

= Shoot ' em up =

Shoot ' em up (also known as shmup or STG) is a subgenre of the shooter genre of video games . In a shoot ' em up , the player character engages in a lone assault , often in a spacecraft or aircraft , shooting large numbers of enemies while dodging their attacks . There is no consensus as to which design elements compose a shoot ' em up . Some restrict the definition to games featuring spacecraft and certain types of character movement ; others allow a broader definition including characters on foot and a variety of perspectives . Shoot ' em ups call for fast reactions and for the player to memorize levels and enemy attack patterns . " Bullet hell " games feature overwhelming numbers of enemy projectiles .

The genre 's origins can be traced back to Spacewar ! , one of the earliest computer games , developed in 1962 and eventually released in amusement arcades in the early 1970s . However , Tomohiro Nishikado , creator of Space Invaders , is generally credited with inventing the genre . Space Invaders premiered in Japanese arcades in 1978 . Shoot ' em ups were popular throughout the 1980s and early 1990s . In the mid @-@ 1990s , shoot ' em ups became a niche genre based on design conventions established in the 1980s , and increasingly catered to specialist enthusiasts , particularly in Japan .

= = Definition = =

A " shoot ' em up " , also known as a " shmup " or " STG " (the common Japanese abbreviation for " shooting games ") , is a game in which the protagonist combats a large number of enemies by shooting at them while dodging their fire . The controlling player must rely primarily on reaction times to succeed . Beyond this , critics differ on exactly which design elements constitute a shoot ' em up . Some restrict the genre to games featuring some kind of craft , using fixed or scrolling movement . Others widen the scope to include games featuring such protagonists as robots or humans on foot , as well as including games featuring " on @-@ rails " (or " into the screen ") and " run and gun " movement . Mark Wolf restricts the definition to games featuring multiple antagonists (" ' em " being short for " them ") , calling games featuring one @-@ on @-@ one shooting " combat games " . Formerly , critics described any game where the primary design element was shooting as a " shoot ' em up " , but later shoot ' em ups became a specific , inward @-@ looking genre based on design conventions established in those shooting games of the 1980s .

= = = Common elements = = =

Shoot ' em ups are a subgenre of shooter game , in turn a type of action game . These games are usually viewed from a top @-@ down or side @-@ view perspective , and players must use ranged weapons to take action at a distance . The player 's avatar is typically a vehicle under constant attack . Thus , the player 's goal is to shoot as quickly as possible anything that moves or threatens him . In some games , the player 's character can withstand some damage ; in others , a single hit will result in his destruction . The main skills required in shoot ' em ups are fast reactions and memorising enemy attack patterns . Some games feature overwhelming numbers of enemy projectiles and the player has to memorise their patterns to survive . These games belong to one of the fastest @-@ paced video game genres .

Large numbers of enemy characters are typically featured . These enemies may behave in a certain way dependent on their type , or attack in formations that the player can learn to predict . The basic gameplay tends to be straightforward and many games offset this with boss battles and a variety of weapons . Shoot ' em ups rarely have realistic physics . Characters can instantly change direction with no inertia , and projectiles move in a straight line at constant speeds . The player 's character can collect " power @-@ ups " which may afford the character greater protection , an " extra life " , or upgraded weaponry . Different weapons are often suited to different enemies , but these games seldom keep track of ammunition . As such , players tend to fire indiscriminately , and their weapons only damage legitimate targets .

= = Types = =

Shoot 'em ups are categorized by design elements , particularly viewpoint and movement :

Fixed shooters (such as Space Invaders) restrict the protagonist to a single axis of motion , enemies attack in a single direction (such as descending from the top of the screen) , and each level is contained within a single screen . These games are sometimes called " gallery shooters " . Atari 's Centipede is a hybrid , in that the player can move freely , but that movement is constrained to a small area at the bottom of the screen , and the game otherwise meets the fixed shooter definition .

Rail shooters limit the player to moving around the screen while the game follows a specific route ; these games often feature an " into the screen " viewpoint , with which the action is seen from behind the player character , and moves " into the screen " , while the player retains control over dodging . Examples include Captain Skyhawk (1990) , Panzer Dragoon (1995) , Star Fox 64 (1997) , and Sin and Punishment (2000) . Light @-@ Gun games that are " on @-@ rails " are not in the shoot @-@ em @-@ up category but the FPS category , and the term has also been applied to scripted events in first @-@ person shooters such as Call of Duty .

Tube shooters feature craft flying through an abstract tube . Technically , most tube shooters are also fixed shooters , because the player is still constrained to left / right movement , but it 's mapped to the shape of the tube .

Scrolling shooters include vertical or horizontal scrolling games .

Vertically scrolling shooters : In a vertically scrolling shoot 'em up (or " vertical scroller ") , the action is viewed from above and scrolls up (or very occasionally down) the screen .

Horizontally scrolling shooters : In a " horizontal shooter " or " side @-@ scrolling shooter " , in which the action is viewed side @-@ on and scrolls horizontally .

