Interactive Storytelling: Meaningful Player Choice

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One might very well ask – why even worry about meaningful choice in video games? After all, it is perfectly fine and valid – and from a business and development point of view, perfectly viable – to entirely side-step the whole issue of significant player choice. Many of the most celebrated and successful AAA games (including the *Uncharted* series, *Gears of War*, *God of War*, *Call of Duty*, *Portal* and *Metroid*, to name only a few) do not offer the player any story-level choices at all.

These and many other masterwork games have proven that "physical" interaction (choosing weapons and shooting enemies; spinning steering wheels with analog sticks, and pressing buttons), combined with static storytelling, is perfectly sufficient to provide a satisfying gaming experience – and can be a fine platform for a great narrative, or even literary genius. No matter the game's structure, a good game writer can design a narrative which makes the player feel fully engaged. If, on top of this, the player can perform certain major interactions out of order, or skip certain parts of the story, then already the game can benefit from narrative dynamics and replayability (as in *Starcraft 2*, to pick but one example).

Nevertheless, whether you're a team lead designing a game's interaction, or just a lowly writer hammering out a game's story, the following ideas may be useful to keep in mind. It is for good reason that many developers believe it's important to empower the player with the ability to affect the story. For the player, the single greatest thing about our medium is its capacity to support interactivity, and there's that wonderful psychological appeal of a fantasy world where you can forge your own destiny. For the reviewer, the degree to which the player can affect the story is often a key consideration in evaluating the quality of the story, and indeed the word "linear" almost always implies criticism of the story's limitation and lack of interactive dynamics. Thus, for many developers, *player choice* is not merely an exciting concept, but a design goal and indeed a mandate.

No Simple Concept

This decade has already proven very exciting for dynamic game narrative. More than ever before, we are seeing the true power of the narrative capability of the medium. From deep RPG games like *Mass Effect* and *Skyrim* to dynamic story-based games like *Heavy Rain*, we are witnessing a really fantastic and defining moment in the industry, and the artistic development of the genre.

But even now, player choice is not a very well-understood concept. It's simple enough on the surface, surely: give the player a choice and provide different outcomes depending on what the player chooses. We've learned that the best strategy is to create a wide range of results for different choices (for the sake of interest – the more the better), while limiting the scope of effect and otherwise using a variety of techniques to limit combinatorial explosion and keep production overhead manageable.

However, this simple "choice-structure" analysis quickly becomes problematic, for it is quite easy to present a choice-structure mechanism without the player even suspecting that they've made a choice. Alternatively, the choice might register, but the player may never suspect that the alternative would have yielded significantly different results. Contrariwise, it's very common indeed in video game writing

to present a false or illusory choice, where the same outcome happens regardless of the player's action; the player feels that they've made a choice even though, from a structural point of view, they have not affected the story in any way. In all of these cases, the *sensation* of choice is not necessarily reflective of the underlying choice-structure.

The Crucial Distinction: *Meaningful* Choice

In any case, the most important element in choice is intentionality, and one simple thing distinguishes intentional choice – *meaningful* choice – in video games: the player's understanding of what is being chosen. It is a simple matter to present the player with a choice on a merely structural level: Press A for option A, or press B for option B. However, if the player does not know what options A and B involve – that is, if there is no indication of the meaning or the consequence of the choice – then we have the mere structure of choice without the significance that makes the choice compelling and meaningful.

Indeed it is not precisely the choice that most satisfies the player, but the freedom to choose. The inherent joy is not in the actual act of burning or saving the village, but that the player has the freedom to take either course.

But freedom is complicated, and it's easy to go too far in the direction of player choice – which leads to choices which have no aesthetic basis or narrative purpose, a problem common in free-roaming RPG games, for example: choices everywhere, while meaning and motive are hard to come by. Such freedom without purpose is tolerable in multiplayer games, where the social interaction is leveraged to generate story, meaning, and purpose. But in single-player games, lack of narrative purpose is a real problem, and it is often caused by an unmotivated excess of player freedom.

The other main problem of choice in video games is arbitrary or random choices. Players make choices without any foreknowledge or expectation of the significance of their decisions. Giving the player real agency in the story, but failing to provide a sufficient conceptual framework to understand the choices, means the player is in charge of advancing the story, but incapable of affecting it intentionally. In effect, this is equivalent to pushing random buttons and seeing what happens.

