

Middle Earth and Brain Chemistry: JRR Tolkien Explains Immersion

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Abstract

A lot is happening when we sit down to play. We aren't just swinging swords, launching nukes, or driving 200 miles per hour (321 KPH). Strange and unprecedented things are happening in our minds. J.R.R. Tolkien, real lord of the rings, understood the process of immersion almost 70 years ago. While some recent theories on the human brain can help us to understand the phenomenon more deeply, Tolkien's structure tells us what we're actually looking at. We'll talk about immersion in fiction, immersion in games, and then we'll define immersion. Get ready.

Watch out for Elves and Faeries

To understand immersion in games, we have to first understand its roots in literature. Who better to explain it than the lord of the rings himself, J.R.R. Tolkien? To Tolkien there was a Primary world, and Secondary worlds. In fantastic literature we lose all track of the primary "real world" and actually have an experience within one of many Secondary worlds. We become immersed. He didn't call any of this immersion, though. To Tolkien there was either 'enchantment,' a complete immersion, or what he called secondary belief. Part of

descending into secondary belief was the common phrase “willing suspension of disbelief,” which to him was inherently flawed. That makes sense on some level. When you’re really into in a great book, you’re not aware of the “suspension.” Constantly working at suspending your disbelief usually doesn’t help you to enjoy a book too much. In real fantasy you simply believe. You are enchanted, and can literally enter a world that the author has woven. According to Tolkien, stage drama (think Shakespeare) could only ever “achieve buffoonery or mimicry,” because actors dressed as towering dragons are obviously not real.

And yet, Tolkien also envisioned Faerian drama, a drama designed and executed by elves and faeries. Faerian drama is much more like television or gaming. Instead of imagining a second world, you step inside of it. “If you are present at the Faerian drama you yourself are, or think that you are, bodily inside its secondary world. The experience may be very similar to dreaming and has sometimes been confounded with it. But in Faerian drama you are in a dream that some other mind is weaving, and the knowledge of that alarming fact may slip from your grasp.” Tolkien said that enchantment, the experience of such a Secondary world, is too convincing. You must believe, “no matter how marvelous the events.” According to theories of the human brain he may have been right.

This is your brain

Our brains can’t tell the difference between real sight and images that we see on a television or computer screen. Anne Marie Barry, author of the book *Visual Intelligence*, wrote that, “Because evolution is a slow process, our brains have not yet adapted to visual experience gained via media in any special way.” If we experience something through a visual media we think that we have seen the genuine article. Keith Kenney, a founding member of *Visual Communication Quarterly*, writes that the tricks are played on the eye, and not the brain. “Pictures give us the false perceptual belief we are in the presence of the subject.” Our eyes cannot tell the difference between real visual experience and mediated visual experience, stuff like pictures in a newspaper, images on television or objects in a videogame. Even games that use abstract images could probably be experienced visually. Our brain learns to break down visual conventions in film: filters that modify the color, cutting conventions, drastic changes in the point of view. Why wouldn’t our brain begin to learn similar conventions in videogames?

The technologies fueling games aren’t just blurring the boundary between entertainment and real life. They go beyond imaginative book immersion, or the visual and auditory immersion of television. We now have interaction. When interaction is thrown into the mix, we move beyond having a primarily passive experience and we actually start to have an active experience in media. Where there has previously only been experience, these technologies have introduced a kind of media experience. Once we’re seeing, hearing, and interacting inside of these worlds, then we have to ask ourselves, “How are games not real experience?” Instead of just reading Tolkien, we can recreate his worlds with light

and sound. Mere mortals can now traverse the soggy grass of Middle Earth. Games allow many to feel, on some level, as though they are there.

This is your brain on immersion

Defining immersion is easy once we understand what we're immersed in. Whether we are entering into the imagined fantasy of a book, or a game that is visually realistic, we are entering Secondary worlds. Basic immersion is just the level to which an individual has an experience of a Secondary world rather than the Primary world. Media experience is much like real experience, it just comes from a Secondary world instead of the Primary world.

