

Do You Feel Like a Hero Yet? Externalized Morality in Video Games

Michael James Heron & Pauline Helen Belford

Abstract

Video games have a long tradition of including elements of moral decision making within their ludic and narrative structures. While the success of these endeavours has been mixed, the systems used to express moral choices within a game have grown more popular. However, these morality systems are inherently restricted and limited by ludic and business considerations. Coupled to this is the concept of the “magic circle” in which games are considered to be morally discontinuous spaces where the normal rules of what actions are and are not permitted are different. Moral choices then become flattened down into mere narrative flavouring rather than a reflection of an individual’s ethical makeup. Moral choices within games are thus shallow and lack the ability to truly offer us an opportunity to reflect on the actions we have taken. Rather than offering insight, they instead cheapen and simplify nuanced topics and concepts.

*However, several games released in the past few years have made an effort to break free of this mould by explicitly externalising moral choices. In this paper we discuss two of these games: Pope’s 2013 title *Papers, Please* and Yager Development’s 2012*

Author Biographies

Dr. Michael James Heron is a lecturer in computing at the Robert Gordon University. His research work focuses on accessibility, video games, accessibility in video games, and issues of choice and morality. He is also the lead developer and administrator of the text MMO *Epitaph Online*. He blogs on the topic of teaching and research at <http://michael.imaginary-realities.com>

Pauline Belford is a freelance lecturer, researcher and indie game developer with over a decade’s experience in education. She is also a director of the company *Imaginary Realities*. Her work focuses on ethics and issues of accessibility in video games. She has worked in both further and higher education as an advocate and a curriculum designer for the inclusion of game development topics as a core part of teaching issues of computing and software development.

title Spec Ops: The Line. We discuss the way in which these games break out of the traditional convention of video game moral decision making, and how they create opportunities for the player to reflect on the deeper meaning of their in-game actions. We discuss the narrative and ludic elements of these titles, and how they interleave to create a gaming experience that allows for a meta-textual appreciation outside of the bounds of the text itself.

While experimentation with narrative and mechanics is sometimes considered the exclusive purview of the “indie scene,” these two games represent titles at both the professional and indie ends of the development spectrum. We argue thus that “mainstream” titles need not eschew genuine, engaging moral choices.

Introduction

Modern video games often incorporate some element of “moral decision making” as a consciously engineered narrative or ludic element (Heron & Belford, 2014). Players, when faced with choices within the game, may choose actions that are “good,” “evil,” or studiously neutral. Most games have shied away from using “good” and “evil” as the names of the label, choosing instead something like “lawful” versus “chaotic,” “paragon” versus “renegade,” or “light side” versus “dark side.” The core concept remains the same regardless of the labels, although the mental associations we form may differ somewhat. As a ludic convention, the choices that players make within the game are then reflected in future opportunities and player dialogue options and may influence the endings presented to the player at the conclusion of the game. Often, the moral choices presented have an explicitly represented element. This is often implemented as the accumulation of points in a pair of complementary or mutually exclusive “morality meters.” These are then displayed along with other character attributes on whatever equivalent of a character sheet is used (Babij, 2012).

Choices in these systems are often somewhat cartoonish, offering only the choice between playing the saint and acting the devil. One example of this is discussed in Schulzke (2009) where the protagonist is offered a choice of disarming a nuclear bomb in the middle of a settlement, or exploding it and killing everyone within—no more nuanced approaches are offered.

As such, moral decisions in video games are more about locking and unlocking content paths than they are about presenting the player with complex, nuanced scenarios to contemplate—some of the implications of this are discussed by Lange (2014). While moral decisions may have a role in helping players attain a sense of ownership over the character they play (Heron & Belford, 2014), moral decisions are rarely designed as tools for enhancing character believability. Access to end-game powers, equipment and dialogue choices too is regularly tied into achieving a certain value in either the “good” or “evil” path through the

game, which creates a ludic restriction that can influence player choices and dis-incentivise a nuanced approach to building a character identity—BioWare’s *Knights of the Old Republic* (2003), *Mass Effect 2* (2010), and *Jade Empire* (2005) are examples of this. It’s not limited to role playing games, however—Sucker Punch Production’s (2009) *inFAMOUS* and 2K Boston’s (2009) *BioShock* are both examples of more action-oriented games that serve to lock options off as a consequence of the choices made.