Even in games celebrated for their interactive design, there is often quite a bit of incoherence and accident, or reinterpretation of random input as significant (such as *moving forward* resulting in *knocking over the vase*, or *opening the door* resulting in *a zombie attack*). Such shortcuts strip control from the player, and although they cannot be altogether eliminated, they can often be avoided or at least refined through more thoughtful efforts in interactive design.

But when the narrative's controls are, in this way, conceptually arbitrary, there can be no intentional choice. The player isn't interacting in the story, but progressing a randomized story. This does not mean that meaningful choices should not have unintended consequences. On the contrary – as in real life, they often do, and that's what keeps things interesting. The point is that meaningful choice always implies intended consequences, and further, intended consequences should generally be borne out by the unfolding story, lest the entire choice-structure of the game begin to feel trivial and contrived.

On a single play-through, there is no difference between a randomized story and a linear story. In other words, there is no meaningful distinction between the player progressing the story by pushing random buttons, or progressing the story by pushing "continue" at each break. Thus, if there is no meaningful choice, the story may as well be linear – from the perspective of a single play-through.

Actual (Structural) Choice

The *sensation* of meaningful choice is the key, if you wish to create dynamic, responsive story, but this is not to say that underlying choice-structure is entirely unimportant. Indeed, if we broaden the range of consideration beyond a single play-through, actual underlying choice-structure becomes a primary concern. It becomes important, for example, when the player re-plays the game, or discusses the various outcomes with friends who have played the game making different choices – or when the savvy reviewer analyzes the underlying structure, or the marketing department wants to praise the interactive capability of the game's story.

In any of these cases, the sensation of choice is no substitute for the reality of actual choices. Choice implies the possibility of more than one outcome, and if a real choice is not borne out by the structure of the game's story, then players become frustrated in the conclusion that their choices are meaningless or merely cosmetic.

Another major concern is a player who is trying to maximize the interest of the story by playing against the perceived main-line narrative, taking the alternative route for the sake of interest or curiosity. This can happen on the first play-through, and very often happens on the second play-through.

Sadly, actual choice can significantly complicate the writer's work, and it can even disrupt the player's sensation of making significant choices, if there is insufficient sensation of choice and intentionality accompanying the actual choice. There's nothing necessarily bad about long-term consequence, although it can jeopardize narrative coherence by preventing the writer from having what could otherwise have been a very productive level of narrative control. Long-term consequence can also leave the player with the unsatisfying sensation that they missed a large portion of the story.

Thus, most writers today prefer short-term, local consequence over long-term, global consequence. In such a design, smaller modules/episodes/missions are multi-threaded, but outside their local scope, the game world remains stable.

Aesthetically convincing choice is a difficult concept to define, and there's a degree of variance between different kinds of players. One thing to stay away from is choice which is merely subtractive (such as choosing which of two characters must die, so they won't be around to interact with later). It's possible to set up a subtractive choice but embroider it with significance and narrative purpose, but beware of choices which do not add significance to the story, and especially those which subtract interest. By contrast, meaningful decisions which open possibilities or embellish the game world with additional significance are the real objective, the holy grail of dynamic narrative.

The Sensation of Choice (Real or Imagined)

It is entirely possible to create the impression of meaningful choice without underpinning it with actual choice on a structural level: thus we can give the player the sensation of interacting in the story, without plucking them from the shoes of the protagonist and thrusting them into the director's chair. Indeed, when we consider the game as it unfolds for the player – that is, when we focus on the player's experience – our goal is only to ensure that the player experiences the sensation of choice, regardless of how that sensation may be achieved. An underlying choice-structure is an honest means to an end, but it is a secondary concern only.

From a philosophical perspective, there's really no way of knowing whether the most significant moments in our lives are self-determined, or are ruled by fate or sheer accident. Perhaps one of the really satisfying things about writing for video games is that we can provide players a real choice, real power over the narrative. Maybe we're still powerless to govern our own life's grand narrative, but hey – determining the fate of Ethan Mars or Commander Shepherd is a satisfying substitute!

