

Bloody fantastic reality! (Published in Play Gamer Magazine)

On the battlefields of our gaming grounds lie a million bullets in a million enemies, fired from a million guns. Still the shots ring out. Never shall they cease. The blasts sound louder. The flares burn brighter. War. War never ends.

Whichever shelf your eyes fall upon in the games store you are likely to see one recurring theme : weapons. Weaponry is perhaps the most ubiquitous of all gaming devices, from the plethora of guns in FPSs, to the upgrading of fantasy weapons in RPGs, to the bare fists of fighting games. Even in racing games, which by all logic should have nought to do with weapons, the cars themselves often turn into a make-shift form of arms with players intentionally crashing into one another. There can be no doubt about it, we gamers love a sense of carnage and mayhem, but truth be told, the visceral thrill of combat is far from unique to games.

Year after year the movie industry churns out slightly tweaked versions of archetypal good versus evil plots, in which the progress of action is clearly linked to the development of a skill, tool or weapon, be it a young Jedi learning the power of the force to bring the rule of the evil Galactic Empire to an end or Harry Potter learning new spells with which to take down the latest practitioner of the Dark Arts. The motif is widespread. In nearly all forms of storytelling there is some form of weapon or tool that the hero must learn to use in order to overcome the villain. Historically, this device was used as a means to give a sense of purpose to plot development, and indeed still is, but with the development of special effects in movies and games it is also used for pure entertainment, for quick thrills. As Nathan Camarillo [Executive Producer on Crisis 2] states, in games '...you always see a direct result from your actions. Weapons are loud, exciting and visceral. The amazing impact they have in the game world offers visceral thrills.'

The rate of these “visceral thrills”, however, is higher in gaming than any other form of entertainment, for where movies and literature advance principally through story, with action serving as an aside, games progress directly through a series of player actions that are created through the use of these tools, which are almost always some form of weapon. As Ed Stern [Senior Game Designer at Splash Damage] says, 'Weapons as agents of change in a game's world are inherent to the medium.' Without his tools, Solid Snake, for instance, could do little more than view the war zone of Metal Gear Solid 4. It isn't until the player makes use of Snake's guns and gadgets that they can truly begin to influence the game world. So important are weapons to a game that Stern reasons, 'In many ways, the weapons are effectively your character. In a first-person shooter you spend more time looking at the weapon in front of you than at your character.'

Serving such an elementary purpose in the relationship between gamer and game, it is imperative that the weapons be not just of a pleasing design, but that they reflect the sense of fiction and also of challenge in the game, that they carry the gamer realistically into the fiction of the game world. It would not do to give Ethan Mars of Heavy Rain an ion cannon, nor a soldier in Modern Warfare 2 a penknife. Not only would these out-of-place weapons destroy the game's challenge, but they would completely obliterate any sense of belief in the fiction. So it is that the weapons the developer designs must unite with the game world. 'The art direction has to extend over the entire game, not just the characters or environments,' says Stern. 'With Brink, we put a lot of work into the weapon concepts, making sure they belonged in the world, along with the characters and the environments themselves.'

'The developer starts with a definition – “Our game will work like *this*” – and designs the enemies whilst simultaneously thinking about what weapons to give the gamer,' says Camarillo. “The developer must marry their ideas for enemies and weapons.” On a broad level, this creates two options. Firstly, the developer may choose to create a realistic universe with conventional weapons – in the Call of Duty and Splinter Cell series, for example, the gamer is given a conventional weapon to take down conventional enemies in a conventional world – or a fantasy universe with fantasy weapons – in Killzone and Bioshock the player confronts larger than life

enemies and so must have larger than life weapons. Either way, the weapons must have a sense of reality. 'Conventional weapons in a game must be polished and believable,' says Camarillo, 'and fantasy weapons must be realistic to the game that you are making, to its fiction, its rules.'

With *Crysis* and *Brink*, Crytek and Splash Damage embraced both conventional and fictional weapons, and in each case went to painstaking lengths to insure that the games' weapons had a sense of place, be it a place in reality or in their respective fictions. 'For our conventional weapons, we did hands-on research at shooting ranges, firing and using the weapons,' says Camarillo. This experience, however, gave the development team a far more realistic picture of real-life weapons than that of the average gamer. 'The broader market of consumers may have never fired a gun,' Camarillo explains. 'Their expectation of what a weapon is does not match the reality because much of it has been created by Hollywood – they expect a gunshot to cause a car to explode.' So it is that in order to comply with the average gamer's skewed view of reality, the development team had to find a halfway point between the truth and the Hollywood depiction of truth. 'We found a mutual point by bridging ultra-realism with entertainment.' Whilst the influence of Hollywood may seem to limit weapons design in this way, Stern points out that Hollywood has also been of great aid to gaming. 'Games often look to movies for inspiration, which can lead to a certain uniformity. Where on Earth would the games industry be without *Aliens* or *Saving Private Ryan*?'

