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### *Fallout*: Rebirth Through Nuclear Holocaust

Introduction

"War. War never changes," begins Interplay's classic PC role-playing game *Fallout*. The opening cinema is a stark black-and-white video that depicts the prelude to and aftermath of nuclear holocaust. The nations, bickering as always over resources, eventually fight World War III in 2077. The war is over in a mere two hours, and most of the world is devastated by nuclear weapons. The player character, however, is spared from destruction because his or her family had entered a large underground Vault designed to protect humans from the war. As the game opens, a hundred years have passed since the first bombs dropped, and when the player character leaves the Vault, he or she is plunged into a world where everyday life is highly dangerous. Small towns have sprung up and struggle to protect themselves
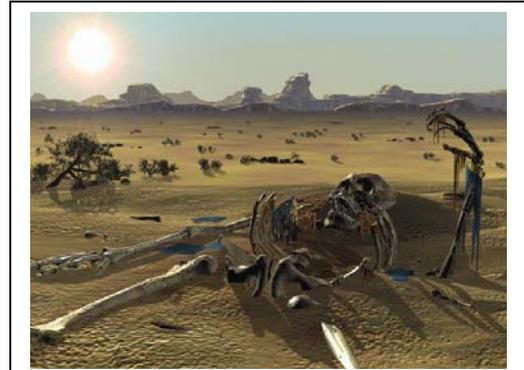
Life in *Fallout* often ends grimly, as seen from this screenshot.

from roaming bandits, huge mutated creatures, occasional armies, and other hazards of the wasteland. In contrast to *Final Fantasy VII*, the most popular console role-playing game produced that year (1997,) *Fallout* is a much darker game, aimed at an older audience than the *Final Fantasy* series. However, underlying the mature setting lies a much more openly structured game than could be found on the consoles. *Fallout* hearkens back to the style of classic PC role-playing games, in which the character could act in any way the player wished. This style of role-playing games (RPGs) was itself inherited from pencil & paper games and reached its height in the late 1980's and early 1990's. However, when *Fallout* was released in 1997, this genre and style was considered dead. The last good game in that style had been released in 1993, and RPGs endured a severe dry spell. Publishers and consumers alike ignored the role-playing genre, especially the hard-core style games. *Fallout* stimulated a rebirth of the genre, proving that "old-school" CRPGs (computer role-playing games) were still indeed viable.

A Brief History of Electronic Role-playing Games

However, to understand the market that *Fallout* entered, a closer look must first be taken at video role-playing games in general. This genre started as a spin-off from the adventure

game genre, and, at first, were simple computerizations of *Dungeons and Dragons* rules. In these games the player character runs around a simple text-based map, kills monsters, gets treasure, and, in the less primitive versions, becomes slightly more powerful. *Hack* and *Rogue* were two examples of these early CRPGs. Games soon started to incorporate the storyline of adventure games, and, while the stories in CRPGs were typically far less complex than adventure game stories, they still made for an immersive experience. These games were soon coupled with rudimentary computer graphics, producing games such as *Akalabeth*, and later, *Ultima.* These games, along with other innovators such as *Wizardry* and *Oubliette*, set the standard for computerized RPGs. More *Ultima* games followed, with *Ultima III* (1983) introducing multiple player characters and allowing the player to control a party. *Ultima IV* (1984,) however, took a step in a different direction than the previous three and introduced moral decisions that the character had to make to shape who the character was. Concepts such as "reputation" entered the game, and if a character performed too many evil deeds, they could be refused service at shops and treated differently by non-player characters.

  Ultima IV represents the junction where hardcore CRPGs and console RPGs split – PC RPGs started to incorporate more freedom, allowing the player to decide what their character could do, while console RPGs stayed more linear (at least with respect to the storyline and character advancement.) The advantages of the PC style are clear – the player feels that he/she is truly interacting with the world through their character, which leads to greater immersion. However, console RPGs gain a benefit from being constrained – they are able to tell deeper stories and better flesh out the characters, as the designers don't need to plan for all possible actions that characters could take. The differences in the two are fairly pronounced even now, and often fans of one type won't be fans of the other.

  PC RPGs continued to do extremely well, with bigger, deeper games being developed each year, each with more freedom and larger worlds. MicroProse's *Darklands* (1992,) although flawed, was a good example of this – the player could wander all over medieval Germany while fighting Satanic forces and gaining fame or, if the player preferred, notoriety. While this world was too big to fully flesh out (cities & towns started to look very familiar after visiting a couple of them,) the player was free to choose moral actions for his/her party and full freedom to attack entire cities full of guards & people. Electronic Arts' & Interplay's *Wasteland* (1987) represents, in many ways, the pinnacle of PC RPGs at the time. It was a #1 bestseller for 1988, and introduced many new features, including semi-autonomous party members (ask a party member for cash and they might refuse,) an excellent storyline, people that would respond to the player's party based on the player's actions, and, possibly most memorably, a dark, brooding, mature

atmosphere. Taking advantage of the demographic split between console & PC gamers, (PC gamers are older,) *Wasteland* was set in a post-nuclear war Nevada, which was known, fittingly enough, as the "Wasteland." Combat was frequent and bloody, as violence was often the best (and only) way to solve problems. *Wasteland*'s setting was also responsible for some of the great atmosphere in the game; while most electronic RPGs had taken place in medieval times, *Wasteland* disposed of the overused fantasy elements and really stayed true to the setting. There was no magic to speak of, and weapons were modern-day (roughly.) *Wasteland* was original, innovative, and engrossing, easily making it one of the best CRPGs in the short history of the genre.