But just as you and I have no way of knowing to a certainty whether our most strenuous efforts affected our life's narrative in any significant way, so will players never know whether their choices actually affected the outcome of the scenario – at least, not until they play the game again and try something different. But such meta-play aside, if we concern ourselves with the player's experience in a single traversal of the game, the reality of making choices is irrelevant; all that matters is the sensation of making choices.

However, unlike in real life, when the player chooses something in a game, there is an expectation that the intention will be fulfilled. In real life, if my love interest refuses me no matter what I try, then it's bad luck; in a video game, it's bad interactive design. Players are savvy enough now to sense when they're being fed a false choice. "False choice" remains an important tool for keeping production costs down and narrative design manageable and coherent, but the device can easily be over used.

One way to convince players they they've made a choice is to set up a system of causality. If their choice leads to something that otherwise would not have happened, then the player feels like they're really having an impact on the game world. One way to inspire this sense of choice is to actually give the players a choice that has consequences, and then give the players whatever they've chosen. Another way is to cheat: work backwards from figuring out what needs to happen in the story, concoct two causes, and place the player in charge of one of them. Then, if the player chooses something else, you can, when needed, activate the other cause. Indirect causality (causality separated by time) is another great way to convince the player that they're in control. Returning to a past choice later and giving it additional meaning or significance is another great technique.

But meanwhile, remember that choice for its own sake is fun and fine, but choice without narrative justification can compromise the aesthetic integrity of the work. Players expect some lens through which their choices are justified and synthesized, something to give the dynamic aspects of the narrative meaning and give their choices value.

Morality and Motivation

Many games support player choice by accumulating the moral value of the player's various choices on a score sheet. One obvious problem in such a setup is that saving 10 chickens for +1 morality each, then killing the farmer for -10 morality, yields a net neutral; this is obviously not how real morality works, but players generally allow the fiction, as it's all part of the fun. Games are, after all, abstractions, not simulations.

A single moral line is itself another oversimplification. Morality in games may be complex and contrary, just as in politics our war heroes and our spiritual leaders often embrace opposing ideologies. There may actually be multiple moral axes involved, and most games with single-spectrum morality scores basically conflate them: altruism (mercy, generosity, compassion), factional loyalty (generosity to a given faction, destruction of their enemy), idealism (which comes in many contrary flavors), and personality (grumpy/sinister/bossy/cynical or cheerful/optimistic/diplomatic). Moreover, even within a single area, there is often moral ambiguity. For example, in *Mass Effect 3*, a dying NPC begs to be euthanized. The player may well wonder whether cooperating with this request is a "good" or "bad" thing to do. (Certainly, morally-responsible, rational people disagree on this point.) A very similar situation appears in *Mass Effect 1*, and in that case the opposite decision is counted as morally good.

Many critics have complained of the incoherent moral identity of the *GTA III* hero, and praised *GTA IV*'s Niko Bellic as a character who synthesized and, to a degree, justified all the contradictory moral attitudes that can be expressed in the game. But aside from the *GTA* example, the general problem remains that when the player has the choice, the player can choose to behave entirely inconsistently, in a way that compromises the coherence of the protagonist's identity and the narrative integrity of the story.

Thus, many games have found success in inspiring or nudging the player to behave consistently. A great example is the Paragon/Renegade setup in *Mass Effect 1*, which we will discuss later, but for the moment consider *InFamous*, which rewards consistent play in an inventive way. There's no reward for being inconsistent, that is, for behaving neither particularly good nor particularly wicked, but you receive increasingly awesome super powers as you behave consistently in one moral direction or the other. But of course, each solution is game specific, and one problem with this approach, when generalized, is that one might well prefer to thematize and reward a "neutral" approach, a hero in the spirit of Snake Plissken or Han Solo.

Moral choice can be in competition with other concerns. For example, it's much easier to finish *Fable III* as an evil character. Winning as a good character requires much more time and/or a highly-developed familiarity with the game's mechanics. Thus, on the first play-through, the player is more likely to opt for the evil solution rather than fail or greatly disrupt the pacing of the story. In slight contrast to Molyneux's stated objective (to demonstrate that political good requires sacrifice), the game simply encourages the player to be evil.

