost ten years old. That means that players approach each new set with all the memories of what came before. As I explained above, not all those memories are of things that actually happened.

Looking Back

What I want to do today is to demonstrate a few different kinds of issues this faulty sense of memory can bring up. In each case I'll use an example to demonstrate.

#1 - Longing For The Thing That Wasn't



Tiger-tribe unite!

Onslaught has a tribal theme. That is, it cares about creature types. R&D made a conscious decision to focus on eight: soldier, cleric, bird, wizard, zombie, goblin, beast, and elf. Some players are very upset because they felt we left one out. Which one was left out varies from person to person, but the most common answer is merfolk.

Curious about this sentiment, as it was the loudest of the "you forgot something" camp, I wrote back to many of my letter writers. What about merfolk made them feel it needed to be included? The number one answer was that merfolk as a tribe had historical precedence. We needed to do it because it was just "part of **Magic** since the beginning". So I went back and did some research.

How many merfolk were in *Alpha*? One—[Merfolk of the Pearl Trident](#). There was one other card though that mattered, [Lord of Atlantis](#). *Alpha* only had three "lords" that

boosted creature types ([Goblin King](#), [Zombie Master](#) and [Lord of Atlantis](#)) one of which helped merfolk.

With only one merfolk though, there wasn't really a deck. (Okay, up until the four-of rule was instituted in January of 1994 you could play a deck of [Islands](#), [Lord of Atlantis](#) and [Merfolk of the Pearl Trident](#).) How long before there was even enough cards to physically make a merfolk deck? The answer was a year and a half. *Fallen Empires* brought six merfolk to the game (*The Dark* had added one.)



How long before there was enough merfolk to have some actual choices in building your merfolk deck? The answer is about four years. *Tempest* is the set I'd tag as the one that got merfolk up to twenty.



How long before a merfolk deck showed up in competitive play? For example, what was the first Pro Tour Top 8 deck with merfolk as a major component? The first to

have any merfolk component would be this deck:

NICOLAS LABARRE'S FISH



DECKLIST

STATS

SAMPLE HAND

SORT BY: Overview ▾

Creature (23)

4 Merfolk Traders
4 Manta Riders
4 Lord of Atlantis
4 Man-o'-War
4 Suq'Ata Firewalker
3 Waterspout Djinn

Instant (10)

4 Force of Will
2 Force Spike
4 Counterspell

Artifact (3)

3 Nevinyrral's Disk

Enchantment (2)

2 Curiosity

Land (22)

4 Wasteland
18 Island

60 Cards

Sideboard (15)

2 Force Spike
2 Phyrexian Furnace
2 Disrupt
2 Serrated Arrows

1 Nevinyrral's Disk
2 Bottle Gnomes
4 Hydroblast

Nicolas Labarre played this deck to a second finish at PT-Rome. The deck, which premiered five years after **Magic's** debut, though had four [Lord of Atlantis](#) and only eight merfolk, so while the deck was called "Fish" the actual merfolk component was rather minor. The first full-blown merfolk deck to make a Pro Tour Top 8 was this deck:

ALEX BORTEH'S MERFOLK OPPOSITION



DECKLIST**STATS****SAMPLE HAND**SORT BY: Overview ▾***Creature (20)***

2 Darting Merfolk
 4 Lord of Atlantis
 4 Merfolk Looter
 4 Merfolk of the Pearl Trident
 4 Vodalian Merchant
 2 Waterfront Bouncer

Instant (12)

4 Counterspell
 4 Gush
 4 Thwart

Artifact (4)

4 Static Orb

Enchantment (4)

4 Opposition

Land (20)

20 Island

60 Cards***Sideboard (15)***

3 Hibernation
 2 Misdirection
 1 Rushing River
 2 Wash Out

3 Mana Maze
 2 Prodigal Sorcerer
 2 Teferi's Response

Alex Borteh played a merfolk deck to take second place in the 2001 World Championships in Toronto, Canada. That's eight year's after the game's premiere.

One final statistic is to see how many cards in the history of the game are what we could think of as merfolk tribal cards. The answer is two: [Lord of Atlantis](#) and [Vodalian War Machine](#) from *Fallen Empires*. [Lord of Atlantis](#) is the only one that enhances your other merfolk.

My point here is that correspondence with players about merfolk brings out a sentiment that isn't exactly true. Merfolk decks have not been a staple from the beginning. There aren't even that many cards that care, in a tribal sense, about merfolk. So what's going on? When you think about merfolk tribal, one card stands out, [Lord of Atlantis](#). That card was in *Alpha*. So when you think of tribal merfolk, the first thing you think of did come out with the game's beginning. The rest you just fill in.

As I explained above, this is how memory works. The brain remembers pieces and then fills in the rest. You remember *Alpha* having [Lord of Atlantis](#) and you know it's the cornerstone of merfolk tribal decks, so your brain just makes the assumption that merfolk decks existed back then.

