Within this essay I will discuss the relationship between the level of player agency during narrative sequences in first person shooters and how it relates to the players engagement and level of empathy with their avatar during these sequences. I will also apply these examples to the theory of flow in order to discover how to maximise the affect on the player. I would like to stress this is dealing with narrative sequences within a level and not cinematic sequences which in shooters in particular tend to be between levels.

Empathy is the ability to feel emotions felt by others through consciousness, there two key forms of empathy called cognitive (also known as cold) and emotional (also known as hot). This essay will be focusing on the later, which according to Daniel Goleman, (2007) is when you feel along with another person "as if their emotions were contagious". The reason emotional empathy is the most important within games is because the player needs to not only be able to realise what their character would be experiencing (such as with cold empathy) but to feel it within themselves, making for the fullest gaming experience. An important note is that the player's ability to feel empathy for their avatar will rely on their engagement. If a player is not engaged in the game they will not be able to empathise with their avatar as well as if they were.

"The Psychology Dictionary" (n.d) describes Human Agency as "the capacity for human beings to make choices and to impose those choices on the world" perhaps the best way to understand how Human Agency applies to games is through control driven mechanics as the mechanics are the player's means of interaction with the game world. Therefore within games it is acceptable to consider the amount of player control over their avatar and subsequently the game world as their agency within the game. Experienced game designer Doug Church is quoted in an article by Justin Hall, (2004) as saying "...If you're going to make the player part of the experience you need agency and the need to be able to act and see reaction. If the world doesn't react to the player, then why are they there?"

For my first game example I will be using a section of Half Life 2 by Valve Corporation, (2004). In this game the player almost never loses control of any of the mechanics during narrative sequences.

In this sequence from the very beginning of the game the player has just been lead into an interrogation room by a member of the antagonist's forces. The player maintains full control but is unarmed and has no path options but to comply.

(Figure 1. Half Life 2-player enters room)

Once inside the room the NPC (non-player character) that led you into the room reveals himself as an ally and begins a long dialogue sequence giving necessary back-story.

(Figure 2. Half Life 2-ally unmasks)

With narrative sequences that give the player full control the player has a tendency to not pay full attention to the narrative and often becoming impatient. A demonstration of this is seen by the player's actions in Figure 3 where they are stacking books on a chair while the NPC continues speaking to them.

As soon as the player is able to progress they simply do so.

(Figure 3. Half Life 2-player gets bored)

(Figure 4. Half Life 2-player exits room)

For my next game example I will be looking at Quake 4 by id Software and Raven Software, (2005) and its method of allowing the player limited and altered control of their avatar during a particular sequence.

(Figure 5. Quake 4-Boss Fight)

This sequence begins immediately following a boss fight at the end of the hardest level to this point in the game. It is a fight you have to loose and once you do a certain amount of damage to the boss he fires a massive energy beam and defeats you.

(Figure 6. Quake 4-Capture)

Afterwards a short complete loss of control sequence where the boss picks the player's avatar up before he blacks out serves as a lead in to the next scene.

(Figure 7. Quake 4-Conveyer Belt)

The avatar wakes up strapped to a table on a conveyer belt with an NPC on another immediately in front of him. They move through a series of sections where they are assessed by the aliens (the Strogg) and injected with various enormous needles.

(Figure 8. Quake 4-NPC gets cut up)

The player knows everything that is going to happen to their avatar as they watch it happen to the NPC in front of them. They are able to look around but not to escape the table.

(Figure 9. Quake 4-Leg sawing)

The player watches as their avatar's legs are removed and replacements are grafted on and their body augmented, they are also implanted with a chip which allows them to read and understand the Strogg language. There are screens around that the player can look by moving the camera that were previously unreadable as they are pulled along.

(Figure 10. Quake 4-Rescue)

Finally the player's avatar is rescued by their team just before the chip connects them to the central consciousness of the alien race. The avatar is now stronger, faster and able to understand the Strogg language but maintains free will. A new level and therefore new difficulty curve begins now.

When the player's controls are limited they are kept as an active participant but forced only to proceed how they must for the narrative sequence to operate effectively.

To show an example of not affording the player any control of their avatar during narrative sequences I will be looking at Mirrors Edge by DICE, (2008).