In this and other ways, games often nudge players to play in a certain moral direction, to fully express the personality proper to the hero. But again the player will often play against the perceived nudge for the sake of interest – or just to be contrarian.

Even if morality is determined, its effect is not necessarily a simple matter. A given game character might despise a character for being good, or love a character for being evil.

But most convincing characters who do evil are doing so for some reason, and do not consider their actions entirely evil. It's generally more interesting to interact with characters who are each working in their own self interest, and who ascribe "evil" to any force that opposes them. Naturally, this is equally true for player characters, and many games provide a morally-charged world, but do not evaluate or label the moral choices made by the player. Still other games, such as *Freelancer*, report reputation with various factions, but again do not evaluate the player's overall moral standing, instead inviting players to make such determinations themselves.

Player-Protagonist Versus Narrative Designer

Sometimes people imagine that more player choice is always better, but in fact this is not always the case, and there are some important limits centered around the simple writer's principle: all writing is about conflict. It is essential to create tension through suspense – by not allowing the player to win right away. Put a player in charge of game balance, and you'll typically end up with a super-powerful hero who smashes everything for a gleeful five minutes, then becomes terribly bored.

Putting the player in charge of the narrative is perhaps even more dangerous. Very much like good gameplay, good narrative is all about conflict and frustration. Take a great story, and subtract all the unfortunate things that you wish hadn't happened; the result is not an improved story, but a horrible story. If the player is in charge of the narrative, the bad guy gets his just deserts in Chapter 1, and the player's favorite supporting character doesn't have to die halfway through Act 2. It might be what the player thinks he wants at that moment, but he's getting short-shrifted because it's not a good story any more. It might look like a classic example of the player thinking he wants one thing, while in fact he wants something else. But the problem is not simply that the player is blinded by hedonism; it goes deeper.

Indeed, the player *should*, wherever possible, make choices that defeat any attempt to construct an interesting narrative; this is because the player should be identifying with the protagonist, not the writer. One really great thing about game story is that players can stand in the shoes of protagonists, breathe their air, and share in their desires and their hardships. On an entirely different level, good narrative design requires scenarios which run counter to the protagonist's interests, problematize their goals, and challenge their expectations. Even if we were to imagine that all players were also expert narrative designers, players would have to cease role-playing the protagonist, if we made it their job to make the game interesting by challenging the protagonist and frustrating his or her desires. Requiring the player to meta-play the game in this way would destroy all immersion. The player should be immersed in the game, not reflecting on the fact that deferred gratification is the key to narrative success – that in the end, it is the battle for the holy grail that brings the most pleasure, not its capture.

To draw an analogy from popular cinema, even the most basic feel-good movie centers around impediments to the hero or heroine's eventual good fortune, and the satisfaction of witnessing the inevitable happy ending lies in sharing the trials that stand in the way of this longed-for closure. The protagonist in such movies, if given the option, would head straight for the obvious prize, by-passing the less obvious but far more entertaining and enjoyable pleasure of the chase. Beyond popular cinema, more interesting films and literary works typically replace final gratification with something that challenges and broadens the horizons of the protagonist and the audience.

Clearly not all choices are created equal. A great narrative designer will try to introduce what I would call "aesthetic choice" – a choice that is not a simple value judgment (bigger weapon, more likeable sidekick), but one which impacts the narrative arc of the game, affecting the character development, and one which becomes more meaningful in retrospect and resonates with the final outcome. Such choices may satisfy short-term goals, but should ultimately challenge the expectations and preconceptions of the player in a way that forces them to reflect upon their previous interactions in the game. In this sense, aesthetic choice mirrors life, insofar as it throws unexpected curve balls, places us in predicaments we had not anticipated nor prepared for, and demands we make difficult decisions with no real way of knowing how our choice will play out in the future. At such pivotal moments, we learn more about ourselves and our values than when our life runs so smoothly that we scarcely question our actions and desires.

Aesthetic choices create a far deeper investment in the player character. Difficult choices that have no obvious solutions or predictable outcomes enhance the realism of the game world, reducing the "cut to fit" aspect of many quests and their tailored obstacles. Similarly, narrative deviance away from the obvious goal makes its final attainment all the more satisfying, not simply because the player is more invested in their character's struggles, but the final value of success is given an aesthetic dimension – its worth is measured against what was sacrificed in its attainment.

