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Metal Gear Solid: an Example of What Game Design Should Be

While walking around Circuit City about two years ago in my search for something worth my dollar, I glanced behind the checkout counter to find my favorite toys of all time: video games. The selection was not great, and most were pretty expensive. But as I was about to leave, a two-CD package with a white cover, solid red lettering, and a green "Greatest Hits" label on the left hand edge caught my eye.

"Metal Gear Solid?" I said to myself. I remembered seeing this game on demo at a department store a couple years before but not being able to really give it a try. To be honest, having gotten only a glimpse of the very first stage, it had looked somewhat boring then. But putting my doubts aside, I thought, "Well, I guess if it's a Greatest Hits game (and thus under \$20☺), it's worth a try." Little did I know that this game would completely change my standard for video games. I opened the package only to be completely sucked in, overwhelmed by its quality of detail and creativity. The game quickly became one of my favorite games of all time. And apparently, I was not the only one to fall in love with Hideo Kojima's masterpiece; all three editors of IGN-PSX editors voted *Metal Gear Solid* (MGS) as the number one PlayStation game ever made in IGN's 2002 "Top 25 PlayStation Games Ever Made" chart.

But why? What made these two discs stand out above thousands of other games out there? What made it so fresh? The answer, I believe, lies in MGS's progressiveness, pushing the limits of game design. Its quality of detail, use of technology, and amazing storyline, set a new standard, and it serves a landmark for the future generation of games to follow.

Mold for the Metal: The History of the Metal Gear Series

In the mid 1980s, Hideo Kojima, producer of *Snatcher* (1994) and *Zone of the Enders* (2001), had an idea that would open up new realms for the video game world: an action game where strategy was more valuable and key to success than shooting everything in sight. This idea became his first project with video game giant Konami and in the industry, the original *Metal Gear*. The game created the "stealth action-adventure" genre, as it was the first to emphasize stealth and avoidance of confrontation as opposed to brute force (Shoemaker, Ajami).

In the game, the player takes control of Solid Snake, a "green", or rookie, agent of the special forces unit FOX-



HOUND sent on a one-man infiltration mission to find a

missing-in-action member of his unit and gather information about a new, super-powerful nuclear weapon. Equipped with only his codec (coder-decoder interface), a high-tech communication device that allows him to contact his authorities for information, Snake must find all his weapons and items as he goes. *Metal Gear* was the first action game to give the player a wide variety of items that the player had to use logically to progress from stage to stage (Ajami). The camera views Snake from overhead in

a somewhat Legend of Zelda fashion so that the player can see enemies ahead. The player must sneak around boxes and crates to avoid being spotted, lest a horde of enemy reinforcements comes after him out of nowhere.



Konami released Kojima's *Metal Gear* in 1987 for the MSX, a popular computer in Japan, and the next year, it released a slightly revised version under its American

label Ultra Games for the Nintendo Entertainment System (NES), expanding distribution to the United States. The game quickly gained popularity, for not only did the concept of stealth intrigue gamers

with its originality and novelty, but also the extremely well designed, thought-out, yet complex storyline built suspense for what would happen.



With the success of *Metal Gear*, Kojima produced *Metal Gear 2: Solid Snake*, released in 1990 for the MSX2 in Japan, also under Konami. This game continued and evolved the same stealth concept of its predecessor with features such as a radar system to see enemy locations, improved graphics, an even more engaging plot, and more development of Snake as a character based on the original. However, *Solid Snake* never left Japan, and Americans were left waiting for more.

In response, Konami, again under the Ultra Games label, made a different game for the NES, *Metal Gear: Snake's Revenge*, which was not produced under Kojima's brilliant eye. The new game diverged terrifically from the core of the original two in many ways, including less focus on stealth and significantly less thought in the plot (the main villain's name was a bit silly: "Higharolla Kockamamie"). In fact, rather than being on a one-man infiltration mission as in the rest of the series, Snake led a team of commandos. Most hard core fans do not even consider this a part of the Metal Gear franchise and call it the series' "bastard stepchild." (Shoemaker).