For contrast, the most popular console RPGs of that time were all developed in Japan for the Nintendo Entertainment System. The *Legend of Zelda* had been released in 1985, and will be mostly ignored in this paper, since it is a hybrid of action & RPG, as opposed to a pure RPG. However, Enix's *Dragon Quest* and Square's *Final Fantasy* were very good stereotypes of console-style RPGs. They incorporated all the elements of console RPGs that are still seen today in almost all console games: frequent random encounters, an protagonist who's morally upright, difficult "boss" enemies, dungeons in which enemies are found, cities in which no enemies can be fought, and a medieval/fantasy setting. However, console RPGs are known for well-developed characters, but simple, linear character advancement. (Here, character development is meant in the sense of creating character depth and personality, as opposed to character advancement, in which characters grow stronger in RPGs.) *Final Fantasy VII*, released the same year as *Fallout*, was the first game that integrated full-motion video with story & gameplay in an RPG, and that arguably helped the game develop its characters more thoroughly. One of the gaps between console & PC RPGs can be seen clearly in comparing the characters of *Final Fantasy VII* and *Fallout* – the former handed the player a set of characters to control, but along a predetermined path and control was mainly restricted to fighting and some minor dialogue options. This allowed *FFVII* to give its characters much more personality than *Fallout* could its Vault Dweller protagonist. However, in *Fallout*, the player determines the protagonist's personality by deciding the character's actions and can customize every aspect of the character, even gender. The main character can be a gun-wielding evildoer who will kill anyone in her way or a smooth-talking, good-hearted thief, who is able to avoid conflict by sneaking around enemies. Because the player has to inject their own imagination into the main character's personality in a PC RPG, console RPGs are frequently more accessible and can rely more on the story to grab a player's attention. Classic-style PC RPGs rely on other things, including strong atmosphere (this includes the world's backstory,) strong non-player characters

(NPCs,) an interesting game world, and first and foremost, a feeling of freedom to do anything that is possible in the game world. The last aspect was inherited from pencil & paper games, which were infinitely flexible.

The Death of the CRPG?

However, despite the appeal to disparate markets, PC RPGs were proclaimed dead in the mid-90s. Releases had all but stopped, with the last critically acclaimed, best-selling CRPG released in 1993 (the CD-ROM version of Sierra's *Betrayal at Krondor*.) Highly hyped titles such as Origin's *Ultima VIII* (1994) and Interplay's *Stonekeep* (1995) were busts both critically and financially. GameSpot's review of *Fallout* begins with this:

> "The past several years haven't exactly been kind to role-playing game fans. Very few role-playing games have been released since 1993, and those that have made it to retail shelves have largely been unsuccessful at combining playability and originality with the complexity that role-playing game fans love."

Part of the reason there were few releases was simply that the RPGs produced in that era (1993-1997) were below average. A few were mildly entertaining, but the gross majority of RPGs were, as the review says, trite and unplayable. However, while there were no great RPGs that were released during that period, even the decent ones did rather poorly financially. There were two reasons for this: *DOOM* (which ignited the first-person shooter genre in 1993) and *Command & Conquer/WarCraft II* (which popularized started the real-time strategy genre in 1995.) While neither of these two games were the first in their genre or even the first in the genre by that development team, both were wildly popular and spawned many imitations. It soon became "profitable" to make first person shooters or real-time strategy games, as that was what was selling. To some extent, this worked, as the newness of the genre allowed all games produced in those genres to be fresh. However, the market was eventually saturated with derivative games, and it was possible for developers to receive funding for other projects. The first successful RPG launched since the "death" of the CRPG was Blizzard Entertainment's *Diablo*. Released in late 1996, *Diablo* was an action-RPG hybrid and had the thinnest of plots. Paradoxically, part of what made *Diablo* appealing was its extremely simply gameplay mechanics; it was far closer to the early *Rogue* spin-offs than the sophisticated RPGs developed in the late 80's/early 90's. However, the game was so polished and so fine-tuned that it was a massive success, even though it left hardcore PC RPG fans yearning for something that was meatier and more substantive than *Diablo*. This void was filled by Interplay's *Fallout*.

Designing *Fallout*

Tim Cain (the producer & lead programmer of *Fallout*) recalls: "*Fallout* was a grade B product that Interplay marketing was basically ignoring. After all, they picked up the AD&D [Advanced Dungeons & Dragons] license and had high hopes for *Descent to Undermountain* [which was a huge bust.]" After all, RPGs were not popular, especially RPGs that were made without major licenses and from scratch. However, the lack of attention allowed the rest of the design team to build their own product, independent of what marketing wanted and what was currently selling the best. As Cain says of the original design goals,

> "I wanted to make an RPG that was close to my tabletop gaming experience. I had played
> a lot of paper and pencil RPG's, and especially AD&D and GURPS, and I wanted that
> feeling of freedom and a big world that came from those games. I also wanted to make
> sure the player was rewarded (or punished) for his actions in the game."