Isometrically scrolling shooters : A small number of scrolling shooters , such as Sega 's Zaxxon , feature an isometric point of view .

Multidirectional shooters feature 360 degree movement where the protagonist may rotate and move in any direction . Multidirectional shooters with one joystick for movement and one joystick for firing in any direction independent of movement are called " twin @-@ stick shooters . "

Bullet hell (?? , danmaku , literally " barrage " or " bullet curtain ") is a shoot 'em up in which the entire screen is often almost completely filled with enemy bullets . This type is also known as " curtain fire " , " manic shooters " or " maniac shooters " . This style of game originated in the mid @-@ 1990s , and is an offshoot of scrolling shooters .

Cute 'em ups feature brightly coloured graphics depicting surreal settings and enemies . Newer , particularly Japanese , cute 'em ups may employ overtly sexual characters and innuendo . Cute 'em ups tend to have unusual , oftentimes completely bizarre opponents for the player to fight , with the Parodius franchise being an example .

Run and gun (or " run 'n' gun ") describes a shoot 'em up in which the protagonist fights on foot , perhaps with the ability to jump . Run and gun games may use side scrolling , vertical scrolling or isometric viewpoints and may feature multidirectional movement .

Arena based shooters or area based shooters take place in a single screen , e.g. Robotron .

= = History = =

= = = Origins and rise = = =

The genre 's exact origins are a matter of some confusion . Video game journalist Brian Ashcraft pinpoints Spacewar ! (one of the very earliest computer games) as the first shoot 'em up , but the later Space Invaders is more frequently cited as the " first " or " original " in the genre . Spacewar ! was developed at the Massachusetts Institute of Technology in 1961 , for the amusement of the developers ; it was , however , remade four times as an arcade game in the early to mid @-@

1970s . The game featured combat between two spacecraft .

However , it was not until 1978 's seminal Space Invaders , created by Nishikado at Japan 's Taito Corporation , that the shooter genre became prolific . Space Invaders pitted the player against multiple enemies descending from the top of the screen at a constantly increasing rate of speed . The game used alien creatures inspired by The War of the Worlds (by H. G. Wells) because the developers were unable to render the movement of aircraft ; in turn , the aliens replaced human enemies because of moral concerns (regarding the portrayal of killing humans) on the part of Taito Corporation . As with subsequent shoot ' em ups of the time , the game was set in space as the available technology only permitted a black background . The game also introduced the idea of giving the player a number of " lives " . Space Invaders was a massive commercial success , causing a coin shortage in Japan , and gaining mainstream popularity in America . It popularised a more interactive style of gameplay with the enemies responding to the player @-@ controlled cannon 's movement , and it was the first video game to popularise the concept of achieving a high score , being the first to save the player 's score . The aliens of Space Invaders return fire at the protagonist , making them the first arcade game targets to do so . It set the template for the shoot ' em up genre , and has influenced most shooting games released since then .

= = = Golden age and refinement = = =

In 1979 , Namco 's Galaxian ? " the granddaddy of all top @-@ down shooters " , according to IGN ? was released . Its use of colour graphics and individualised antagonists were considered " strong evolutionary concepts " among space ship games . That same year saw the release of SNK 's debut shoot ' em up Ozma Wars , notable for being the first action game to feature a supply of energy , resembling a life bar , a mechanic that has now become common in the majority of modern action games . It also featured vertically scrolling backgrounds and enemies .

In 1981 , Defender established scrolling in shoot ' em ups , offering horizontally extended levels . Unlike most later games in the genre , the player could move in either direction . The game 's use of scrolling helped remove design limitations associated with the screen , and though the game 's minimap feature had been introduced before , Defender integrated it into the gameplay in a more essential manner . Konami 's Scramble , released in 1981 , is a side @-@ scrolling shooter with forced scrolling . It was the first scrolling shooter to offer multiple , distinct levels . Atari 's Tempest , released in 1981 , is one of the earliest tube shooters and an early attempt to incorporate a 3D perspective into shooter games . Tempest ultimately went on to influence major rail shooters .

Vertical scrolling shooters emerged around the same time . Namco 's Xevious , released in 1982 , is frequently cited as the first vertical scrolling shooter and , although it was in fact preceded by several other games of that type , it is considered one of the most influential . Xevious is also the first to convincingly portray realistic landscapes as opposed to purely science fiction settings . While Asteroids (1979) allowed the player to rotate the game 's spacecraft , 1982 's highly acclaimed Robotron : 2084 was most influential on subsequent multi @-@ directional shooters .