But *Metal Gear* and *Solid Snake* established a strong foundation for the series and the genre. At the E3 Expo 1997 in Atlanta, a decade after the original and with a military base with turrets and pyrotechnics set up around its booth, Konami announced the development of a new game for the series, this time for the Sony PlayStation: *Metal Gear Solid (MGS)*. (Keighley). Produced, written, and directed once more by the great Hideo Kojima and designed with the talents of character and mechanical designer Yoji Shinkawa, the game would take full advantage of the 32-bit PlayStation processing power to bring the stealth genre, and



video games as a whole, to new levels. Other team members included Assistant Director Yosikazu Matsuhana, main programmer Kazunobu Uehara, and sound effects director, Kazuku Muraoka, who have worked with Kojima for over a decade, and co-writer Tomokazu Fukushima. The game also featured music by TAPPY and Rika Muranaka ("Staff").

As the press received more information about and screenshots of the game from then until its release in 1998, MGS generated much hype and became one of the most anticipated games of its time and of all time (Shoemaker, "Metal Gear Timeline"). After its release on September 3, 1998 in Japan and on October 19 that same year in the United States, the title sold 2 million copies worldwide by January 1999 ("Metal Gear Maintains Solid Sales"), eventually leading to a total of nearly 1 million copies in Japan and 5 million in America and Europe (interestingly enough, more in the western world than Japan☺) (Keighley). And MGS indeed lived up to the hype surrounding it; critically acclaimed and an instant sensation, it pushed the limits of video game design to the maximum with its stunning graphics and gripping story. It was a precedent for the high quality and maturity that the video game medium can attain.

Metal Gear Solid's popularity led to many other expansions to the game. In 1999, a special edition of MGS, *Metal Gear Solid Integral*, came out for the PlayStation in Japan. This edition, while it did not add much to the overall plot, added some extra features and secrets, such as a first-person play mode that would allow players to play the entire game from the first-person perspective rather than the traditional Metal Gear overhead camera view (Carless "Go East, Young Man", Shoemaker). While the United States never received this edition, Americans were provided an extension disc, *Metal Gear Solid: VR Missions*, which added hundreds of new missions to the VR Training mode in the original MGS. And in 2000, Microsoft in association with Konami published a PC version of *MGS Integral*. (Carless, "Tokyo Becalmed"). Also in 2000 *Metal*



Gear Ghost Babel (*Metal Gear Solid* in the American version) was released for Game Boy Color with a completely new but equally tasty storyline. This looked similar to the original NES *Metal Gear*, but had added gameplay adaptations based on the PSX MGS.

The warm reception of *Metal Gear Solid* led immediately to plans for *Metal Gear Solid 2: Sons of Liberty*. Kojima explains in a recent interview with Gameslice's editor-in-chief Geoff Keighley, "There were no plans for a sequel when MGS shipped. But once the game came out and we received so much acclaim, I decided we had to do a sequel." MGS2 came out this past November, again as one of the most anticipated games of the year, with hype that made that of the first seem non-existent. It continues on the PS2 Kojima's tradition of excellence and serves as an even greater example of gaming at its finest.

Metal Gear Solid: Showing Us What Video Games Are Made Of

Through his MSX/NES *Metal Gear* series, Hideo Kojima gave the world quality and creativity. But through *Metal Gear Solid*, Kojima gave the world a masterpiece. While the original series was significant in starting the stealth genre and showing excellence in thoughtful gameplay and plot development, *Metal Gear Solid*, became the ideal stealth model, influencing countless games after it on both PC and console platforms. "Pretty much every game that involves some kind of super spy in stealthy situations is paying homage to MGS1," says Amer Ajami, PC Games senior editor at Gamespot. Among those influenced are *Siphon Filter*, another PSX greatest hits game, *Deus Ex* (PC), and *Winback* (N64), and developers at companies like 3D Realms of *Duke Nukem* fame have said that MGS has influenced their designs (Keighley).

The mechanics of the interface inherits the successful elements of the original series. *Solid Snake*, again on a one-man infiltration mission, must sneak around the base and avoid being spotted. The player has at his disposal a Soliton radar system that allows him to see enemies and their line of sight. However, once an enemy sees Snake, the radar jams and remains unusable for a period of time.