Ideally, each significant choice the player makes should carry an expected result, while not impacting the narrative structure in any obvious way. Then, as the story develops, they may accrue aesthetic value. Decisions without aesthetic justification can be amusing constructs, and have a toy-like quality, but in the current generation, game narrative advances well beyond simple fun. Plots and characters are rich. Players become emotionally invested. It may sound like a good idea, giving players the capability to determine the story, but players are bad at this, and moreover, it is contrary to their identification with the protagonist. Each decision-point should be justified and serve an aesthetic purpose, so that any choice made by the player adds aesthetic value, and synthesizes with the larger design.

But enough theorizing! Let's turn instead to consider three of the most important games of our time, in the area of dynamic narrative – *Mass Effect*, *Heavy Rain*, and *Skyrim* – and see what we can learn from each.

Mass Effect

Mass Effect 1 distinguished itself in 2007 for its excellent writing and dialog. It was very well written indeed, and well-performed by the actors; technically quite sound.

It was deeply implemented. After a certain point in the game, you can select which two characters join you during field missions, and each one responds differently (according to their personalities) to the various situations encountered.

But the main reason the story and dialog were so compelling was that the dialog choices seemed significant to the player. This was not merely a consequence of the fine writing and acting; the interaction seemed significant because it was very carefully planned on a structural level. Each individual dialogue was carefully crafted, but what especially concerns us here is the overarching structural sophistication of the dialogue and role-playing system, which goes far beyond the oft-mentioned menu layout.

Many readers will be familiar with the Paragon/Renegade setup, but if you haven't played *Mass Effect 1* recently, you might not recall that, alongside the combat skills, the main character possessed two skills relating to dialog – "Charm" and "Intimidate". These the player could develop alongside various skills in blasting enemies. True, *Mass Effect 1* remained a combat game at its core, not a *Planescape*-style game which one could complete successfully just by specializing in conversation. But the elevation of conversation was quite remarkable for a first-person shooter.

Some conversations provided special color-coded options which could only be pursued if the player's "Charm" or "Intimidate" skill was sufficiently developed. But in order to open the possibility for developing these two conversation skills beyond a certain level, the player had to develop a second set of skills, "Paragon" and "Renegade". These were developed in part by putting to use the former skills.

But what is critically important – the game was written in such a way that there was normally a rude or "renegade" thing to say and a polite or "paragon" thing to say, quite apart from the special color-coded "Charm" and "Intimidate" options. Thus, the game rewarded you for role-playing – that is, if you consistently behaved in a rude and intimidating way, then you were rewarded with "Renegade" points, which allowed to advance your "Intimidate" skill. In turn, behaving rudely in general, combined with continued utilization of your "Intimidate" skill, opened further options for advancing your "Renegade" points.

Also critically important was the reward system. As this complex system is introduced to the player during the first mission, it is immediately clear that the special color-coded options are only available if you have developed one of the conversation skills, and if you have done so (rather than developing your combat skills, which is tempting, naturally) then you are rewarded – typically with items or equipment, or the solution to an otherwise difficult quest, and always with interesting conversations which develop the story.

"Renegade" and "Paragon", and "Charm" and "Intimidate", are analogous and almost equivalent, but this structure separated the reward from the role-playing. This reward system encouraged consistent role-playing. Say, for example, you want to increase your Renegade status so you can level up your Intimidation skill, so that you can get prized dialog options, more interesting responses from NPCs, and the further hidden rewards they offer. In order to do this, you continuously say mean things in every dialog. You're meeting your nominal objective, but along the way you're identifying with the character's

dark side, and you develop a vested interest in that potentiality of their personality. In other words, there's a secondary psychological effect, which draws you more deeply into the game.

All these little decisions were convincing, but the big decisions did not work quite as well. From a writer's perspective, when a lead character dies, this must be a very carefully planned event. *Mass Effect 1* attempts to parameterize the event, but ultimately the player's choice boils down to which character they want more, not which character's death is more aesthetically compelling. (Typically, the death of a more loved character is more aesthetically compelling, so the story's parameterization effectively guarantees the less-compelling story, tailoring this to the tastes of the individual player.) But from a narrative point of view, there's really not much difference anyway between the two characters who can die. This too compromises the aesthetic force of the choice. It's an aesthetically unmotivated and ultimately meaningless choice about which of the two supporting characters you sacrifice.