Sega 's Space Harrier , a rail shooter released in 1985 , broke new ground graphically and its wide variety of settings across multiple levels gave players more to aim for than high scores . 1985 also saw the release of Konami 's Gradius , which gave the player greater control over the choice of weaponry , thus introducing another element of strategy . The game also introduced the need for the player to memorise levels in order to achieve any measure of success . Gradius , with its iconic protagonist , defined the side @-@ scrolling shoot ' em up and spawned a series spanning several sequels . The following year saw the emergence of one of Sega 's forefront series with its game Fantasy Zone . The game received acclaim for its surreal graphics and setting and the protagonist , Opa @-@ Opa , was for a time considered Sega 's mascot . The game borrowed Defender 's device of allowing the player to control the direction of flight and along with the earlier TwinBee (1985) , is an early archetype of the " cute ' em up " subgenre . R @-@ Type , an acclaimed side @-@ scrolling shoot ' em up , was released in 1987 by Irem , employing slower paced scrolling than usual , with difficult levels calling for methodical strategies . 1990 's Raiden was the beginning of another acclaimed and enduring series to emerge from this period .

Shoot 'em ups such as SNK's Ikari Warriors (1986) featuring characters on foot , rather than spacecraft , became popular in the mid @-@ 1980s in the wake of action movies such as Rambo : First Blood Part II . The origins of this type go back to Berzerk by Stern Electronics , released in 1980 . Taito's Front Line (1982) established the upwards @-@ scrolling formula later popularized by Commando , in 1985 . Commando also drew comparisons to Rambo and indeed contemporary critics considered military themes and protagonists similar to Rambo or Schwarzenegger prerequisites for a shoot 'em up , as opposed to an action @-@ adventure game . In 1986 , Arsys Software released WiBArm , a shooter that switched between a 2D side @-@ scrolling view in outdoor areas to a fully 3D polygonal third @-@ person perspective inside buildings , while bosses were fought in an arena @-@ style 2D battle , with the game featuring a variety of weapons and equipment . In 1987 , Square's 3 @-@ D WorldRunner was an early stereoscopic 3 @-@ D shooter played from a third @-@ person perspective , followed later that year by its sequel JJ , and the following year by Space Harrier 3 @-@ D which used the SegaScope 3 @-@ D shutter glasses . That same year , Sega's Thunder Blade switched between both a top @-@ down view and a third @-@ person view , and introduced the use of force feedback , where the joystick vibrates . Also in 1987 , Konami created Contra as a coin @-@ op arcade game that was particularly acclaimed for its multi @-@ directional aiming and two player cooperative gameplay . However , by the early 1990s and the popularity of 16 @-@ bit consoles , the scrolling shooter genre was overcrowded , with developers struggling to make their games stand out (one exception being the inventive Gunstar Heroes , by Treasure) .

= = = Bullet hell and niche appeal = = =

A new type of shoot 'em up emerged in the early 1990s : variously termed " bullet hell " , " manic shooters " , " maniac shooters " and danmaku (?? , " barrage ") , these games required the player to dodge overwhelming numbers of enemy projectiles and called for still more consistent reactions from players . Bullet hell games arose from the need for 2D shoot 'em up developers to compete with the emerging popularity of 3D games : huge numbers of missiles on screen were intended to impress players . Toaplan's Batsugun (1993) provided the prototypical template for this new breed , with Cave (formed by former employees of Toaplan , including Batsugun's main creator Tsuneki Ikeda , after the latter company collapsed) inventing the type proper with 1995's DonPachi . Manic shooter games marked another point where the shoot 'em up genre began to cater to more dedicated players . Games such as Gradius had been more difficult than Space Invaders or Xevious , but bullet hell games were yet more inward @-@ looking and aimed at dedicated fans of the genre looking for greater challenges . While shooter games featuring protagonists on foot largely moved to 3D @-@ based genres , popular , long @-@ running series such as Contra and Metal Slug continued to receive new sequels . Rail shooters have rarely been released in the new millennium , with only Rez and Panzer Dragoon Orta achieving cult recognition .

Treasure's shoot 'em up , Radiant Silvergun (1998) , introduced an element of narrative to the genre . It was lavished with critical acclaim for its refined design , though it was not released outside Japan and remains a much sought after collectors' item . Its successor Ikaruga (2001) featured improved graphics and was again acclaimed as one of the best games in the genre . Both Radiant Silvergun and Ikaruga were later released on Xbox Live Arcade . The Touhou Project series spans nineteen years and twenty @-@ four games as of 2015 and was listed in the Guinness World Records in October 2010 for being the " most prolific fan @-@ made shooter series " . The genre has undergone something of a resurgence with the release of the Xbox 360 , PlayStation 3 and Wii online services , while in Japan arcade shoot 'em ups retain a deep @-@ rooted niche popularity . Geometry Wars : Retro Evolved was released on Xbox Live Arcade in 2005 and in particular stood out from the various re @-@ releases and casual games available on the service . The PC has also seen its share of d?jin shoot 'em ups like Crimzon Clover , Jamestown : Legend of the Lost Colony , and the eXceed series . However , despite the genre's continued appeal to an enthusiastic niche of players , shoot 'em up developers are increasingly embattled financially by the power of home consoles and their attendant genres .