As usual, he must find all his weapons on site, for as in the original series, he starts off with nothing but his codec, a scope, and a pack of cigarettes (that he sneaked in his stomach when they suppressed his stomach acid). The mission team helps you via codec and gives hints about objectives of the game. MGS provides "a linear game architecture that guides the player, but still leaves freedom of action", a structure that according to Pascal Luban and Joël Meziane is part of the "foundation for solid game design".

But the MGS influence extends beyond the stealth genre; it is "one of the high watermarks for gaming" as Mr. Keighley put it, a milestone that has set a standard technologically and aesthetically in modern game design in general. Articles on design everywhere acknowledge elements of MGS as examples for what works well, or how certain elements can be used effectively. A true visionary, Kojima finally had the technology in the PSX to create what he had always set out to do with the original series. Metal Gear Solid pushed the limits of hardware utilization, aesthetics, and maturity in game design and serves as landmark for future game designers to follow.

MGS truly pushed the limits of hardware in both gameplay and creativity. As far as gameplay is concerned, its game engine was an amazing feature, for it was powerful enough to render every detail in 3D. Unlike many games in which beautiful backgrounds are pre-rendered so that they look like merely backdrops, MGS gives every box, crate, stairwell, and maggot on a corpse a 3D texture. With the exception of some World War II footage and biotech lab shots, the MGS engine even renders all of the game's cut scenes with polygons (3D objects used to create 3D models (Ajami)), rather than use pre-rendered full motion videos (FMV) like the later Final Fantasies. "Most games depend on [these] to show off their graphical prowess," explains Nich Maragos in his review of the game, "but the Metal Gear team instead concentrated on developing a graphics engine powerful enough to handle pretty much everything that needs to be done." Although such cut scenes may look a bit blockier than pre-rendered videos, using the same polygons as used



during gameplay adds a wonderful consistency to the entire game and makes transitions absolutely seamless while still capturing movement exceptionally well.



Developed specifically for the game by the Metal Gear Solid team, this remarkable engine, the "most robust technology for the PlayStation at the time" (Ajami), used about 75% of the processing power of the PlayStation (Keighley). And as a result of pushing the limits of the hardware, MGS indeed stood out as one of the best looking games around 1998, as its high percentage of utilization of the PSX's capabilities was quite astounding. In fact, in order to realize this potential, a potential beyond what many thought possible, Hideo Kojima had to play a little game-design psychology and "hir[e] inexperienced programmers and level designers for the development of MGS1 because those with PlayStation experience would have preconceptions that the PlayStation hardware wasn't powerful enough to realize [his] vision." (Ajami). While the engine was not perfect and still had its limitations, Metal Gear Solid showed us that game design meant more than just creating from existing technology; it meant pushing forward into a technology of your own.

But in addition to utilizing the processor, the MGS made excellent use of the console's accessories in really creative ways. The Dual Shock controller, released in May 1998 (SCEE) only months before MGS's release, demonstrates this creativity. This controller added vibration and analog features to the possibilities of the PlayStation. In the game, it vibrates for typical reasons, such as on-screen explosions. But in addition, it vibrates with Snake's heartbeat as he tries to steady his sniper rifle, making it hard to aim not only in the game's virtual reality but also in the player's physical reality.

A stunning example of accessory creativity occurs when Psycho Mantis, one of the bosses of the game, uses the vibration feature to prove to the player his telekinetic powers. "Put your controller on the floor" he tells the player. As he sends pulses through the chord, the controller actually does move! The novelty is really quite entertaining and amusing. In that same sequence, Psycho informs

the player that he can read minds. The game actually scans the memory card plugged in, and tells you if you are "a prudent man" for saving often or reckless for not. If you have other Konami saved games in there, Psycho will tell you that you like Castlevania for instance (Ajami). And in order to defeat Psycho, the player must actually unplug the controller from controller port 1 and plug it into the second port so that Psycho cannot read Snake's mind.