I say "aesthetically unmotivated", because no matter which sacrifice the player chooses, there's really no difference. Yes, one or the other character remains in the game, has a few unique conversation bites later, and can be taken on further missions. But it is, as they say, a distinction without a difference, and ultimately the effect is merely subtractive.

Clearly the external design motivation was to impress players with the idea that they can make real and permanent decisions about the game world. (In most other games, player choice is either strictly local in consequence, or does not affect story.) Indeed, as a one-off stunt, this was a convincing maneuver. But aesthetically speaking, there's nothing gained; there's no compelling reason for this wrinkle, from the perspective of the narrative design.

Mass Effect 2 was really quite similar, although level design was more linear and directed, and the Charm/Intimidate complexity was eliminated, making the system more streamlined albeit less engaging. Still, individual conversations were every bit as aesthetically and structurally interesting as in the original game, and side-quests were numerous and involved. In the negative column, as before, decisions which were presented as "major" ultimately had little or no real effect. As in the first game, the few significant "big" decisions were limited to the deaths of characters, and the characters' consequent unavailability in later episodes; again, this device proved merely subtractive and did not add to the story, except insofar as the player might be impressed with the realness and permanence of the cut. From a writer's point of view, it's a great waste to put such an investment into the development of a character, only to kill the character for no good reason; it's a waste of capitol. Far better indeed to kill a well-loved character in a carefully-planned way that makes everyone cry; that's spending capitol, but spending it for compelling emotional effect, not wasting it.

Mass Effect 3

Mass Effect 3 took quite a different course from the previous games. The original game involved quite a lot of wandering around talking to people, as one would expect in an RPG game. The world design was open and large, enough to get lost in – which also means large enough to explore. Anyone who moves from *Mass Effect 3* to *Mass Effect 1* will experience a very jarring transition – from a linear FPS to an

open-world RPG. If you're interested, try it for an hour. You will find the difference *quite* spectacular, especially from the moment you arrive on the Citadel.

In *Mass Effect 3*, FPS action became the principle focus, and RPG elements were pared away or deprioritized. Level design became almost entirely linear (except for the circular multiplayer maps which the single-player campaign approprates); exploration was effectively eliminated; many side-quests did not involve any dialog at all, and were automatically fulfilled simply by walking past certain locations. As *Mafia-Wars*-inspired "win quest here" was to be the fate of robust RPG exploration and conversation, so *Pac-Man*-inspired "outrun the reapers" was the fate of the original game's inventive planetary exploration. Oversimplification affected everything from level-layout to the structural design of the game's text. The greatest difference, however, was the elimination of significant choice.

A few "big decisions" remained, though even these have no lasting consequence. Many are later referenced in passing for good measure, but this only amounts to a couple lines of dialog and no significant difference. The game relies heavily on the "ascription effect": the illusion that there's a literal game reality that the individual moments are articulating, when, of course, it's just a series of contrived moments. This is fine, and indeed inevitable, but in order to reinforce the illusion, the player's decisions should have been revisited with some frequency and, wherever possible, some urgency or significance. Instead, the lack of substance gradually becomes clear, and the illusion is shattered. At minimum, everyone who survives should have had a significant impact in the final battle; uttering their catch-phrase in the final battle was nowhere near enough to endow the player's decisions with meaning and gravitas.

A closer analysis bears out the hypothesis that, had the "big decisions" of the first two games in the series been more interesting than simply deciding who gets killed, the continuing lives and heroic sacrifices of the main characters could be wrapped in a proper narrative for all players to enjoy. (Meeting Jack and Grunt in *Mass Effect 3* is far more satisfying than the default alternative.)

But the real loss was that the little decisions that filled previous Mass Effect games with meaning were effectively eliminated. The game had evolved away from the Paragon/Renegade device, leaving it as a useless appendix with no function. (Indeed, one can easily play through the first half the game without encountering a single Paragon/Renegade conversation option.) Moreover, no matter what conversation option is chosen, the result remains the same: Renegade intimidations and Paragon charms are always simply rejected or rebuffed. That all dialogues were built upon the false-choice technique soon becomes all too evident.