Whether the system be “good” versus “evil,” “paragon” versus “renegade,” or “light side” versus “dark side,” there is usually benefit to be had in min-maxing one’s responses whether or not we agree with them or the way in which they are allocated, often seemingly arbitrarily, to one end of an axis.

As a result these systems are often extremely shallow, offering few genuine opportunities for real moral reflection (Heron & Belford, 2014). The dilemmas they present are rarely complex, and the consequences rarely significant in and of themselves. Ludic considerations of game balance and playability virtually mandate that the distribution of benefits and penalties applied by taking one moral path through the game should be roughly mirrored by the end of the game if you take the other. Some games though omit this consideration and favour one path over the other: See again *Knights of the Old Republic* (BioWare, 2003) as a textbook example of this where the “light side” option receives many more rewards than the dark side. In either case there is little need to wrestle over the thorny issue of “right” versus “wrong,” because the nature of the choices is such that our options are rarely complex. In those cases where there is a bias towards one end of the axis, we usually know in advance by virtue of the conventions of the setting. In no situation do we need to think through our actions. For many games, this is entirely appropriate, as they claim no role in offering vehicles for moral contemplation—the moral systems used here are tools for ensuring replayability, as discussed above. For others, they are merely prompts for characterisation. Only rarely are they explicitly about moral contemplation even though the very design of such systems would seem to argue for that interpretation.

However, a growing corpus of work is emerging where ethical and moral issues are handled not as branching choices within a game, but instead as moral dilemmas externalised onto the player. The game itself offers few incentives for choosing a particular path. The consequences of moral and immoral activity within a game becomes not a trait expressed in integers about a character but rather something suggested about us as players. We are encouraged to contemplate our relationship with the game not through textual analysis, but instead a meta-textual analysis.

In this paper, we discuss two such games as examples of *externalised ethics*. These are Pope’s (2013) *Papers, Please* and Yager Development’s (2012) *Spec Ops: The Line*. In terms of game design, they are radically different titles. Both, however, manage to make the issue of ethics one that extends beyond the engineered dilemmas of game narrative. Both accomplish this

in different ways. *Spec Ops: The Line* encourages meta-textual introspection as the game narrative progresses. *Papers, Please* eschews traditional narrative and instead handles ethical decision making as an emergent property of the game's ludic elements. They represent an innovative way to encourage reflection on our actions, in comparison to the much shallower contemplation encouraged by other, ludic morality systems.

Morality Systems in Games

It is outside the scope of this paper to spend a lot of time discussing the various philosophical measures of morality. See Heron and Belford (2014) for a discussion of this. Similarly, while there is a distinction between activity that is moral and activity that is ethical, it is not an important aspect of this paper—we use the terms largely interchangeably in this context. However, we must at least address the issue of how morality is represented within video games. The limitations of computer systems are such that it is impossible for a game to accurately assess, or even inaccurately guess, at our unspoken intentions when taking a particular moral choice presented in the game. Kantian morality, which focuses on ‘the will behind the action’, ignores the circumstances or consequences of an action (McKelvey, 2012). Utilitarian ethics (Bentham, 2009) are the usual compensation for this in video games, in which an action is categorised as good or evil based on its outcome rather than its intention. In this context, the game developers serve as a kind of universal yardstick, omnisciently able to decide the eventual moral categorisation of an action. The concept of relative morality and other more subtle philosophies (Dreier, 1990) are banished, for within the game world the designer is an absolute source of moral judgement since the designer creates the world and the reward structures within it. When we are rewarded for an action, we must assume that it is deemed to be ‘good’ by the developer. In games with explicit moral representations, if we move along a morality axis as a consequence of our action, we must assume that the developer believes that progression is appropriate.

The choice of philosophical basis for moral evaluation in this case is driven far more out of pragmatism than the effectiveness of the concept. We cannot assess intention within a video game, and so we rely on that which we can assess: outcome. An action is “good” if the outcome is one that the developer considers to be good. It is “evil” if it is an action the developer has considered to be evil. It is the impact that these “good” and “evil” actions have upon the game that defines the nature of a game morality system.