While we never physically leave the primary world, our level of experience slides back and forth between the Primary and Secondary. Our level of immersion can vary. If we're especially close to being completely in the Primary world, for instance a controller is in our hand but our attention is focused on a conversation, then we aren't very immersed. If we are experiencing completely within one particular Secondary world, and have utterly blocked out the Primary world, then we are completely immersed. At times, we can even act in the Primary, and remain highly immersed. For example some gamers can eat while playing, yet they continue to carefully monitor the deployment of their troops.

Immersion has changed along with media technologies. In literature immersion is the mind's ability to breathe life and color into the author's Secondary world. In television it became a passive way to experience a planned and choreographed Secondary world. In games, you can shape your experience within a Secondary world. But games can introduce new kinds of experience, situations that few humans before us could have entered. In other words, different kinds of immersion deal with different kinds of experience, real or imagined. For example, a first person shooter presents you with a very specific type of experience, one which reflects the visceral responses that you would have if you were actually running around, getting shot at. An emotional and romantic game might make your heart flutter. That's right, games can attempt the heart fluttery experience. The point is that immersion has different faces, depending on our body's natural reaction to what's happening in our Secondary world.

While game creators have amazing tools that can be used to fabricate many kinds of experience, immersion into secondary worlds is more commonplace than we give it credit for. You can get so immersed in a telephone conversation that you do chores without thinking about them. Or alternatively, you could become so focused on your chores that you start hearing the agitated phrase, "are you even listening to me?" While driving it is a bad idea to give your full attention to a rear view mirror, passenger, or cell phone. Your senses can become absorbed into any of these other elements, but the bulk of your perception has to be focused on the road. If you lose sight of that, then you're speeding toward disaster.

Books and Brains and Experience, oh my!

Tolkien's essay talked about faerie stories and fantasy. He saw these stories as far greater than most literature because they take the mind one step beyond normal book immersion. Faerie tales free people from established and boring rules. Using fantasy to re-imagine the world not only lets somebody see things in a refreshing new light, it lets the mind escape the inescapable - things like extreme poverty, war, even death itself. Re-imagined game worlds have the potential to engage our brains in ways that even phenomenal books can't. Worlds of brilliant mice, heroic mutants or even a lack of hunger take us out of the real world, giving us perspective on ourselves. Tolkien insisted that faerie tales are too important for anyone to look down upon them as a pursuit that's only fit for children or for study by academics.

This is where games get really cool. A lot of games mimic what happens in the Primary world, but certain experiences can only be found inside of Secondary worlds. We can harpoon space whales, fire rockets at dinosaurs, and lead a civilization for 6000 years. When immersed in games we get to experience the "unique content" of real life, and that's pretty cool. Unlike books, the individual makes the decisions that drive the action. Like books, a majority of games use their tools in order to recast the tired violence and drama that has been sold and resold in conventional media. That's fine; getting shot in a Secondary world is healthier than getting shot in the Primary. And yet there is always going to be room for pushing the envelope, and deep down that's what Tolkien is arguing for.

Immersion into games lets us go beyond experiencing only a Primary world. J.R.R. Tolkien understood the value of Immersion, but he also had an inkling that something more might be on the horizon. Maybe the elves of Britain slipped him a laptop loaded with Baldur's Gate 2. Maybe he understood game worlds because he was so deeply immersed in the thought of fantasy itself. Technology and interactivity allow gamers to become immersed in ways never before possible, but there will always be that nagging higher responsibility to the elves and faeries. Despite so many tools for immersion, most games still force us to suspend our disbelief. Only in fantasy can we transcend that.

For my own conscience, I have to say that this essay leaves out and recasts significant elements of Tolkien's essay. That said, I have tried to preserve the original intent and welcome all feedback that you have in that, or any other regard. His "tree and leaf" is a collection of one essay, "on faerie stories," and one short story, "leaf by niggler." They are presented together in the Tolkien reader. If you can tolerate a gross overuse of commas, then you can get a lot from "tree and leaf," whether or not your motivation is learning to make great games.