True, even if there is no consequence or significance to player choice, it can still be fun for the player to choose between acting in one moral register or another. But if there is no larger significance either way, it's just a matter of choosing which line to say. Players may choose whimsically or consistently, but the lack of consequence in the end can become a disappointment, like a promise forever forestalled.

And indeed, many *Mass Effect 3* fans strongly objected to the lack of consequence at the end – the ultimate lack of significance of player choice. People have complained about the ending because it is at the end that the ephemeral nature of player choice finally becomes clear, that is, that each decision was

local, merely cosmetic, and irrelevant to the larger picture. But this is not a problem with the ending per se, but with the deep interactive structure of the story. At the end, players realize this, and while some players may blame the ending, in fact the problem was happening all along.

That said, fans could never legitimately object to *Mass Effect 3* on the grounds that the game is objectively bad, but only on the grounds that its narrative design does not meet the expectations set by the previous games in the series. Its design is fine in itself, and although the writing is hackneyed at times, it is no worse than usual in popular entertainment. Considered on its own merits, the lack of significant player choice is not a strike against it. This is a charitable interpretation, of course. One might instead argue that the third game in the series was ethically obliged to meet or exceed the level of excellence set by its predecessors.

Naturally, it's entirely possible to construct such a game while providing meaningful, aesthetic choice, such that the entire work is ultimately satisfying and justified, lending gravitas and legitimacy to each player decision. All that is required is good writing, carefully planned on the level of structural design, which is by far the least expensive and arguably the most critical part of a story-rich production. Considering this, one might think it's strange to see an IP like Mass Effect, which was formerly at the cutting edge of narrative design, taking such a big step backwards, away from significant choice.

Heavy Rain

Heavy Rain is almost entirely an interactive story. However, its few action scenes determine most of the critical choices in the game. In other words, the player rarely if ever makes a significant choice in a quiet moment of reflection. That choice is so closely tied to action-sequence performance jeopardizes the integrity of the player's choices in a few ways. First, the player might not intend to fail, but fail nevertheless because the arcade segment proves too difficult; the choice is sort-of made for him. Second, assuming the player is skillful enough with the controller to complete the challenge, he will most likely succeed simply because it's a challenge; it's much rarer for the player to intentionally fail a challenge, although contrarian-minded players might of course take such a line to satisfy their curiosity. But most of all, by limiting the occasions of player choice to a few time-pressure arcade-like sequences, the player is deprived of the opportunity to thoughtfully, intentionally, *meaningfully* influence the direction of the narrative. (The convenience store scene and the "lizard" challenge are exceptions which arguably meet the standard of "aesthetic choice".)

The player may wish to beat an arcade challenge simply because the challenge, from a gameplay point of view, is exciting. In this case, the player is not choosing to advance the story in one way or the other, but to succeed in the current gameplay challenge. This is a classic example of orthogonal choices superimposed upon one another, familiar from such games as *Fable III*. There is the convenience choice, which determines the gameplay difficulty, and the "meaningful" choice, which makes the story progress in one direction or the other.

But the problem goes deeper, for prior to the first arcade-challenge sequence, the game has taught the player that the game is linear and interactions are just for cosmetics and fun – sometimes great atmospherics, sometimes just silly, but always irrelevant to the progression of the narrative. Thus, when

the player first encounters one of these arcade-challenges, the assumption may well be that there's really no pressure, no need to succeed in the challenge, because the narrative result will remain the same. The player may voluntarily fail, assuming that failure is inevitable anyway, or they may succeed and never imagine that failing would have led to a significantly different result. This is a perfect example of the precise opposite of meaningful choice.

If a game fails to communicate the meaning of choices to the player, the player cannot appreciate the story as intended. This does not mean that the player should be in the position of cherry-picking their favorite ending; that is meta-playing and disruptive to immersion and to the aesthetic integrity of the narrative. Obfuscating the ultimate consequences of choices is something that *Heavy Rain* gets just right. One might well complain, however, that the immediate consequence or fundamental meaning of many choices is also obscured, though it should be pointed out that the fact that it's a mystery/suspense thriller somewhat frees the writer from the need to communicate beyond the immediate the significance of the choices. Sadly, many choices promise suspense and intrigue (e.g., whether to put the box on the table or hide it under the bed), which is temporarily exciting, but ultimately disappointing when we learn that it's entirely irrelevant.