Such utilization of accessories demonstrates the high quality of thought and design that went into the game to keep the player on his toes in both his own and Snake's realities. MGS takes the extra step to generate the immediacy described in lecture that all media try to achieve, to make the player feel like a real part of the game. Solving game puzzles requires thinking beyond the game and into the very room where the player sits and involves the player even more. Even though at the same time this stretch beyond realities breaks our immersion in Snake's world by reminding us that the game is not real, it somehow draws deeper into it, for we cannot escape, even in our world. Steven Poole writes in his book *Trigger Happy*, "Metal Gear Solid's true brilliance lies in its touches of humorous self-consciousness. It knows it's a game.... Such clever devices ensure that the player is a happy slave..."(110). The game shows just how much design can be done with the hardware, in addition to what is on screen. It is a model of great game design, for it enhances gameplay satisfaction and entertainment value by using the hardware beyond its normal purposes and making the player think in novel ways.

In addition to setting an example for hardware design in games, Metal Gear Solid also showed us the aesthetic merit and maturity a video game can achieve. It pushes the limits of the medium as a whole with its awesome detail, cinematic qualities, and storyline.

If there is one thing Hideo Kojima is most known and respected for by developers, it is the superb polish and attention he puts into every detail of his games. And Metal Gear Solid was no exception; the amount of thought put into it is mind-blowing. For example, while the guards do their patrols, they yawn and even fall asleep at times. When they breathe in cold climates, we can see their

breath, perfectly timed and gradually evaporating. They are "animated in a way that gives them extraordinary presence" (Luban). When Snake leaves footprints in the snow and they see them, they become alert and search for him, and after a while, the snow covers Snake's tracks again. Knocking on walls becomes an effective way to lure guards away from their posts, as well as running through puddles or on platforms that click and clack as you run on them. At one point, Snake can catch a cold if he stays motionless too long outside, and his sneezes alert the guards to his location. The player must find medicine to cure it.

Subtle details in the design help to make the game so intricate and real. With Motosada Mori as military advisor at his side, Kojima made sure that each weapon accurately depicted the real deal, that Snake reacted accordingly, trembling with the sniper rifle for instance, and that the personnel behaved as they would in real life. Visually, in the background, pressing up against a wall while searching for Dr. Hal Emmerich allows the player to see him pacing in his office before you can reach him. Taking a look through the scope at certain points, we can watch conversations between villains (Maragos). And ventilation shafts come complete with field mice that lead the way to light at the end of the tunnel. But details do not just lie in visuals; shots fired in snowy weather are dimmer than when indoors (Gerstmann). MGS has surely pushed the limits of video game aesthetics with the way it handles the little details, and it has shown that a large amount of little detail enhances the experience of playing tremendously.

Such attention to details makes the game so much more realistic in fact that the game becomes very similar to cinema medium, another way in which Metal Gear Solid shows its aesthetic merit and revolutionary design: the game moves into a realm between video games and film. Its cinematic cut-scenes take up about half the game, truly defining the term "interactive movie". "Forget the old FMV-based schlockfests that first claimed that title," says Brad Shoemaker in his article "The History of Metal Gear", "this is the right way to conduct narrative through video games." The mechanics of gameplay demonstrates this greatly. Opening with a cut-scene with the actor credits, the game

continues with design and direction credits even after the player takes control of Snake, making the player feel that his playing is part of the action for a film. If he were to record his moves on a VCR, another person could watch and enjoy it as a spectator later. Rendered with the same game engine as the rest of the game (as mentioned before), the seamless and consistent transitions from gameplay to cut scenes greatly enhance this "interactive movie" effect. Walking around the same 3D environment itself makes gameplay not just a matter of getting to the next scene; it becomes a matter of acting and becoming the role of Solid Snake.

In addition, the different camera angles that the player can achieve aid in interactive movie making. For instance, by stretching up against walls, the camera moves from the traditional Metal Gear overhead position to an angle of Snake's face against the wall so that the player can see enemies behind Snake but in the process



create a sense of dramatic irony for Snake, for we can see things that he cannot. Although Steven Poole argues that such angles are primarily functional, he does admit that Metal Gear Solid "is given a particularly 'cinematic' feel by touches such as these". After all, as he says, multiplicity of viewing angles is important both functionally and aesthetically (83, 79).