Fallout was designed to be a hardcore CRPG from the very beginning. The important features that distinguish "hardcore" RPGs from other games is that they tend to be closer in terms of gameplay and game style to pencil & paper RPGs. (Throughout this paper, "hardcore," "old school," or "older-style" RPGs will refer to RPGs that are closer to the deeper, slower games like *Wasteland* as opposed to newer action games like *Diablo.)* After all, pencil and paper was the only model game for the first CRPGs and did not require heavy computing power like the newer action-role-playing games. Pencil & paper RPGs have two distinguishing features themselves: freedom of action & feeling that a world adjusts to a player's actions. With a human "dungeon master," this is a relatively simple goal to accomplish. However, because of the sheer number of possible actions that a player can take, this is difficult to do with electronic RPGs, since every possible path must be anticipated and written in ahead of time. One of the ways to simulate this feeling of freedom is to restrict interaction to people and objects that are special or important to the player, and to restrict a character's actions to those that are relevant to a quest in the game. *Ultima VI*, however, had a staggering number of objects that the player could interact with, showing that it was indeed possible to at least allow the player to interact with all visible objects in the world. Allowing the player to have full freedom of action, even for a restricted set of actions, was still a difficult task, and one that would take up most of the development time for the game.

After the design team was chosen, the setting of the game was decided – it was to be a follow-up game to *Wasteland*, a classic that had never received a sequel. The sequel started development for the Apple][, but was scrapped when MS-DOS PCs started becoming commonplace and porting it was simply too expensive. Electronic Arts and Interplay jointly held

the rights to the name *Wasteland*, but now that the two were competing publishers, it was highly unlikely that the two companies were ever going to cooperate. However, creating a spiritual descendant of *Wasteland* would violate no laws, and so the *Fallout* project was born in 1994. The engine had to be created first before a story could be grafted on top and actual content could be created, and a prototype was soon created so that management would be convinced the project was feasible. This was approved, and work on the game began after that. Work on the game proceeded quietly, and *Fallout* was still low-priority. In fact, as Tim Cain says, "everyone else [on the design team] was still assigned to other projects… So I convinced people to stay late at work, and about 10 of us would sit in a room and throw out ideas for the storyline." However, before the world can be examined, a better look should be taken at the engine that was the backbone of the game.

GURPS & S.P.E.C.I.A.L.

At the heart of every RPG lies a rule set. The rule set governs character statistics – how "good" a character is at performing tasks in the game world. The rules also govern character advancement to improve those statistics, and general gameplay, that is, how those statistics affect the player's ability to perform actions in the world. "Gameplay" here, however, mostly refers to combat, as most non-combat interactions between player characters and other player characters (PCs) do not need to be based on rules. (What kinds of statistics govern conversation?) Simpler (system-wise) games such as *Final Fantasy* and *Diablo* could make do with simple rules; combat was restricted to certain areas and against certain enemies. *Fallout*, however, needed a solid rule set that was flexible enough to allow the kind of interaction that Cain was looking for to be able to feel like a pencil & paper game. The system also needed to be easy to plug into the world of *Fallout*. This world lacked magic weapons & spells, but Desert Eagles, AK-47s, and Gatling Lasers were plentiful.

The most popular rule set to license was, and still is, TSR's Advanced Dungeons & Dragons license, and while Interplay had rights to that, that rule set was simply inappropriate to *Fallout*'s setting. The team could have also designed their own rule set – a step that developers of many older-style CRPGs take – but licensing a popular rule set would also make the game more famous. Using a commercially available rule set would also ensure that the system was tested and worked reasonably well, something that a homegrown system was not guaranteed to do. In the end, the designers chose Steve Jackson Games' GURPS rule set to power the game. GURPS, which stands for "Generic Universal Role Playing System" is a giant set of rules that is capable of working with any genre of role-playing game. The rules are reasonably simple to

adapt to any conceivable game world, and thus it made an excellent fit for the unique world of *Fallout*. A deal was struck, and Interplay acquired the license for what was supposed to be a series of GURPS-powered role-playing games. *GURPS Fallout* was to be the first of these. At first glance, this was a good deal – GURPS was easy to adapt to new games, so development time, which was always considerable for CRPGs, could be cut down. Developers could also worry more about creating an interesting game world instead of fitting rules to them, and gamers would be attracted to this line of games due to the name. However, it was not to last.

