

Balancing Engagement and Immersion in videogames to create a mutually beneficial loop

Tork Shaw, August 2011

Immersion and engagement are terms used loosely and often in the video game industry. From studios to reviewers these terms are quoted as features rather than variables to such a degree that they no longer have a qualitative meaning. The fluidity of definition and usage has resulted in a serious shortfall in investigation of how these factors are in fact distinct and how they relate to one another. While both seek the same goal; to draw the player into the game, merging the terms could suggest that in achieving one you will achieve the other, but while each can be used to improve the other, one does not automatically guarantee the other. When properly understood and balanced these two elements of gameplay can create a gaming experience that is exceptional. The goal is to treat each as a separate variable, and design a game where immersion encourages engagement while simultaneously, engagement results in immersion. Balanced correctly the two should complement each other creating a self-fulfilling loop.

Furthermore, by using active Engagement factors in the emergent narrative of gameplay in place of more passive, subconscious empathy and sympathy found in a more traditional linear narrative, it should be possible to achieve levels of 'immersion' that rival those of the great literary and cinematic works.

Engagement vs. Immersion

Engagement is the easiest of these terms to define in a gaming sense although perhaps its best definition comes from education; "*Students make a psychological investment in learning. They try hard to learn what school offers.*"¹ In games we are referring of course not to 'School' but instead to the individual titles. Players who engage with the game are making an investment in learning the mechanics, principals, and rules of a game. They are trying to understand and beat the game. Engagement is the conscious and deliberate application of skill and concentration to the mechanical aspects of the game in order to achieve a particular outcome from higher scores, to game completion. It represents the game's ability to capture, and hold, the conscious attention of the player.

Immersion is a more ethereal term. This is the 'deep mental involvement'² in or with a particular entity. We are more familiar with the term as applied to cinema, television, or literature, but in those mediums immersion is something passive; an unconscious reaction to the material. 'Gameplay', however, is something active so traditional definition would seem to become problematic. To clarify this Ernest Adams sought to expand the term in his book *Game Design and*

¹ Newmann, F. (1992) *Student Engagement and Achievement in American Secondary Schools*. Teachers College Press. pp. 2–3.

² Oxford Dictionary definition, 2011

Development³ with a number of different kinds of 'immersion', Tactical, Strategic, and Narrative but these are problematic in themselves.

Tactical Immersion is the kind of immersion experience by players of fast paced high-action games like Tetris. The player is 'in the groove' and the level of attention and split second timing required to succeed in the game leaves little or no time for any other thought processes effectively immersing the player in gameplay.

Strategic Immersion is a more developed version of Tactical Immersion where instead of simply being swamped by the number of 'calculations' required by the player each second they are instead overcome by the wider strategic nature of the game. The game requires longer term decisions to be made based on a set of rules with which the player has become extremely familiar and such complex and detailed decisions occupy the player's conscious mind again allowing little time for external concerns.

Narrative Immersion is the 'feeling of being inside the story' much like reading a novel or enjoying a film. In fact I believe this is the only one of Adams' distinctions that can be considered 'immersion' as I will outline below. I would hasten to add that does this is not a suggestion that video game immersion should be studied in precisely the same way that it can in other media. I am suggesting, however, that much like the crossover in filmic and literary 'immersion' there is some crossover in some of the techniques that can be used to achieve Narrative Immersion in games. Cultural, emotional, and even narrative frameworks can at least on some level behave as effectively in games as they do in film and literature. It is important to remember though that the kind of emergent narrative found in games and mitigated by interaction and engagement (as discussed below) is vastly different from the kind of linear narrative found in cinema and literature.

Using Engagement to drive Immersion

Adams' categories of Tactical and Strategic Immersion are many steps away from traditional 'Narrative Immersion'. Neither are sub-conscious and in both cases the player is not so much 'immersed' in the game as 'immersed in the rules'. They are reacting deliberately and consciously and I would argue this is not immersion, but 'engagement'. The player is deliberately engaging with the rule set – playing to beat the rules, not immersing himself in the game world. The pre-soviet setting of Tetris, for example, is irrelevant to the player and it could just as well be a game about packing furniture into your car while moving house. The player is not 'immersed in the game Tetris' they are *engaging with a rule set*. Similarly, and perhaps more strikingly, players in a game of chess are not 'immersed' in a world of knights, kings, and pawns, they are engaged with the strategic aspects of the game. I would contend then that Adams' Tactical and Strategic 'immersion' are not immersion at all, but rather Engagement, and that even in video games 'narrative' is the only truly immersive technique. Despite this, it is true to say that tactical and strategic 'engagement' can be used to great effect to improve narrative immersion, which can then in turn be used to increase engagement building a promotional cycle.