But while the mechanics of playing extends the boundary between the two mediums of video games and movies, the actual cut scenes break it, showing the style of an action thriller film. Renowned for his love of cinema, Hideo Kojima "cites the works of stylish directors such as Luc Besson, Dario Argento and James Cameron as his inspiration for the way his games look and play" (Calvert). "I really did want to become a film director," he told Geoff Keighley in the "The Final Hours of Metal Gear Solid 2". And this desire and tremendous talent really becomes apparent in MGS, which melds the two into one perfectly balanced work of art. "Since the upstart videogame form shattered film's monopoly on the moving image, the two media have been engaged in a wary standoff," says Poole, and this game has been quick to draw its socom pistol (a weapon in the game), both

onscreen and off. Although many games prior had directed movie-like scenes, MGS's awesome display took this to new levels, and it became a significant model for future developers to follow and even took advantage of elements that the film industry could follow, too. "That game pretty much set the standard that all companies now follow when implementing cut-scenes," says Amer Ajami, "I mean, the game made great use of "bullet time" before *The Matrix* popularized that effect."

The way that *Metal Gear Solid* has pulled the two media so close to each other shows its progressiveness and how wonderful the marriage of the movie and video game industries can be, but it has also been a source of critique. "Do we really want games that are more like movies?" asks Gamespot's Jeff Gerstmann in his MGS review. "If Hideo Kojima...was so set on this type of cinematic experience, he should really be making movies instead of games." But as a designer, Kojima explains that this cinematic element is needed to make the game more "enjoyable and captivating" and to create greater immediacy, making the player feel like he is in that setting; it creates atmosphere. And yet at the same time, this element is not necessarily intentional, and it comes automatically with the setting. In an interview with IGN's Colin Williamson, he responds to the question of whether "cinematics" diminish the interactivity of a game:

What I'm doing is creating a game. I'm not making a movie.... There may be a misunderstanding in the game world when we say "cinematic," because that doesn't necessarily mean showing a CG movie in the middle of the action, and splitting everything up.

Let's say that there's a Super Nintendo game where you go into a cave, and you see a large spiral staircase that leads down. Of course, you'd never see that kind of view in real life, because the ceiling's there. But when you walk inside, you can see your father fighting a monster at the very bottom of the cave. In that one moment you see *everything* all at once, and you know that you have to go down there to rescue the old man.

But in recent games, you'll walk into a room, and you'll see a cut scene that shows a close-up of your dad and the monster, maybe a little CG movie of them fighting. There are different ways of presenting it, but both of them are creating atmosphere and a reason to fight. *The setting itself* is cinematic, not how you present it visually.

Kojima's brilliance lies in how he manages to perceive the mediums as separate entities, yet at the same time balance them so well in his games.

Metal Gear Solid definitely serves as a model for this balance and has made its mark in the plane between cinema and video games and made noteworthy contributions in bridging the gap between these mediums, but perhaps it shined even brighter as an example of maturity and quality in storytelling. Greg Costikyan once said, "... the pleasure people derive from games is not dependent on its ability to tell stories" (Lowood, lecture 1/27/02). But MGS opposes that statement, for the incredible storyline of the game makes it so much more than just fun. Actually, the story is what keeps reviewers frustrated with the short length of gameplay playing. "A good videogame story provides a powerful external motivation (external to the actual gameplay mechanics) for continuity to try to beat the system," says Stephen Poole. "A well-scripted game, such as Metal Gear Solid, keeps you playing because fundamentally...you just want to know what happens next" (110).

The story begins with Solid Snake, having been pulled out of retirement after the original *Metal Gear* and *Solid Snake* games, being launched in a one-man submarine into a secret nuclear disposal facility in Alaska. Terrorists demanding the remains of Big Boss, the super soldier whom Snake defeated in the original games, have taken over the base and have threatened to launch a nuclear weapon if their demands are not met in twenty-four hours. The terrorist group is led by FOXHOUND, Snake's former unit, with six extremely skilled agents, each with his or her special talent. The player starts off with two mission objectives: find and rescue the DARPA chief Donald Anderson and the President of ArmsTech, Kenneth Baker, and then eliminate the threat of a nuclear attack.

However, once Snake finds the DARPA chief, he learns that the disposal facility is actually housing a government "black project", the development of a nuclear equipped battle tank that could launch a nuke from anywhere in the world: Metal Gear Rex. Of course, Snake has had some run-ins with this nemesis in previous games and but this Metal Gear is even more powerful than before. Unfortunately, before he can give any more information, Anderson has a mysterious heart attack and dies.