While GURPS was a fine system that easily fit into *Fallout*, Steve Jackson Games was a little more difficult. The license ensured that Steve Jackson had final say on what could go into the game; after all, his company's name was also at risk here if *Fallout* turned out to be a low-quality product. Although it is still unclear what exactly happened, Interplay & Steve Jackson Games terminated the contract over "creative differences." Both sides refuse to speak to exactly what those differences were, but PC Gamer reported that the design team on *Fallout* was having difficulty dealing with the restrictions. *Fallout* was a violent game, and allegedly Steve Jackson was unhappy with the amount of blood and gore that was spread around during and after combat. The gritty world of *Fallout* was also too mature for children – which was the way it was designed to be, but Steve Jackson was also unhappy about that. A few other disagreements were reported, including one in which Steve Jackson wanted the removal of the game's mascot, a happy-looking cartoon man that was patterned after the Monopoly man and appeared everywhere throughout the interface. However, Steve Jackson claims that

> "Creative differences" was THEIR story, not mine. I did *not* pull out. And it wasn't halfway through; it was a few months before the end of a 3+ year development process. It was an amazingly unpleasant and sudden end to something that I had put a lot of work and hope into.
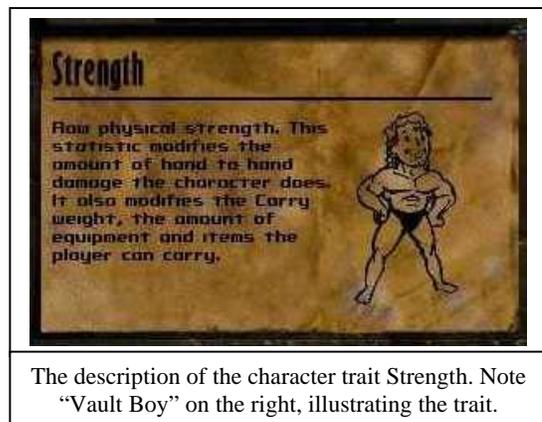
Regardless of whether it ended up being Steve Jackson's attempts at stifling *Fallout*'s creative touches or Interplay's greed in wanting to keep all the money that the game made, the design team ended up needing to find a new rule set. A good portion of the game had already been designed, so it was a heavy blow to the team. Still, as Tim Cain recalls, there was a silver lining:

> We were all a bit demoralized [at losing GURPS.] After all, I was the one who wanted the license and convinced everyone how cool it was. But we also realized that during the development of Fallout, we had had good ideas that just didn't fit into the GURPS mold. So we also saw it as an opportunity to make our own system, that fit our engine better and our story.

Enter SPECIAL

Fortunately, the development team consisted of many veteran RPG players, so making a balanced, flexible system wasn't nearly as difficult as it could have been. In designing their own system, the design team looked at popular paper RPGs and picked out seven traits that were universal across all of them. Basic statistics, such as move rate, sequence (which character goes first in a turn,) resistance to drugs & radiation, and carry weight could be directly derived from these basic seven traits. More advanced skills, such as using small guns, large guns, performing first aid, performing surgery, and so on, were also dictated by these seven traits, but the player could choose to improve them later. The seven traits, Agility, Charisma, Endurance, Luck, Intelligence, Perception, and Strength, were the center of the system and their initials formed the name of the system: ACELIPS. (When someone later pointed out to Cain that "SPECIAL" could also be used, the name was switched over.) Switching the game engine over from GURPS to SPECIAL was actually fairly easy, as the engine had been designed to be modular. The new system worked very well, and offered many opportunities to customize character advancement, something that is always important in old-style CRPGs. (While PC action-RPGs also place emphasis on this, many console RPGs have relatively simple character advancement.)

Characters in *Fallout* have an immense number of options. The character has 40 points to distribute among the seven traits (each trait could have anywhere between one and ten points.) However, in addition to this, there are also 16 optional character characteristics, 18 specialty skills, of which three could be "tagged" for faster advancement, and 53 character perks, of which a character could pick one every three levels. As alluded to above, each skill's base level is calculated using one or more of the traits, and upon each level, the player can add a certain number of points to his/her character's skills. "Tagged" skills increase by two points per each skill point, and also start out at a higher level. However, while the traits &

The description of the character trait Strength. Note "Vault Boy" on the right, illustrating the trait.

skills combined make up most of a character's ability, the optional characteristics and perks are what give a character flavor. Each characteristic & perk affect the character less than distributing points over skills or traits, but they make up for that with original and often humorous effects. Optional characteristics have more effect of the two, and are chosen upon character creation. The player can pick up to two, and each characteristic has both positive and negative

effects. Some of them significantly alter the character – one gives the character 10% more skill points in all skills, but at the cost of only gaining perks every four levels instead of three. Others are there mainly for cosmetic effect and to add flavor: the "Bloody Mess" characteristic ensures that the most gruesome death animations in the game will be played. Perks are similar, only they are all positive (i.e. the character becomes more proficient or "better",) and the perks that a character can choose from are customized to what "type" the character is. For example, if the character is a long-range sharpshooter, the "Sniper" perk will become available, which makes gun attacks much more deadly. Similarly, a sneaking-type character will have perks like "Pickpocket," which makes stealing from other characters considerably easier. And unlike most games, all these choices actually make a difference. Giving a character fewer than three Intelligence points will result in the conversation choices being only "ruk," "eeg," "yah," "uh-huh," and occasionally "want more." Conversation and interpersonal interaction can actually be governed by statistics in this game, because all conversation is PC-NPC (non-player character), as opposed to PC-PC interaction. Since computer-controlled NPCs only have a certain number of responses, skill points can determine which ones the player can use. Thus, having a high charisma will enable the player character to say things that will ingratiate the PC to NPCs, and thus allow them to get through parts of the game without fighting. *Fallout*'s roots in pen & paper RPGs can easily be seen in character advancement and there are many unique characters that can be created.