Several significant flavours of game morality systems exist, as shown in Table 1.

However, even for the most complex of these the issue of intentionality remains one that frustrates the ability to provide genuine nuance. The reasons why one might have chosen to undertake an action are elements that cannot be interrogated by the game. Whether the consequences are recorded directly within a character sheet or are only ever observed as a consequence of later game situations, we are often left with a situation in which our motiva-

Category	Description
Single Axis Exclusive	A character builds up “points” towards an extreme of the axis. A single value is used to represent a discrete point in the scale. See for example: <i>Star Wars: Knights of the Old Republic</i> (BioWare, 2003), <i>Fallout 3</i> (Bethesda Game Studios, 2008), <i>Jade Empire</i> (BioWare, 2005), <i>Infamous</i> (Sucker Punch Productions, 2009), <i>Bioshock</i> (2K Boston, 2007), <i>Mass Effect 1</i> and <i>2</i> (BioWare 2007; BioWare 2010), <i>Red Dead: Redemption</i> (Rockstar San Diego, 2010), and <i>Black & White</i> (Lionhead Studios, 2001).
Diegetic: Single Axis Complementary	A character builds up points in two possible extremes of an axis. A value is used to represent the “prevalence” of each. See for example <i>Star Wars: The Old Republic</i> (BioWare, 2011) and <i>Mass Effect 3</i> (BioWare, 2012).
Multi-Axis Exclusive	A character has an “alignment” that is a point of convergence on several axes. Position on each axis is represented by a single value. See for example: <i>Planescape: Torment</i> (Black Isle Studios, 1999), <i>Epitaph Online</i> (Imaginary Realities, 2013), and <i>The Walking Dead</i> (Telltale Games, 2012).
Multi-Axis Complementary	A character has an “alignment” that is a made up of multiple axes. A value is used to represent the “prevalence” of each. See for example <i>Alter Ego</i> (Activision, 1986) and <i>Ultima IV</i> (Origin Systems, 1985).
Non-Diegetic or Reflective	No formal representation of morality is presented, with any moral instruction expected to emerge as a result of “water cooler” contemplation of game choices or narrative. Such games offer scenarios where moral contemplation is facilitated, rather than explicitly represented. Heron and Belford (2014) discussed this issue in more depth. See for example <i>The Sims</i> , <i>Dwarf Fortress</i> (Adams, 2006), and <i>Heavy Rain</i> (Quantic Dream, 2010).

Table 1: Moral Systems in Video Games

tions are incompatible with the way the game interprets our actions. A player in *Fallout: New Vegas* (Obsidian Entertainment, 2010) who killed the raiders known as “Fiends” would find their morality moving ever closer to good because raiders were considered to be evil. Nowhere is there a way to identify if we were killing them just because we *enjoy* killing. Psy-

chopathy in this sense is hard to judge as a truly good action. Utilitarianism reigns, and as long as the outcome was good, so too are we.

As far as our ability to texture our choices goes, we are also left with few genuine opportunities within a game to explain ourselves. In Telltale Games' (2012) *The Walking Dead*, there was a situation early in the first episode where you must choose between saving a young boy and saving the older son of a man who was allowing you to stay on his farm. When first presented with this situation, Michael saved the wrong person because of a misinterpretation of the controls under the time constraint to make the choice. At no point was there a chance to say, in effect, "I panicked." That the choice of person to save was largely accidental was never something that was possible to explain, in character or otherwise. Similarly, there was a point where you were asked as to the protagonist's relationship to the young female character for whom he had essentially become the de facto guardian. One answer, "I'm her babysitter," is technically correct but interpreted in such a way as to make it seem like a lie—the protagonist encounters her hiding in a tree house rather than her having been left officially in his care by the parents, and yet the comment is interpreted as the latter case. The answer comes with an ominous warning that the character with whom you are talking "will remember you said that."

Realistically, these limits cannot be easily removed without offering a very different experience as to what a moral choice involves. The best moral choice systems incorporate the decision making as a fluid part of the game experience. Having to check through a list of motivations, attitudes and actions is likely to be at best jarring and at worst tedious unless the game design itself is built around the idea.