From there, the plot thickens, as Snake learns more about the "true nature of [his] mission and the organization [he] works for, keeping you guessing as to how it will all turn out" (Poole 110). (As you have got to play the game to feel the full effect of the details and the full storyline would be a book in itself, I won't go into everything here.☺). His journey comes with twists and turns of trust and betrayal, as he must face moral obligations, come to grips with the truth about his past and his identity, and much more. The game has everything you could possibly want from a great story.

The story is thought-out and polished, but MGS's presentation of its tale is really what makes it so wonderful and unique from other games, on so many levels. First, the script is extremely well done. Scripted by Shiro Mukaide, Satoshi Hirano, Shinji Yamashita, and translated to English by Jeremy Blaustein, every line of information the player gets fills the plot or drops suggestions that lead the player's thoughts where the game wants them to go. Featuring the voice talents of David Hayter, screenwriter for the 2000 movie *X-men*, as Solid Snake, James Flinders as Liquid Snake, and Mae Zadler as the love interest Meryl just to name a few, the acting in the English version is brilliant, as everything said has the proper conviction and attitude (Gerstmann). Careful casting really added a great deal to the quality of the game; game reviews recognize and praise the voiceovers, calling it "the pinnacle of what voice acting in games is capable of" (Maragos) and "the very best voice acting heard in any game" (Gray). The acting was so good in fact that even *MGS Integral*, the extended version of MGS only in Japan, kept the English and put in English and Japanese subtitles (Shoemaker). And fans everywhere associate the voices to the game; according to David Hayter anecdotally, "[My friend, his

brother, and I] were all out at a bar, and when I said I did the voice of Snake, his brother just freaked out. He wanted me to talk as Snake for the rest of the night...That was a great moment for me" (Keighley).

MGS also creates a model for character development design. The amount of character development, including every villain and hero, heightens the maturity of the game indescribably. It is remarkable how much Snake learns about himself and about his purpose in life, as his story goes on. He starts off as a retired hermit, a hired mercenary who knows how to kill and does so without thinking about it. But after meeting a rookie soldier Meryl with her "beautiful, compassionate eyes" he begins to realize that that life has more in store than that, and that he did not have to be just a hired gun, that he could fight for his own beliefs rather than other people's. He even falls in love with Meryl, another great design choice for the story. In "Fourteen Forms of Fun", Pierre-Alexandre Garneau explains that love stories can greatly enhance a video game when done well, using Final Fantasy and MGS as examples. "Considering the all-importance of love in all forms of entertainment, it is amazing to see how rarely this theme is used in games," he says. "All of these eastern games are renowned for their great story, which might be more than just a coincidence." The characters who help Snake along the way give a fair share of gems on life, for example that he was not a tool and had control over his life, and we watch Snake take these to heart. And at the same time, we as players can get certain satisfaction from his discoveries by discovering ourselves through him.

Character development does not stop with protagonists; the villains get their fair share of explication. Strangely, one might find himself remorseful for killing a boss because he finds out that each has a heart, has his or her own ideals and merely fights for them or submits to injustice because he has no choice. Poole calls the game the "brilliantly manipulative Metal Gear Solid, which made me feel guilty for killing a woman sniper by playing a rather well-written dying scene for her and her opponent" (225). As Hideo Kojima said when making the original Metal Gear, "Fighting alone does not make a game", and this connects to the moral awareness that was one of his goals. He says,

When you *do* perform as a hero, you face situations where you have to say to yourself, "Am I doing something wrong here?" I like to include these factors in games...I want my games to teach a message about life, by presenting situations where the answer isn't a clear yes or no.... I want to show people how there are variations and different interpretations of good and evil (Williamson).

By making the player feel guilty, Metal Gear Solid gives him more than just the satisfaction of shooting everything in sight; the player might actually gain more perspective about life. With the issues of violence surrounding video games today, such considerations elevate the game's maturity above that of others.