Of course, if the in-game experience were the same no matter how the player created their character, all the character advancement options would be rendered useless. This is a trap that many CRPGs fall into; because of the finite limit to the game world & gameplay possibilities, a set of skills from a pencil & paper RPG might not all be applicable to a computer RPG. However, when using a commercial rule set, designers usually import all of the skills so that not only is it easier to convert, but also purists won't complain. *Fallout* does a very good job of ensuring that few skills are useless. Even the "Gambling" skill, while not applicable in many situations, can be used to guarantee the player character a steady source of income if boosted high enough. Ensuring characters were different but equal – that is, they played fundamentally differently, but yet could all beat the game – was a high priority in *Fallout*'s design, as Tim Cain says:

> The biggest priority, the development guideline that became our mantra, was asking how would someone solve this quest with combat, with talking, and with sneaking (the fighter-diplomat-thief triad). Everything stemmed from that... Combat had to be

avoidable, or the thief and diplomat characters would suffer. I think Fallout might be the first RPG that you can play from start to finish without fighting anyone.

All of the character advancement was also built towards this goal – while the character could amass many skill points, certain powerful perks would allow non-combat-oriented characters to do fine. This, in the end, combined with freedom of how to advance a character, gave characters in *Fallout* a very good pencil & paper feel. Characters were highly personalized to the player and how the player wanted to play, yet a character could succeed in the game even if pacifistic. This was a pretty strong contrast to previous CRPGs, and yet even stronger from the contemporary *Diablo*. However, even if the player could avoid combat, *Fallout*'s detailed combat system is inspired by hardcore CRPGs and paper RPGs and is thus worth a look.

Combat: Post-Apocalyptic Style

At first glance, *Fallout*'s combat system looks like it belongs in a complex tactical combat strategy game, not a CRPG. Combat occurs on a hex-based grid and is turn-based. During each turn, the player has as much time as necessary to decide on a course of action. Everything the character does requires a number of action points, which are replenished every turn. The number of points a player has in a round is determined by the character's distribution of points over their traits. Unused points are turned into armor class points, which make the player character harder to damage. All

A screenshot of the main view. The player has entered combat mode and is targeting a mutant with a 95% chance of hitting.

this combined means that the player has a lot to decide on every turn, and there's a lot of tactical flexibility with what he or she wants to do – which again was originally inspired by pencil & paper games. Most electronic RPGs followed this turn-based style of play, although at the time, real-time gameplay was considered the trendy way to go. Due to the success of *WarCraft II* and *Diablo*, fantasy real-time games were suddenly also trendy, and *Diablo* proved role-playing games didn't have to be slow and thoughtful. Fortunately for fans of the hard-core style who wanted a little more time to think things out, Cain was also a fan of turn-based systems: "At

the time, we looked to *X-Com* and *Crusader*, which were both isometric, [and tactical combat games] for inspiration." In fact, the real time *Diablo*, which was released in late 1996, came out too late to have any effect on *Fallout*'s combat system. Even so, Cain also made this argument for turn-based systems over real-time:

> "I like turn-based combat in my RPG's because I have always felt that the character should get better and better in combat, not necessarily the player. If I have a character with a 98% shooting skill, he should hit a lot even if I am not a "twitch master". If I want a good shooter, I'll go play *Quake*."

For Cain, the feeling of the character truly advancing was too hard to capture in the game if it was real time. By examining modern shooter-RPGs, such as *Deus Ex*, his argument becomes fairly clear – although there is a sense of progression throughout the game, a player that's bad at "twitch reflexes" is simply not going to see the difference as much as one who does, especially when dealing with combat skills. Also, allowing the player to think through their actions reinforced the importance of choosing the correct tactics in each situation, something that older CRPGs, especially *Wasteland*, really did well. *Fallout*'s combat system also allowed more intricate details in combat. For example, characters could make targeted attacks at specific parts of their enemies: shoot the eyes and the enemy's counter-attacks might be weakened; attack the arms and enemies might drop their weapon. While this is possible in some first-person shooters, it's very difficult to perform such an action with any regularity because target areas are small and the time allowed is small. Allowing targeted attacks in an isometric/overhead view like one found in *Fallout* or *Diablo* would simply be impossible, as characters are too small to accurately aim at individual parts, and popping up a menu would consume too much time in a real-time environment. The variety, detail, and pacing of the combat system were good enough to make it the centerpiece of a stand-alone game in the strategy spin-off *Fallout Tactics*. *Fallout*'s attention to detail didn't stop at combat – the player character's interaction with the world was also well thought out.