One of the few games to have explored the issue of intention and motivation is Activision's (1984) *Alter Ego*. Within the constraints of its text-based vignettes, players are offered an opportunity to choose not just an action but an attitude to go with it. An action may be interpreted very differently if it is performed "mischievously" versus "maliciously," and the response to the action differs as a result. However, this is a game entirely designed to be a sort of "life experience simulator," and as such the necessity for nuance is almost a mandatory element of its design. The images in Figures 1 and 2 are taken from the PC version (Activision, 1986) although a web-based version of the game (Choose Multiple, 2009) is available for those who do not wish to battle with an emulator. Figure 2 shows the tree which players can explore. Clicking any of the icons in the central part of the display brought up a story-based vignette on a general theme—hearts represented romance, and the people represented social situations.

Figure 2 shows two parts of the same vignette. The first is the textual description of the event, and the second is the choice with which we are presented. Four possible combinations are permitted, although the *Alter Ego* engine prohibited combinations that make no logical sense, as defined by the author.

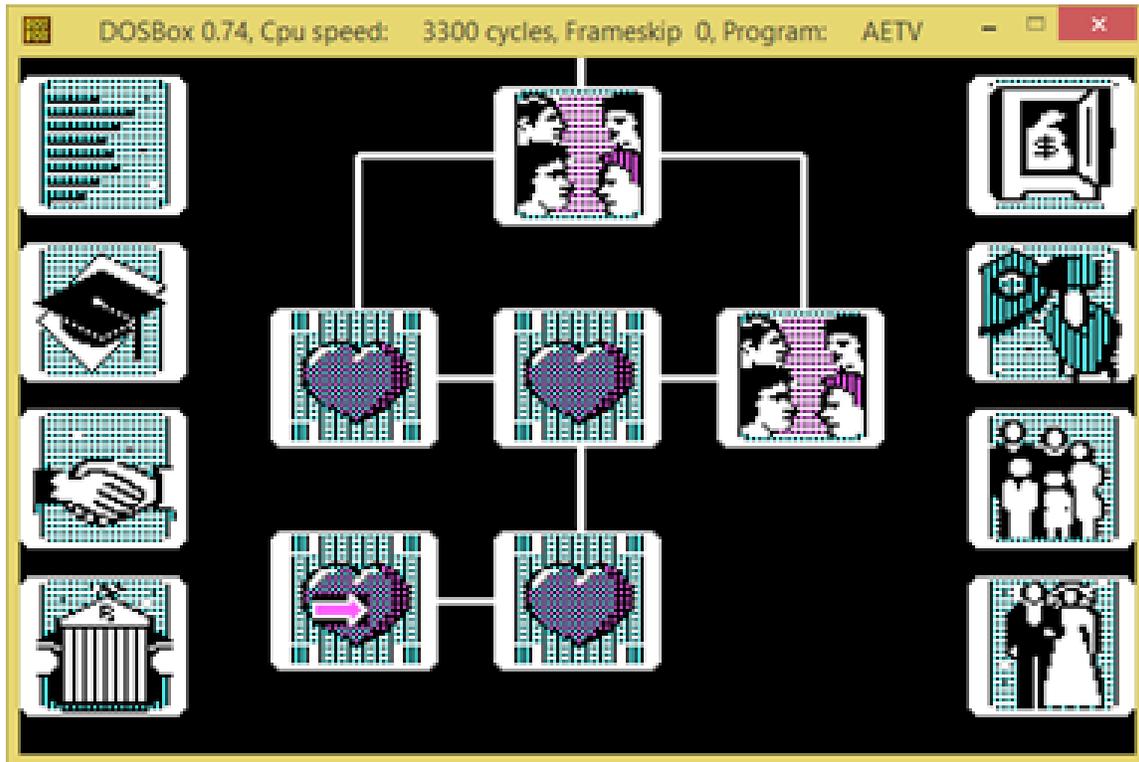


Figure 1: *Alter Ego* Vignette Tree (Activision, 1986)

Given the restrictions of the technology at the time, *Alter Ego* is an interesting example for the sheer scope of the game; however, it is a largely deterministic experience. Some variation is given in that a few actions are impossible to pull off convincingly if you lack a certain value in your “personality,” but otherwise the story progresses largely the same way each time. A few random events are included, and the format of the vignettes themselves allow for considerable variation that was never truly leveraged—see “Alter Ego vignette script format” for a discussion of the capabilities of the file format used.