#2 – Remembering Hearing What You Wanted To Hear



Back in 1999 with the release of *Sixth Edition*, we made a major revamp to the rules. This revamp, known as the *Sixth Edition* Rules Change, met with a lot of resistance from the player base. The number one concern was that R&D, in making these changes, were "dumbing down the game". That is, that we were making **Magic** less strategic. To offset this concern, Bill Rose, the Lead Designer, wrote a [letter to the public](#) explaining the reasoning behind the change. In the letter, Bill specifically spelled out how we were not "dumbing down the game" and walked through our reasoning for the different changes.

Cut to several months later. I was at a Pro Tour and I got into a conversation with a number of the players. The topic of *Sixth Edition* comes up and several of them start complaining about how the rules changes are "dumbing down the game". As we discussed the topic, several of the players, as support of their argument, pointed out that R&D admitted we were "dumbing down the game". It took me a while to realize that they were referring to Bill's letter.

So how exactly did the letter created to dispute an issue become the evidence for its existence? The answer lies in how memory works. As I talked about above, the memory isn't great on details. What it is good on though is remembering emotions that took place during a memory. I assume this is hard-wired into the brain because remembering things that triggered strong emotions is probably good for survival.

Here's what happened. The players (and I really mean some of the players, as there were those that liked *Sixth Edition* Rules) were upset about the changes. Reading an

official letter from R&D fueled those feelings. Six months later, they didn't remember the details of the letter, they just remember the emotions it generated. Those emotions were mostly negative as the players were upset. So now in their memory, the letter is associated with those feelings. The brain fills in the details to make that memory make sense. The letter goes from being a defense of the issue to conformation.

#3 – *Shifting Memories Over Time*

I began working for Wizards of the Coast in 1995. As such, I was in R&D during the summer of 1996. That summer is probably better known by its nickname given to it by the players at the time—the Black Summer (also known as Necro Summer). There have been a couple dark times in **Magic** constructed. One such time was the Black Summer when constructed **Magic** was taken hostage by a card called [Necropotence](#). (The other low-point, for those that care, occurred during *Urza's Saga* block which was lovingly referred to as Combo Winter.)



Even back in 1996 I was one of the higher profile R&D members. I wrote for *The Duelist*, I attended all the Pro Tours and I was a frequent contributor to the Usenet (the then equivalent to modern day bulletin boards). Players who wanted to complain often would complain to me. It was a bad time and the players were unhappy—very, very unhappy.

Flash forward a few years. I'm at some Pro Tour and the format was a very wide-open one. I'm talking with a bunch of the pros and a few of them complain about how they hate formats that are too open ended. They explain that they prefer environments that are better defined when it's clear what the dominant deck is. As an example, they brought up [Necropotence](#) and the summer of 1996. That, they said, was when

tournament **Magic** was fun. The crazy part about this is that I remembered a few of them specifically chewing me out about it back in the day. How is it a few years later that summer went from being a low-point to being remembered as a high point?

The answer is that it plays into another quirk of memory. Memories don't live in a vacuum. They exist in comparison to one another. The players were upset about something, so they searched their mind for the opposite. Because they were searching for a contrast to the negative of the present, the past now feels more positive. Remember how I said memories were fluid. One of the side effects of the fluidity is that present context can change perspective and thus change the memory.

Here's a different example of the same principle. When I was in Rio de Janeiro for the second Duelist Invitational, it was insanely hot. I remember going on an excursion where all I could think of the entire time was wanting to get back to the barely air-conditioned lobby of our hotel. I'd never been so hot. I was miserable. Several years later, I'm trapped outside in a snowstorm and I am freezing. I'm about as cold as I had ever been. I began thinking about the excursion in Rio fondly because the idea of being too hot was so attractive that it overrode any unhappy memories I had from the actual event.

Don't Forget



Was it eggs and butter, or eggs and milk?

So memories are faulty and players don't always remember things correctly. What does that have to do with game design? I explained at the beginning of this article that part of understanding game design is understanding people. It is very easy to

want to dismiss things because they don't logically make sense. How can players be upset about something you didn't do or never said?

The lesson of today is that dealing with people is dealing with their foibles. *Onslaught* didn't have merfolk as a tribe. If enough players feel it needed to be there, even if their reasoning isn't logically sound, then perhaps we should have had merfolk. (There's actually a giant debate about whether merfolk should even be in the game, but I'll save that argument for another column.)

Game design on some level is about giving the players what they need. Whether or not that need is rational is not actually relevant. In fact, a lot of design is playing into this irrationality. I have made a big effort to bring psychology into R&D because in the end what we are doing is selling fun and fun is about as subjective an issue as they come. Dealing with players is dealing with the memories they have, not with the memories they should have.

Memory is just one example of this concept but an interesting one. Game designers have to understand how people work because what we are creating is made for people. My hope for today was that this column will let you rethink of game design in a different context. As always, I'm interested to hear what you all have to think of this idea.

Join me next week when *Legions* previews begin and I unmorph a number of new surprises.

Until then, may you think back on this column with positive memories.

Mark Rosewater

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