World Interaction & Story

F*allout* was designed to have considerable freedom in terms of character-world interaction. While the player can enter "combat mode" anywhere and engage in combat with any living or sentient being, the player is able to also interact with the world on a less violent level. Every desk, bookcase, ice chest, and refrigerator can be searched (most hold nothing,) while the player character is free to use sinks, toilets, computers and other objects that populate the game world. While interacting with a lot of these objects don't produce anything of value to the

character, the fact that the player is able to makes the world feel a lot more free. *Ultima VI* was one of the first games to allow the player to interact with just about every game object in the world and *Fallout*, while not carrying this principle to the same level as *Ultima VI*, also gives this
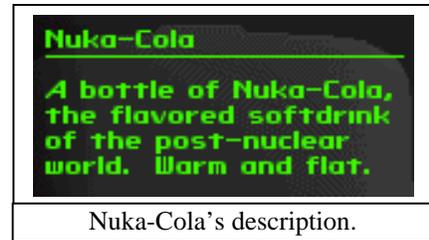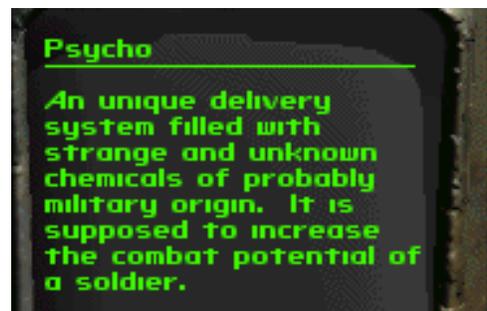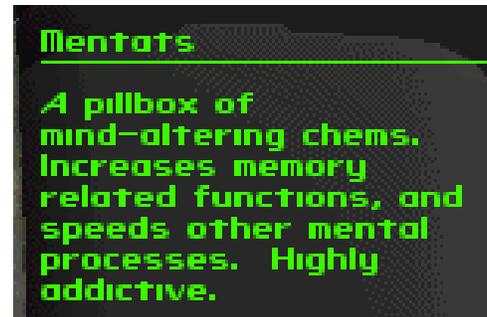

Nuka-Cola's description.

feeling. Objects don't have to relate to quests or heal the player; some, like the ubiquitous Nuka-Cola, are in the game to give the world a feeling of life beyond the player. There are many objects like this – "Iguana-on-a-stick" can be bought & eaten, there are pre-war frozen dinners that are still mostly edible, and, if the player character has a high enough Luck, he/she may run into a crashed flying saucer, from which a painting of Elvis can be taken. All of these items can be used in normally expected ways. Characters can drink Nuka-Cola, eat fruit, throw rocks, and even collect pornographic magazines. While none of these items are required for any of the quests (although it's possible to solve certain ones with food/drink items,) they still come with fairly lengthy descriptions that can be viewed in the inventory screens. While fruit might be fairly explanatory, a paragraph of Nuka-Cola or the Cat's Paw magazine adds immensely to the feeling of the world existing outside the game. While many other electronic RPGs also have a variety of useless items inserted purely for atmosphere, *Fallout*'s sheer variety and number beat all of its contemporaries. *Final Fantasy VII* has some useless items, but they are usually unique (as in the only one in the world) and used for some secret quest. *Diablo* has almost no useless items, except for the ears that players can take off of other players they had killed. Item placement also makes sense: open a refrigerator and food or drink items will be there. Tents in bandit camps have hard alcohol and drugs inside, while bartenders sell beer & other alcoholic drinks. Not all of these items are useless, though, as drugs and alcohol play a somewhat significant part in the game. *Fallout* has a unique and realistic treatment of the touchy subject, but one that enhances playability and actually gives players a compelling reason to dabble in drugs.

Of the two, alcohol is definitely less of a factor and not really useful at all in the game. Characterslose Perception points when consuming alcohol, as might be expected. These are regained after a few hours of rest. It's extremely easy to rest off the effects of alcohol, but there is no benefit to the character. Drugs, however, are handled interestingly. The various drugs in the game provide temporary boosts to a character's traits that wear off after time. Of course, when the drugs do wear off, the character's statistics are now worse than before the drugs were taken. Depending on the drug and the character's resistance to drug addiction, the character can get hooked on the drug and need to take it just to keep their statistics at a normal level.

Thus, to get a similar boost to when first using the drug, the character has to take multiple doses. Add on the cost and difficulty of acquiring drugs, and it all adds up to almost a continuous quest on its own. The drawbacks to taking drugs usually outweigh the advantages, but there are certain cases in which there's little other option. Certain objects require a minimum strength or intelligence to use, and if the player character doesn't meet said requirements, then there's no way to use those objects without some chemical assistance. However, with some Buffout or Mentats, the player character can easily get to such a level. Maybe one certain combat is too difficult, but can be easily beaten with some more Buffout or some Psycho, which makes the player faster and more resistant to damage. The drugs only need to be used a few times before the character is addicted. The process of withdrawal passes by faster in the game than in real life, although the player's statistics take some pretty drastic eductions when going through withdrawal, as both stamina and traits take

Mentats & Psycho, two of the more common drugs available in the game.

a drastic reduction. The power & drawbacks to using drugs ensure they can only be used in important situations, but the fact that the player can take them at all gives the world a grittier feel, and, of course, more freedom. Drugs were an important part of the post-apocalyptic society *Fallout* presented, and to not allow the player character to take them would feel restrictive.