³ Game Design and Development, Adams, Ernest and Rollings, Andrew, 2001, Pearson

Narrative Immersion in all forms of media is not as straightforward as simply forcing a story on the audience. Under close scrutiny we can see that it is not entirely passive. Even in literature and film the state of immersion is not forced upon the viewer or the reader, it is developed as a subconscious reaction in the form of empathy and sympathy. In games Tactical and Strategic engagement could be used in exactly the same way to heighten and even define this reaction through conscious and/or tactile means. A player may be able to better understand the predicament of their player character through their physical actions within the game. They no longer necessarily need to 'relate' to the character's situation because the game simulates it for them. They do not need to empathise with a character who is suffering the effects of a debilitating condition or the loss of a gameplay partner because they are able to engage with these 'realities' on-screen. In the game of chess mentioned above while a player's initial engagement may be entirely strategic, by the end of the game if given effective narrative cues to compliment the situation the strategic situation they are engaged with the player could find themselves experiencing the panic and despair of a King who has lost the majority of his court and not tries to escape his final demise. They have achieved not only engagement but also immersion creating a much more satisfying and complete game experience.

The difficulty with the relationship outlined above is that it is not always possible to rely on the factors of engagement alone to draw a player into the narrative. Engagement by a player is not always within the rule or the spirit of the game. It is much more straightforward in a film or novel to draw characters to which viewer or reader can relate because in those instances viewers are asked to relate noly to the presentation and actions of that character as scripted. They behave in a way that is consistent with their character. In a video game, however, we are asked to not only relate to the presentation of the character but we are also asked to some extent to provide their actions. This causes problems if we behave in a way contrary to the character as presented. In 'Spiderman'⁴ for example it is possible to ignore the dangers of maniacal supervillians and instead to roam the streets of New York beating up pedestrians. This is very much against the design of the character and when we engage with the game in a unusual way the illusion of immersion is broken. The moment we lay into our first old lady we cease to be Spiderman. The solution to this is to ensure that the narrative and the gameplay are inextricably linked. From the first moment they enter the game-space the player should be encouraged to engage with the game in a way that is complimentary to the narrative.

Building gameplay that compliments the narrative is more complicated than simply eliminating the ability to do anything that compromises the story. Players require a degree of freedom in order to play the game their own way. Particularly restrictive rules also heavily decrease narrative immersion (although can augment Tactical and Strategic engagement). Instead the narrative and gamplay elements should be considered in tandem. The gamplay should follow the story points of the narrative while the narrative should require the player's input while also rewarding that input by demonstrating how it has affected the narrative. If the game is set in space, for example, space travel should play an important part in the narrative. Choosing to master the mechanics of space travel could act as a story point, opening up new chapters in the narrative. The intention is that initially the

⁴ [http://en.wikipedia.org/wiki/Spider-Man_2_\(video_game\)](http://en.wikipedia.org/wiki/Spider-Man_2_(video_game))

player will want to learn the ropes of operating their 'cool new spaceship' but once up and flying will want to 'travel to that new planet' not just because they enjoy the flying mechanic but also because a story element has opened up as a result of their spaceborne abilities. On the flipside, transporting a player to this new planet against their will (perhaps in a cut scene) does nothing to utilize their engagement with the space travel mechanic and can be both jarring and unappealing, detracting from the narrative.

Using Immersion to drive Engagement

Rather than relying on just Tactical and Strategic Immersion to draw the player into the narrative as outlined above, for greater success, the reverse should also be engineered. Once play has begun and they are comfortable with the basic mechanics the player should be led from ability to ability, mechanic to mechanic, by the development of the story, not just the necessity of the game. This again requires careful planning since it is all too easy to simply deliver new mechanics or abilities in a mathematical and scientific manner. While this may be disguised with narrative elements if the procedure is too predictable or two-dimensional it will potentially jog the player from the narrative.

If we consider our space game again perhaps there is a planet that is just out of reach of the fuel cells of the player's ship. If each 'level' the player is able to upgrade their ship's fuel capacity then they can immediately see that progression to this distant planet is a matter of 'wait it out'. Instead, this particular ship upgrade should come as a result of some fortuitous narrative element; a new character is rescued who becomes a better ship's engineer, a new ship is captured by the player, the player develops some new fuel formula. Using the player's narrative achievements to drive the game forward not only makes for a much smoother transition between levels but also helps anchor the player within the narrative by rewarding their attention and dedication to that narrative. In turn the player understands that their level of skill, their engagement with the game and its mechanics, is the driving conscious force behind the game's advancement. In order to achieve more and to progress further into the narrative in which they are slowly becoming immersed they will push themselves to higher levels of engagement.