The only influence you as a player have over what scenarios you encounter was based on which cards you picked from the pre-determined layout. We can explore the coded consequences of alternate decisions, but we will never be surprised when making a choice we have made previously in “another life.” As such, there is little relationship between “what happened before” and “what happened now” except in terms of the morality, or in this case “personality,” we have accumulated as a result of making earlier choices. Similarly, it is a game that is very much a product of its time—there is no option to play as anything other than a white, middle-class, heterosexual male or female. Regardless, it is an example of a game that



Figure 2: Vignette Mood and Action (Activision, 1986)

shows the extent to which offering engaging narrative choices with moral elements must skew its design to accomplish the goal. The authors are aware of no other title since then that has attempted quite such a task.

Another often cited example of creativity in morality systems is that of *Ultima 4* (1985). Having succumbed to parental feedback regarding the hack and slash nature of previous *Ultima* titles, Richard Gariott attempted to create a game that required more of its player in terms of moral engagement (King & Borland, 2003, p. 72-76; Barton, 2008, p. 115). The player took the form of the Avatar, a person sent from Earth to become the embodiment of all that is good and noble. Achieving this is done through demonstrating mastery of eight virtues: honesty, compassion, valour, justice, sacrifice, honour, spirituality, and humility (Barton, 2008, p. 115). As the player performed actions within the game that align with these virtues, they gained a hidden score. One displayed honesty if they answer questions truthfully and never attempted to steal from shops. One showed humility by demurring when offered an opportunity to boast. Valour was shown by never retreating from a fight while Compassion was shown by allowing non-evil creatures to retreat from battle. In addition, once a particular score has been achieved in the virtue, the Avatar must find a rune (usually hidden somewhere in a town) which would allow access to the virtue's shrine where the Avatar could meditate on the virtue.

It was a novel system, and one that informed much of the design of later *Ultima* titles (Barton, 2008, p. 115). However, again, we are faced with the difficulty of assessing intention. If one chooses not to steal purely because of the fact it would “mess up your karma,” is that an action that truly counts as a virtue? If we allow a creature to flee purely because we are afraid it will best us if the fight goes on, is that genuinely compassionate? If we kill an evil creature for its experience reward, is that valorous? Such incompatibility between intention and outcome do not necessarily invalidate Gariott's experiment, but do make it difficult to fully engage with the concept unless we already buy-in to the premise. Those that do however find depths in the interrelationships of virtues (Zagal, 2009).

Coupled to the issue of utilitarianism, we also have to consider the ludic and logistical constraints under which games must function. Flow is tremendously important in video games (Chen, 2007), and while it would be feasible for a game to offer an opportunity for motivational introspection when decisions are taken, it's hard to believe it would result in individuals choosing to contemplate deeply upon their actions. Similarly, actually incorporating this contemplation into genuine impact for a game is likely to be both technically challenging and extremely time consuming. Ludic considerations too require that different moral paths through a game should, in the end, be broadly equivalent—more of a flavouring of the experience rather than something that should reflect deeper meaning back to the player. Genuine moral choices sometimes involve doing the right thing and being punished for it. Genuine moral choices sometimes involve doing the wrong thing and being rewarded as a result. Such things may strike us as unfair in life, but we are all to a greater or lesser extent aware

that “life is not fair.” When game balance is so important to good play experiences, consciously engineering unfairness into an experience which is at least partially about escapism seems counterproductive.

We are left then with perhaps an impossible situation to resolve: Moral choices within games are typically weak because they are shallow, cannot easily assess intentionality, and skewed ludicly in such a way that consistency of action is more important than fidelity of characterisation. However, there is perhaps a solution to be found outside the constraints of the video games themselves: in the area of externalised ethics. If the role of a morality system in a game is merely to texture the experience or encourage re-playability, then they currently fill that niche reasonably well. However, we are perhaps on more solid footing if we think of them as “choice systems” rather than “morality systems.” The former is more encompassing as to what these systems represent and accomplish. The latter is misleading.