Making Friends in the Wasteland

Interacting with objects, however complex or widespread they might be, is only a small part of making a world that truly reacts to the player's actions. People, of course, are the most important and noticeable element, and it's always difficult for CRPG designers to create not only believable, three-dimensional NPCs, but also ones that react to the player character's actions as well as give the players a choice of how to treat the NPCs themselves. *Diablo*'s NPCs were mildly interesting, but didn't give the player much of any choice in dealing with them, while *Final Fantasy*'s NPCs only support shallow, linear interactions. *Fallout*'s NPCs all do a fairly good job of reacting to the player's actions, but, like in most human-mediated RPGs, only some of them will have anything useful to say. There are three types of NPCs in *Fallout*: the "speech-heads," the less-detailed dialogue NPCs, and the regular NPCs. The NPCs with less-detailed dialogue are represented on the overhead screen, and when the player engages them in conversation, a

dialogue window comes up, but the view remains centered on the player & NPC. However, when a "speech-head" NPC is engaged in conversation, the NPC's digitized speech is played and the game cuts to a close-up view of the NPC's face, allowing the player to personally gauge the NPC's reaction to the player character. Finally, with regular NPCs, no dialogue window is presented, and the NPC responds to the character's attempt to engage them in conversation with one of several stock replies. In all of these cases, the NPCs' responses will usually change based on the player character's "reputation" and "karma," measures of how well the PC is known and how "good" the PC is considered to be. "Evil" NPCs react better to "evil" PCs, and vice versa for "good" characters. The strength of the reaction is determined by reputation, so famous good characters will be treated like heroes, while little known good characters will still be treated neutrally. In addition, NPCs react to the player's statistics: a truly dumb character will be treated like one. While this reaction has a fairly significant effect on gameplay, it also allows the player the feeling that the world is alive outside of the player character's quests, and that the player is actually affecting the people inside of the world. Reacting to the player affects all NPCs, even those that join the player character. If a "good" NPC has joined the player's group, then performing evil actions will eventually cause the NPC to turn on the PC. Although not being able to control NPCs makes combat more difficult and sometimes frustrating, the player is really inserted into the role of the main character; there's not just a one-minded party with a spokesperson, but rather a leader of real characters that are allowed to disagree with the leader. This also hearkens back to paper RPGs, in which the players of the characters each had their own personality and role in mind. Older CRPGs were actually fairly poor at this – most parties functioned like a hive-mind. Console RPGs like *Final Fantasy* do a better job of having NPCs react appropriately to PCs, but they have a major advantage: linear, non-branching character interaction.

The other half of character-character interaction in RPGs is actual conversation. Here, *Fallout* has a major advantage over both *Final Fantasy VII* and *Diablo*. Conversations that occur in *Fallout* can

The player doesn't always have to be polite.

branch, and, depending on the player's charisma, speech skill, reputation, karma, and other external factors, NPCs will say different things, to which the PC can respond in one of several ways. This is an integral part of being able to beat quests in multiple ways. If the PC requires an item from the NPC, the PC can threaten the NPC in dialogue, or convince the NPC to hand the item over, perhaps in exchange for a service from the PC. Conversations need not be directly related to quests, either. In asking for information about a small city called Junktown, for example, the PC can respond to the leader of the city positively ("sounds like an exciting place,") neutrally ("thank you for the information,") or negatively ("this place sucks.") Of course, getting on the good side of the leader will result in certain quests being available, while getting on the bad side will result in others, along with the potential enmity of the Junktown police. Being able to choose the actions & attitude of the player character is something that's rarely found in console RPGs and something that CRPGs only allowed players to do after a somewhat long history. The fact that the player character can say something from each attitude makes dialogue less constrained, and allows the PC to react in the way the player wants.

Control & Story

Taken together, the character advancement, combat system, and world interaction allow players to have much greater control over their characters. The control is still constrained by technology, of course, but the amount of choices the player has easily beats the amount a player of *Diablo* or *Final Fantasy* would. This weakens the ability of *Fallout* to tell a good story – if the writers needed to write a story for each little choice the player makes, the game would have been completely infeasible. *Fallout*'s solution to this problem is novel. Instead of writing a whole story for every possible branch, the end game shows the player each place they visited, and what effect the Vault Dweller's visit had. For example, overthrowing the local police in Junktown would allow the crime lord, Gizmo, to take over, while assassinating the Brotherhood of Steel's leader led to the group extending an iron-fisted rule over all of California coast. This approach allowed the game to tell an appropriate epilogue for the rest of the world and conclude the story, but it still forced the player to write his or her own story. Instead of telling the player what this group of people did, like in other games, *Fallout* forced the player to decide what to do, and, when the game was concluded, the player would have a complete story. Like everything else in the game, this was somewhat reminiscent of paper RPGs because the human dungeon masters had to react to the player's choices: an unnecessarily restrictive plot line usually led to a boring game. A main story arc had to be constructed, but how the player characters

completed the goals in that arc was up to the players. *Fallout* was brilliant at replicating that feeling of freedom.