What the player *can* thoughtfully choose, by contrast, is whether to sit down in any of the many chairs, use any of the many toilets, or open any of the empty cabinets. That is to say, the player can choose to delay the progress of the story and compromise its pacing by engaging in trivial activities which generally do not provide narrative interest. Or the player may choose to proceed along the critical line, until the next arcade sequence.

However, the design of the quiet episodes nevertheless sheds light on what might be achieved in future games. Let us take for example one scene from the game, to consider its merits and, one hopes, learn from its faults.

The scene begins with Ethan Mars entering a hotel room. There's a mysterious box on the desk on the opposite side of the room, and there is scarcely any doubt in the player's mind that this box is the principle point of interest in the scene. However, there are several other trivial objects with which the player can interact, before finally turning to the box.

The player can go to the chair, and sit down, wait as long as he likes, then stand back up again. The player can go to the medicine cabinet, open it, close it again, and walk away. The player can urinate and flush the toilet. None of these interactions are anything but entirely trivial, but the fact that they are available suggests that they are (or should be, or at least might be) interesting. It is inherently bad design to present the player with an interaction which is entirely devoid of meaning or purpose. But beyond this, assuming there are non-critical interactions which are in fact interesting, we risk the player either missing these hidden gems because he legitimately believes that almost all secondary interactions are dull and meaningless, or heroically plodding through numerous lifeless interactions in order to find the few which are worthwhile.

The question is – why add inherently boring and meaningless interactions? Doesn't making the chair interactable encourage the player to try to interact with it, and in so doing, depreciate the story? That

pseudo-realism leads to greater interest is by now well-known to be fallacy– but perhaps different people will answer these questions differently.

One interaction in our example scene, however, stands out as truly brilliant. It's understated and at first might appear as trivial as the others, but on the contrary it adds color and interest and it has a real narrative purpose. Ethan Mars can walk to the sink and wash his face. As the interaction plays, he stares at the mirror, slouches, expresses real exhaustion and hopelessness; it is understated, but it's very effective in communicating the hero's mental state. Another such interaction occurs at the beginning of the game, when Ethan Mars steps out on his balcony to enjoy sunny life and the light of morning. Far from being a trivial and meaningless interaction, this greatly contributes to the story, though its effect is subtle and understated. If all the other secondary interactions were subtly doing something – anything – on the level of real literary interest, developing the characters or the narrative, then the interactive design of the game would have been as brilliant as its storytelling.

One final point on this scene: this hotel-room scene begins with the player entering the room, and ends with the player opening the box. Everything in-between – well, almost everything, as we have seen – is a distraction that interferes with the pacing and bogs the game down with trivialities. The proper behavior from the player is to go directly to the box. But being that this is the case, there's really no need to make the scene interactive at all: it's just a needless delay, and all intervening interaction is meaningless, to the extent that the extra interactions provide no narrative interest and merely disrupt the pacing. The problem with the scene, then, is that it was not written with interactivity in mind: the story doesn't match the medium. It was written as a static cutscene, and then an unnecessary interaction break was introduced, along with a number of trivial interactable objects. If the writer were targeting interaction, the entire scene would have been composed differently.

The ideal game would achieve the narrative interest of *Heavy Rain*, with its 17 endings, each of which is aesthetically convincing and relevant, and combine this with significant choice, which allows players to form the story with some agency of their own.

The great thing about *Heavy Rain* is that it allows the player to interact with the story, without telegraphing the narrative consequences to the player. The player remains rooted in the characters, immersed in the story, rather than playing the role of narrative designer. One might prefer that the player makes significant choices based on their limited view of the story at that point, which are later reinterpreted as the story develops. Sadly, few if any of the player's *choices* are of any consequence, while instead the story unfolds based upon the player's performances in the arcade-challenge segments of the game.

Skyrim
[this section is not yet written]

Thanks for your interest! The entire paper will be revised at least once more, after the Skyrim section is complete. But hopefully you have found the ideas presented here interesting and perhaps helpful, even in their present state.