Whilst research may be directly available for conventional weapons, developers have to look to alternate channels when it comes to fictional weapons. 'We did a lot of research on what weapons are going to be introduced in coming years and what could be introduced in 10-15 years,' says Camarillo. The most obvious of these pseudo-realistic weapons in the *Crysis* games comes in the form of the Nanosuit, the suit of armour the player-character wears and which serves as the player's principle weapon in the game. 'The Nanosuit is an extension of you as a player. It gives the player superhero-like powers – you can jump on a grenade with armour to survive, you can jump to new areas of the level etc.' With no current real-life counterpart, the Nanosuit had to undergo a different kind of testing to discover whether it could be considered realistic. 'We spent a lot of time developing the Nanosuit and talking about the technology that would be needed to make it happen. That requires a decision as to what the universe of the game is and is not – we have to weigh up the fantasy elements with their physical realism.' Should a weapon be deemed to be out of place in this testing period it is removed from the game. 'There were weapons in *Crysis* that didn't fit in. Ultimately it's all about time and place. It's an orchestra of everything that you are making.'

The prototyping period is but the tip of a very long blade. Much of the remainder of the weapons development period is dedicated to creating that most important trait, which Camarillo calls "Physical reality," a process that is painstakingly long and whose reward is gleaned in the speed of a bullet. It is a process that requires the developer to make a great deal of design considerations. 'Olivier Leonardi, our art director, has done a fantastic job of defining and communicating the *Brink* style to the team, ensuring that every weapon, item, and object in the game world looks and feels right,' says Stern. Whilst the image of the gun itself is an obvious element of its design, the care taken to insure physical reality even extends to details so minute that the player could be forgiven for not noticing, but which Camarillo nevertheless considers imperative to the aim of physical reality. 'Weapons aren't simple. A bullet is much more than just a projectile. There are over thirty elements of design that go into making a weapon feel good every time you fire it : sound, controller vibration, weapon feedback, muzzle flash, what material does the bullet hit? What does it sound like? When it hits an enemy is there a particle effect? Is there a hit reaction? Do sparks come off... ? A lot of work goes into creating what you, the players, do thousands of times while playing.'

Should the development process be a success, those thousands of shots will each prove a real thrill for player and developer alike. 'I really like the Gauss Rifle,' Camarillo states with much enthusiasm. 'It's really fun to use in the game because it's a little more over the top than most weapons, it's pinpoint accurate, like firing a sniper rifle, and when you hit an enemy it launches

them and sends them flying, they can then fall on objects that break, causing different effects... . It causes mad chaos with one shot.'

Once this vigorous development process is complete, the weapons are placed along the player's journey in an order that gives a sense of progression. 'We want to constantly create a sense of challenge and success,' says Camarillo. 'It's about maintaining the game balance. We allow you to master one thing then introduce another. The weapons become an arms race. By introducing new weapons we are able to introduce new, harder enemies.' This then creates the three-fold backbone of First Person Shooter gameplay. The player is given one weapon that has its own "physical reality" – its own thrill – and allows a player to overcome a certain enemy, before being given a new, more powerful weapon with a greater sense of thrill that allows the player to overcome the next, tougher enemy. It is through the swinging of this three-way pendulum – weapon, thrill, enemy – that the player is carried on towards the game's conclusion : the biggest gun, the biggest thrill, the biggest enemy. Provided every weapon packs the punch of a bloody fantastic reality, the journey from pistol to BFG should be one heck of a blast.

Box-Out : Interview with Ed Stern, Senior Games Designer at Splash Damage

Play-Gamer : Why do you think weapons are so prevalent in games?

Stern : There really aren't that many verbs available to us as gamers or developers. It's much, much easier to make something explode convincingly than to make a character seem like a real live human being. Besides, it's therapeutic and cathartic. We want to do extraordinary things in games, things we don't experience in real life.

Play-Gamer : Could you overview the criteria you look at when designing weapons?

Stern : We think of the weapons as a cast of characters with vivid and distinguishing characteristics. We didn't want to have dozens and dozens of weapons in Brink if they weren't going to be distinguishable. So a key point was to make the choice of weapon a meaningful one for the player.

Play-Gamer : How do you insure that the weapons hold the same style and feel as the characters that wield them and the game of which they are part?
Our goal was that the whole game has to feel and look uniquely Brinkish; you can take a screenshot at any point, looking at any object in the game, and instantly know it could only be Brink.

Play-Gamer : Of all the weapons across the spectrum of PS3 games, which do you find the most artistic? Which carries the greatest sense of personality, and why?

Stern : Sooo tempted to say the Portal Gun from Portal. :)

Captions

- 1) The futuristic setting of Vanquish looks to promise some original gameplay, but to succeed it will need to offer futuristic weapons that provide visceral thrills.
- 2) The Tom Clancy games have provided some of the most realistic futuristic weapons yet seen on the PS3. Hopefully Future Soldier will follow the trend.

3)What can be said? The giant of the FPS world. Modern Warfare 2 perhaps as big a bang for your buck as any game ever.

4)Ratchet & Clank's comedy weapons sets it part as a shooter. Grab that groovatron and start grooving... . No really, we'll shoot you if you don't.

5)With the amount of care Crytek are taking over the physical reality of their guns, it's a dead certainty that Crysis 2 will pack a punch.

6) Konami are taking a big risk in changing the nature of battle in Metal Gear Solid : Rising. Will Raiden become as big an icon on the PS3 as Snake? Only time will tell.