The World of *Fallout*

Before the impact of *Fallout* on the computer gaming world is examined, a brief word must be said about the atmosphere in the game. This was one aspect in which *Fallout* mainly derived from other electronic RPGs and not pencil & paper games. In the latter, because the dungeon master has to verbally describe the world to the players, the atmosphere is greatly decreased. Players are allowed to imagine what the world looks like, but nothing is quite as clear as images. The first scene the player is allowed to control sets the tone:

A small intersection in the Hub. Note the cracked ground, general run-down appearance of the world, and heavily armed guards.

the character leaves Vault 13 and enters a dark cave with huge mutated rats that have to be avoided or fought in order for the player character to escape. The first scene is dark, gritty, and often creepy, which is the way the game world appears. Between the huge deserts and mountains of the wasteland exist cities, each with its own look & feel. Junktown, for example, is actually a town made of junk. Broken-down cars surround the city and tires are seen lying against buildings. The Boneyards, built from what used to be Los Angeles, combine new buildings with burnt-out hulks of pre-war buildings. Junkies are everywhere in The Hub (the most populous city,) and shuffle around aimlessly, responding to questions with nonsense. And finally, in Shady Sands, a somewhat isolated town near Vault 13, the beginnings of a community have appeared. Buildings made of adobe-like material are neatly organized in the town's main square, and there is a farming & gardening area off to one side of the town. Children run around while at play, but the burnt ground and two-headed cows remind the player of the dark world. Art Director Leonard Boyarsky's work did an excellent job of capturing the desolation of the wasteland. He also was responsible for somewhat retro-technological look of the game.

Eschewing the usual futuristic appearance of this type of game, Boyarsky opted for a retro-Fifties look.

> "Things just had no trace of the style you can see in artifacts from the Forties and Fifties. That's why the machines in our game are powered by vacuum tubes, and why everything has that grungy, patched-together-with-duct-tape look. It's still recognizably "our world," but it's a world where nobody ever invented the transistor."

This choice gives *Fallout* some of its most effective visuals. The suit of powered armor on the front represents the essence of what the art looks like: the armor has tubes coming out everywhere over the face and going into the armor itself, while other protrusions serve as air filters, among other things. However, even though the suit of power armor itself looks like something that would have been designed in the 1950's, the technology involved is still futuristic and far advanced beyond the current age.

Other elements add to the game's unique sense of style. A haunting soundtrack is reminiscent of the desolation and serves as an audible reminder of the world's emptiness. Not all of the game is empty and creepy – the game has plenty of black humor, from the smiling families in front of their Vaults to Vault Boy, a character derived from the Monopoly man that appears on many of the interface screens. Each character trait or attribute, when clicked on, has an often humorous text description accompanied by a related graphic of the smiling Vault Boy. For example, the "big guns" skill shows the cheery mascot slinging a rocket launcher over his shoulder. This dark humor fits in well with the game's oddities and serves to lighten the atmosphere. Although none of these factors improved the gameplay directly, they immeasurably increased the enjoyment of the players, and *Fallout*'s style contributed to its success.

A Rebirth

When *Fallout* hit the market, both critics and gamers alike received it extremely positively. It won many RPG of the Year awards, and, more importantly for Interplay, sold many copies. Prior to *Fallout*, the only good contemporary CRPG was *Diablo*, and it's already been mentioned how hardcore gamers felt about that. *Fallout* showed that classic RPGs were not dead, and that games built off of the ancient pencil & paper game model were still viable. While nothing the game did was truly revolutionary, the game was an evolutionary step over its predecessors in almost every way and extremely polished. Nothing yet has quite captured the feel that *Fallout* did – even Tim Cain's follow up game, *Arcanum*, was too ambitious and didn't quite make it. Following *Fallout*, interest in hardcore RPGs was revived and soon a slew of deep, old-style RPGs were released. *Fallout 2* followed in 1998, and was "more of the same,"

encompassing a game world four times as large as the original. Interplay's RPG division became so successful that it was spun off into its own studio, Black Isle. Black Isle has since produced the phenomenally successful *Baldur's Gate* series with BioWare, and created a couple of Advanced Dungeons & Dragons games using BioWare's engine (*Planescape: Torment* and *Icewind Dale*.) Long dead series, such as New World Computing/3DO's *Might & Magic* and Sir-Tech Canada's *Wizardry* have since returned, with the former still going strong and the latter finishing with an excellent finale in 2001. The revival wasn't restricted to games based on paper RPG systems, either – Ion Storm's *Deus Ex* integrated strong RPG elements with a first-person shooter, and Blizzard's *Diablo II* sold very, very well. Even with all the success that these new RPGs are having, *Fallout*, the game that revived the hard-core RPG genre, still holds its own. The freedom of action, combined with a world that reacts to the player's choices, still makes the game fun to play. Even if the Super VGA isometric graphics don't hold up to today's 3D engines, the free gameplay and freedom of choice make *Fallout* a memorable game for hardcore RPG fans.

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