This is perhaps the most wonderful aspect about the story and its presentation: it really makes us think, like a good book, about real issues including nuclear disarmament and genetic engineering, questions that are relevant to today's world. And this awareness was Kojima's goal. He states in an interview with GamerWeb Japan, "The main point with these controversial topics is to try and be responsible for your own outcome, or moral stance on them. Certainly in my games, you have the freedom to do good and bad—it's my job to present these options for the player to decide what to do." Even though they are set in the future, the game's events do not take place so far ahead that we cannot imagine them in our world. Using video games as a form of communication to stimulate awareness about society truly shows how much the game stretches the limits of the medium. As discussed in class, it is something that all media try to achieve.

Kojima's first issue was nuclear disarmament. As the game's title implies, the main story concerns Metal Gear, a nuclear super weapon with the power to potentially destroy the world. In reality, disarmament issues still exist, though many people might not really realize or think about it. As Kenneth Baker tells Snake in the game, "Most people think that we live in a safer world now, but with all the dismantled nuclear weapons and waste around ...the threat of nuclear terrorism has increased" (Urbina). "In MGS," says Kojima, "the antinuclear war message is particularly strong. Since

I'm Japanese, and Japan experienced the nuclear bomb, I feel a need to address this." The game actually includes footage of the Hiroshima/Nagasaki bombings and addresses the anti-nuclear-weapons movement currently present (Leonard). With the Cold War over, the threat does not seem as pervasive in our lives, but through the game and its story, players become aware of these impending issues and learn something about it.

Genetic engineering, the other central theme, comes into play in the beginning when we learn that the soldiers on the facility have Big Boss's DNA spliced into their own genes to give them hypersensitive senses and fighting skills. Even as Snake crawls through the ventilation shaft, his friend Master Miller tells him about how the male mice sometimes eat the progeny of other mice to ensure the preservation of their genes (Urbina). But it becomes even more of an issue when Snake finds out that he himself was genetically created off Big Boss's DNA in the "Les Enfants Terribles" project along with the main villain in MGS, Liquid Snake who reveals himself as Snake's twin brother. The message behind it, as brought up by one of Snake's team members Dr. Naomi Hunter, is that while our genes and heredity affect our predispositions, they do not control our paths; we can still choose how we live. Kojima says that he did not want to sway players one way or another on whether genetic engineering was good or bad. "...I include the topics in my games so everyone will know that there *is* genetic engineering out there which can be used in a variety of ways," he explains, "It's up to the players to come up with an answer for themselves" (Williamson).

The use of the game as a form of communication and stimulus for societal awareness demonstrates incredible design. Rather than just demonstrating skill, a player can walk away from the console after playing the game feeling that it was worthwhile because he gained insight about the world and about himself. Metal Gear Solid set a great standard for storytelling in video games that no one can deny. It has shown the industry that an awesome story is in fact a very important part of game design and that pleasure *can* come from a its ability to tell stories.

A New Future Begins

Already, Metal Gear Solid 2 has broken even newer ground from its predecessor. With even greater details, such as slipping on bird poop if you run too fast over it or breaking plates and bottles in crossfire, smarter artificial intelligence such as organized units that chase after you, and a new graphics engine for the PS2 that made viewers shocked that the 2000 E3 trailer was actually a game, MGS2 continues Kojima's legacy. This only starts a new beginning. Kojima actually had thoughts of a game with "no lives and no linearity, a truly nebulous experience wherein anything can and will happen - and that, once completed, can never be played again" (Calvert). Maybe this will happen soon. But regardless of what's to come, Hideo Kojima's masterpiece Metal Gear Solid, pushing the limits on game design in every way, will remain a pillar for generations to come.

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Photos courtesy of Gamespot, Videogames, Gamasutra, and PSXNation.

Discussing Metal Gear Solid V without discussing Ground Zeroes is akin to discussing Metal Gear Solid 2: Sons of Liberty without touching upon the Tanker chapter. It's certainly possible, but the Tanker chapter directly sets up the events, arcs, and themes of the Plant chapter. Simply analyzing the latter ignored all the crucial context found in the former. While it isn't handled with nearly as much grace as it should have been, arcs, themes, and characters are all introduced in the prologue that aren't necessarily reiterated in main game. The Phantom Pain's narrative absolutely expected its audience to have played through Ground Zeroes. Narratively, Metal Gear Solid V is the simplest game in the franchise, perhaps to a fault.