(Figure 11. Mirrors Edge-Framed)

(Figure 12. Mirrors Edge-Hugging)

This sequence is from the first level of the game titled 'flight'. The player's avatar has just entered a room where her sister – a police officer – has been framed for the murder of a mayoral candidate. Upon entering the room all control is taken from the player and Faith (the player's avatar) moves around without player influence. The advantage to this method is its allowance for more complex animation such as Faith hugging her sister as she leaves. However most players (particularly on subsequent play-throughs) are liable to skip or not pay full attention to the sequence and lose their engagement and therefore are less affected by the narrative.

If the player has full interaction with a sequence they maintain their agency but are less enthralled by the sequence itself and when the player has no interaction with the sequence the player looses their agency entirely and therefore their connection with their avatar. Giving the player limited control during narrative sequences both keeps them connected with their avatar and maintains their full attention on the narrative allowing for the best engagement in the sequence and therefore preventing any interference with its emotional affect on the player.

Another key element to look at when talking about player engagement is the concept of "Flow". Flow is described as the experience of being so completely involved in a task which challenges but is achievable to the point where you lose all sense of time and the task itself becomes its own reward. (Farmer, 1999)

In 'Finding Flow' (Csikszentmihalyi, 1997) Csikszentmihalyi says himself that people often describe flow as "the sense of effortless action they feel in moments that stand out the best in their lives". He goes on to say that flow tends to occur when a person is given clear goals and their skills are fully involved in overcoming a barely manageable task. Perhaps the best way to show how to find flow is in any activity when the difficulty of a challenge matches an individual's level of skill. Figure 11 (Csikszentmihalyi, 1990, p.74) shows a 'channel' between anxiety and boredom where flow occurs.
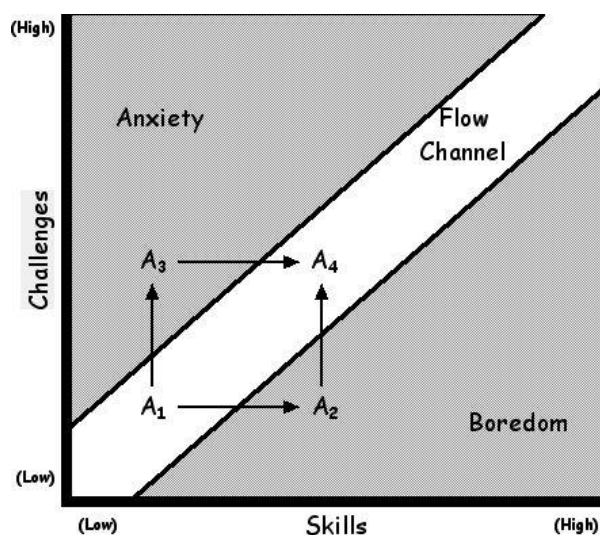
(Figure 13. Flow model)

From looking at the necessity of agency and the concept of flow we can see that the player's engagement in the game is determined by their level of agency and by the level of difficulty relative to their skill. Within games anxiety is usually presented as the difficulty gradually increases. Otherwise the player would not have the necessary skills and would become too overwhelmed, breaking their flow. We have also found that giving the players some but not full control allows for the best engagement with a narrative sequence.

Another consideration is to evaluate the most effective time to present these narrative sequences relative to the player's level of anxiety and how this can affect their level of empathy with their avatar.

When applying flow to a narrative sequence we must understand that since within the sequence there will rarely be any direct challenge (and therefore necessity for skill) flow cannot be applied

to the sequence itself but rather to the placement of the sequence within gameplay. Looking at the examples of Half Life 2, (Valve Corporation, 2004) and Mirrors Edge, (EA Digital Illusions CE, 2008) these sequences are before any real challenges have been presented and because of this the player is not as engaged as they otherwise would be. The Quake 4, (id Software and Raven Software, 2005) example on the other hand is put directly after a boss battle at the end of a difficult level, when challenge is at its peak. This affords maximum engagement of the player and combined with the player's limited agency preventing disengagement or distraction during the sequence allowing the player maximum empathy with their avatar.

Narrative sequences elicit the most player empathy for their avatar when they present only limited agency to the player and are they are most effective at peak anxiety. This allows for less loss of engagement from the removal of control while still keeping the player an active but constrained participant allowing for the greatest empathic affect on the player through their avatar.

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