

Groundbreaking game mechanics and their subsequent uses

Computer games have always tried to innovate. It's no secret that games need to be fresh for players to be interested enough to buy them. Player investment in the games market allows companies to focus on more expensive projects, possibly leading to new gaming innovations.

"Bullet Time"

Bullet Time has become a staple formula of the gaming industry today. It is best described as a tool that slows down time to the extent that bullets in flight are visible to the naked eye. The effect of slowing down time and being able to perform actions and manoeuvres impossible at regular game speed is most effective in fast paced shooting games. Remedy Entertainment's Max Payne, a multi-platform title released in 2001, used the bullet time mechanic heavily in its gameplay.

Some areas of the game were almost impossible to complete without the help of slow motion gameplay. The game was received with open arms by the gaming community. Praised as "an atmospheric third-person shooter, clearly inspired by the cinematography of John Woo films and The Matrix, with captivating graphics and edgy, action sequences."¹ The game scored highly in many reviews, including a bold statement by Games Radar UK, claiming that Max Payne was "The most important action game made yet on the PC. Well worth the long wait."



Max using Bullet Time to dodge enemy fire

Many games have made use of the bullet time mechanic in precisely the same or similar ways since its real debut in Max Payne. The most notable of these was however, in a completely different genre. Tony Hawk's Project 8 for the Playstation 2, later released for the Playstation 3, used the bullet time mechanic in a similar way to Max Payne. The player had the ability to slow time down with a series of commands, entering them in

to "Nail the Trick" mode. This mode puts the player in control of both the skaters' feet, using the left and right analogue sticks for directional purposes. Players are then able to invent tricks and time tricky manoeuvres with relative ease during the slowed gameplay.



Max's toilet habits are best left alone...



Blurred surroundings in Nail the Trick mode

Project 8 isn't the only PS3 release to make use of the bullet time mechanic. Insomniac Games' latest title, Resistance: Fall of Man included a sniper rifle, the "Fareye." This weapon was able to slow down time in single player mode for more accurate sniping, much akin to the usage of said mechanic in Max Payne. Bullet time has proved to be a popular feature amongst gamers and developers alike. Expect to see it crop up in plenty more games.

RTS User Interface – Command and Conquer

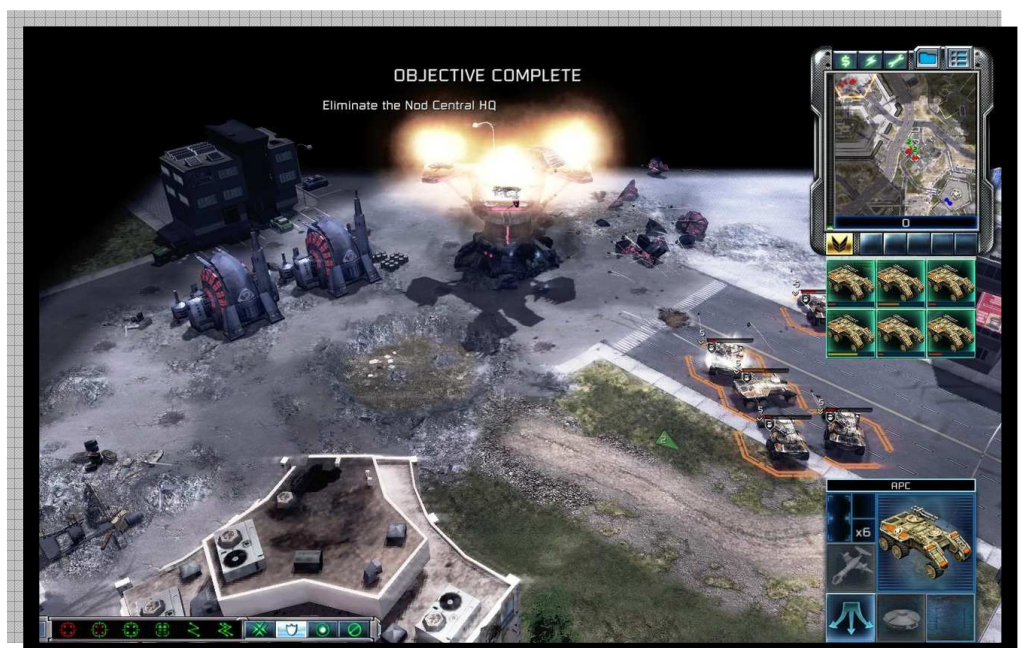
Along with many aspects of the Command and Conquer series, its user interface has proved extremely popular in design and has been adapted by many different RTS's throughout the years². A simple layout providing a list of the player's available units, structures and defence's, displayed on the right hand side of the screen, made for a popular choice for developing RTS games.