However, if the role of these systems is to genuinely encourage reflection on our actions, then the majority of these fail in almost every real regard. The consequences of our actions are simplistic, the implications of our choices shallow and unconvincing, and the moral dilemmas themselves often laughably cartoonish. We may enjoy the escapism of behaving like an utter cad within the consequence free environment of a game. Such escapism though also disconnects us from having to consider how our in-game actions reflect upon us as a player. We may run over pedestrians and kill civilians freely within a title such as *Grand Theft Auto*, but we do so understanding that our actions have no moral weight. This then is the core tension at the heart of the video game concept of the morality system.

Internal and External Morality

The concept of the magic circle (Huizinga, 1971) becomes important here. A magic circle is an area in which the usual rules of society are suspended while a new, temporary social contract is formed. Traditional examples of this include a boxing ring, a church, or the card-table. It has also been argued by authors, including Castronova (2006), to extend to virtual worlds and game environments. Video games for many represent a kind of mentally walled-off space where our actions explicitly have no consequences (Consalvo, 2005). Thus, they become pure escapism without our having to take responsibility for the actions we perform within them. When viewed through this lens, we are explicitly divesting ourselves of the need to consider the moral consequences of our actions because the normal rules regarding what is and is not appropriate do not pertain (Heron & Belford, 2014). We may engage deeply with the ludic mechanics, or even with the narrative structure, within the magic circle, but the actions performed by our character are not reflective on us as the players. Given this, there is no need for deep contemplation: The lessons learned would only be relevant to other, similarly morally discontinuous spaces. Consalvo (2005), for example, argued that to attempt to apply moral considerations to gameplay activities is to strike at the heart of what makes a game distinctive as a form of entertainment. However, we have to be wary of what might be

considered “magic circle fundamentalism” where the distinction between that which is within and without the circle is considered to be pure and inviolable (Zimmerman, 2012). The magic circle then serves as a kind of inoculation against considering our relationship between our characters and their game world and as an extension between ourselves and our characters. Such a situation could be classed as a kind of *internal narrative morality*. The moral universe implemented and tacitly endorsed by the creators of a game (Sicart, 2005; Sicart 2009; Craft, 2007) may touch upon the real world by virtue of shared conventions of representation, but it never overlaps. The morality put forward within game titles may frustrate us with its external illogicality but is internally consistent and, thus, a guiding factor for our character’s interactions. All the judgements we may make about what is done must be rendered against the morality of the world in which our character functions. Limitations on interactions, difficulties in assessing intention, and restrictions on options are all part of the context of these actions. We cannot condemn the player for choosing an option when only a subset of sensible possibilities are presented. This is the morality of narratives—when players are picking between branching game options that have no inherent value in terms of game mechanics.

This contrasts against *internal ludic morality*, which can be seen as the morality implied by the mechanics of the game itself. Explicitly linking access to “high end” powers to a particular morality system configuration creates a ludic moral equivalence. The method by which a player’s moral configuration is altered serves to enforce, codify and constrain player activities. If it is deemed good to kill a particular enemy, and the reward for being good is access to special powers that others may not use, then the game mechanics themselves are reinforcing a moral lesson. When a game locks powers and skills behind a particular moral configuration, then this too is reinforcing a particular moral lesson. Often, these ludic morality lessons will override narrative morality, especially when the player has no deep engagement with the underlying story. The need to accomplish in-game goals or make progress may be more important than allowing a character to behave as a “realistic” entity in the world.

To externalise the moral message of a game, it’s necessary for the player to be spurred on to consider what their narrative and ludic choices mean to them and *about* them. Games have a link between the player and the protagonist that few other forms of media can hope for, and yet it’s easy to make a case that the best works of literature and entertainment are vastly more resonant than the best game stories. The expectation upon the reader, or the viewer, is different: Reflection upon the message contained within is not only possible, but actively encouraged as part of the general act of experiencing. Currently, this is not the case for video games—even those that aspire to art (Smuts, 2005; Squire, 2002; Gee, 2006) are considered to be somehow less intrinsically valuable than books or movies (Ebert, 2010; Reimer, 2005; Green, 2013). The concept of externalising the moral message of a game is still somewhat alien although there are numerous games that offer gameplay mechanics that permit the emergence of interesting moral scenarios. The various incarnations of *The Sims* games, for example, set up a world where complex social and economic interplay can lead to opportuni-

ties for external reflection; however, the design of such games rarely emphasizes this.