Spatial Immersion and character customisation

In *Patterns In Game Design*⁵ Björk and Holopainen provide similar immersive categories to Adams' but with specific terms that tell us more about the nature of each category (Sensory-Motoric, Cognitive, and Emotional). They also add a fourth category; Spatial Immersion, which refers to the immersion achieved by a convincing virtual environment. This type of immersion refers largely to Virtual Reality but has relevance in more conventional games and although early text based dungeon crawlers as well as early MUDs and MOOs⁶ demonstrates that a detailed or realistic environment is not a vital for immersion it can make the process easier, particularly early in gameplay. Players who

⁵ *Patterns in Game Design*, Björk and Holopainen, Charles River Media, 2004

⁶ Sherry Turkle, *Life on the Screen : Identity in the age of the internet*, Phoenix 1997

are able to identify with either a more realistically presented player character or better yet, customise aspects of their own player character⁶, may find it easier to establish an emotional connection with the game. If such a relationship with the player character can be established emotionally it takes some of the pressure off requirement for early engagement found detailed above allowing for a more complex rule set from the start.

There is an additional danger to character customisation, however, that allows the player (much like the misbehaving Spiderman) to build a character contrary to the environment. As Mik Furie demonstrates in his Gaminglives.com article an extended character creation process may allow the player to create a character so unsuitable for the game it breaks immersion⁷. Even beyond the physical features of the character the name itself may prove problematic. The popular MMO World Of Warcraft does not allow words or phrases that could be considered 'offensive'⁸ to be used as character names in the game and while they do not force 'elven' names on 'elven' characters it is a step towards rationalising this aspect of customization. To wander the streets of Stormwind and come face to face with Batman would likely break fantasy immersion of WoW.

Likewise if a player has become either immersed or engaged it is important that in order to maintain this the environment or presentation of the game itself does not jar them out of 'the zone'. Graphics and environmental effects should not only increase the 'realism' of the game world but should actively add to the tactile and sensual nature of interaction. If a player is to believe they are in the game world despite in fact being sat on their sofa at home then the player character, the extension of themselves into the game world, should appear to be acted upon and to act upon that game world. Environment should affect the PC from footprints in the snow to slowed movement through water. Actions the PC takes should provide the most convincing feedback possible from the noisy creaks of wooden doors to the dull clanking of levers pulled. In the case of modern consoles this can even be achieved through a level of haptic feedback delivered by vibrating controllers.

While pure Spatial Immersion is a long way off in the console environment it is important to consider the impact of poor spatial implementation on the other forms of engagement and immersion.

Conclusion

A game that is either engaging OR immersive can be a successful title in itself. Tetris offers little to no narrative immersion at all and is simply a series of engaging and fiendish mechanics yet it is one of the most successful games of all time even coming in second as late as 2007 in IGN's 'Greatest Games of all time'⁹. Conversely, Myst by Cyan¹⁰ requires very little actual engagement with the mechanics but a huge amount of commitment to the narrative and remained a bestseller throughout the 90's¹¹. The potential of balancing both immersion and engagement is huge and on a

⁷ Mik Furie, Gaming Lives, 2011

<http://www.gaminglives.com/2011/05/02/evolving-character-creation/>

⁸ http://us.blizzard.com/en-us/company/legal/wow_tou.html

⁹ http://uk.top100.ign.com/2007/ign_top_game_2.html

¹⁰ <http://www.cyanworlds.com/>

¹¹ http://uk.gamespot.com/pc/strategy/simslivinlarge/news_2857556.html

mainstream commercial scale is just beginning to be realised with titles like the Mass Effect series, Dragon Age¹², and the upcoming L.A. Noir¹³. If the correct balance can be achieved each should feed into the other creating a loop that draws the player deeper and deeper into the game.

Engagement is perhaps the easiest and fastest to achieve but by considering the narrative as a game feature, rather than as an afterthought it should be possible to design a complimentary approach. As a template using Adams' classifications I would contest that in order to achieve initial engagement the player should be presented with a 'Tactical' situation that simultaneously introduces the 'Narrative' aspect of the game. By introducing more and more mechanics and game goals using story points to do so the game can develop a 'Strategic' quality that does not lose sight of the 'Narrative' goals. Finally, developing the characters and story as the player progresses both around, and as affected by, the player's actions the game should lead to more natural 'Narrative' immersion. At all times the player should be encouraged to discover and develop their Tactical and Strategic abilities not for their own sake but in order to drive the Narrative forward.

Ideally the narrative would develop as the game is formulated leading on from some of the ideas and even the mechanics that start to make up the game. A more traditional rigidly scripted narrative is in danger of jarring just as badly as if it were simply tacked on once the game was built. Trying to find meaning in a series of unconnected gameplay features is a recipe for disasters but so is trying to apply a structural narrative to features and mechanics that were derived from technology and business need.

There is no right answer as to which should come first, narrative or gameplay but as far as Immersion is concerned it is important to remember that Engagement is gameplay – it is what the player expects and as such it is natural for a player to 'engage' themselves. It is much harder for them to 'immerse' themselves and this requires the careful and considered help of the game designers.

¹² <http://masseffect.bioware.com/>

¹³ www.rockstargames.com/lanoire/