Command and Conquers interface

Total Annihilation, released in 1997 by Cavedog Entertainment was innovative in its own right. It was the first RTS to feature true 3D units and terrain. Total Annihilation borrowed heavily from CnCs idea pool. It used a similar point-and-click command system, employing the left click for both selecting units and for assigning commands such as movement or attacking. Grouping units was similar to CnC in that selected units could be grouped together and assigned a number, making selecting large amounts of units a lot simpler. The UI included with Total Annihilation was very similar to the CnC UI in that it was mounted on the side of the players screen and displayed a list of units and structures available.

Future releases of the CnC series have stuck heavily to the design of the original interface. The latest release, Command and Conquer 3: Tiberium Wars, has returned to the same design after the series brief break from their regular interface with its predecessor Command and Conquer Generals. The player base showed a distinct lack of enthusiasm at the introduction of the new UI design in Generals and thus EA decided to return a similar, if a little more advanced UI than the original CnC interface.



Command and Conquer 3: Tiberium Wars interface

Modified Input Devices

Over the years, as gaming and consoles have developed, there has been a plethora of input devices developed that differ from the “standard” games controller. Various inputs have depicted how games are played. One of the earliest varied inputs was the NES’s “Zapper” light gun. The release of the “Zapper” heralded a new age between arcade and console relations. Many games previously only seen in arcades utilising the light gun mechanic were finally available in the home.

Since the development of the “Zapper” many different input devices have been seen in the home. Different styles of light guns, bazooka’s (most notably the Super Scope for the Super Nintendo

Entertainment System), dance mats and more recently, guitar input devices.



The “Zapper” light gun circa 1985

The guitar input device was first seen in arcades across the world in 1998, used for playing Konami’s

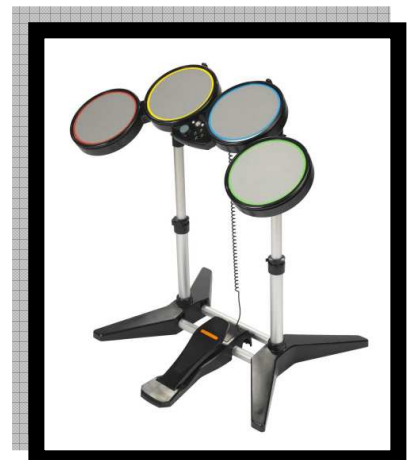
GuitarFreaks. The series has proved a popular one. Currently in its 15th release in arcades, the game managed to corner a market, along with several of Konami’s other releases using varied input devices including keyboards, drums and dance mats.



GuitarFreaks Playstation controller

These guitar controllers have recently found their way into player’s living rooms with the release of the Guitar Hero series. A multi-platform rhythm game much the same as GuitarFreaks, using 5 buttons and a “pick” button to play through popular songs while on screen characters act out the movements input by the player.

Recently released, Rock band; another game based around rhythm input has brought newer input methods into player’s homes. Debuting without its new peripherals on the 20th of November 2007, Rock band is set to take the online gaming community by storm. The inclusion of a drum controller (very similar to DrumMania, released by Konami in 1999) and a microphone for players to sing into brings more of the existing arcade inputs



Rock Band's drum controller

into the household. Rock Band's new drum controller and all other Rock Band branded controllers are set for release in 2008.

Currently within the games industry, the use of Bullet Time, the constant use of similar interfaces within the RTS genre and newer input devices are seen as 3 of the most widely used and innovative techniques around. It would appear that from current trends that their utilisation will continue for some time to come.

Videos displaying of all of these mechanics are available on this month's cover disk.

References

¹ <http://www.metacritic.com/games/platforms/pc/maxpayne#critics>

² Westwood's earlier RTS release, Dune 2 had a similar sidebar interface. This earlier release wasn't nearly as intuitive and thus has been emitted from this section.

[Http://www.wikipedia.org](http://www.wikipedia.org)

All screenshots obtained from original game footage or <http://www.gamespot.com>

Command and Conquer screenshots obtained from <http://www.ea.com>

GuitarFreaks controller from <http://images-jp.amazon.com/images/P/>

Tony Hawks Project 8 Screenshot from <http://www.ign.com>