And yet, despite the fact that the usual expectation of gameplay does not encourage externalisation, several games have now come along that attempt to formally connect the player with the actions of their protagonist. They do this whilst still embracing the standard conventions of the video game experience. Some of these titles may cleave to the definition of indie games (Heron & Belford, in press), but others are unabashedly designed for a mainstream audience. Experimental narrative games, such as *The Stanley Parable* (Galactic Cafe, 2013), incorporate a strong sense of self-awareness into their branching storylines. One of the more notable endings in that game included a sequence in which the player attempted to find a way to disarm a self-destruct sequence. As the player did, the omniscient narrator delivered a monologue on the futility of player choice. The looping game structure along with its odd combination of deterministic, and yet occasionally random, story hooks acts as a persistent commentary upon game narrative. It lacks anything that could realistically be considered “gameplay”, and in its design it functions more like a repeating, meditative chant than anything approaching a story. And yet, within this strange design are many insightful observations about the structure of the concept of the video game and the relationship the player has to the idea of “choice”. While a fascinating title in its own right, its architecture is somewhat more contrived, explicitly meta-textual and self-referential than the titles we will discuss in the next section. As a consequence, it is easily dismissed as being “artsy for its own sake,” or just plain confusing. In the context of this paper, it is an interesting side note that works primarily to show the range of ways in which player agency can be represented and presented within game worlds. *Papers, Please* and *Spec Ops: The Line* both take a different approach to the representation of player choice, making it instead explicitly about the player rather than the avatar they control.

Papers, Please

Pope’s (2013) title *Papers, Please* is an ideal example of a game that manages to incorporate a powerful system of reflection through nothing more overt than the intricacies of its gameplay mechanics. It is perhaps best described as a “bureaucracy ‘em up” in which the player took on the role of a border guard at a fictional Eastern European country, “Arstotzka,” during the fall of the Soviet Union. Their job was to inspect the documents that were presented and examine them for inconsistencies, such as incorrectly declared genders or weights. Then, the documents were checked against a protocol for acceptance—a protocol that became more complex every in-game day. One day may have required you to reject all applicants from a particular source location, others may have required that a work permit be provided under situation A but a citizenship card would suffice under situation B. In all cases, multiple documents are provided, and part of the player’s job is to assess these for validity. Various tools are provided to support this, such as invasive body scans which can reveal gender, explosives and contraband and querying about specific inconsistencies in the provided documentation. If someone’s name was different on two forms, that’s an inconsistency. If they were expired, that’s grounds for rejection. If they came from the wrong originating authority, that’s also grounds for rejection. Figure 3 shows an image demonstrating some of the bureaucratic complexity that must be navigated by the player.



Figure 3: Some of the Documentation Required in *Papers, Please* (Pope, 2013)

Players were rewarded with an in-game salary, which at the end of each day was used to provide food, medicine and warmth to your family. Salary was awarded on the basis of every correctly processed applicant. Failures included allowing those with invalid documentation to pass and rejecting those who meet all the immigration criteria. Failures result in written citations, and if enough of these accumulate, financial penalties. Every day, meeting all the needs of your family costed a certain amount of money, and anything else was added to your bank balance to cover future problems. The eventual ending you get depends on how well you succeed in making it through the game without being arrested, fired, and with your family intact and healthy. Only one ending was considered “completing” the game, and this in turn opened up the “sandbox” mode for play.

As the game progressed, special “scripted” applicants arrived for processing. These combined a certain configuration of—usually invalid—documentation along with a “sob story” as to why the player should let them through. The player’s response to these had a little in-game weight, but it was not usually significant. Since the game was set in a time of great upheaval, there was also an ongoing risk of terrorist activity: When there was an attack on the border point, it was shut for the day. Terrorist attacks then were a direct risk to the health and wellbeing of your family because they cut short your earning potential and, thus, eat into whatever surplus you have been able to build up.

Aside from the few scripted encounters, there is nothing so engineered as a morality system, and those moral dilemmas presented are incidental. Instead, it is the ludic architecture of the game that creates the tension between right and wrong. The need to process a certain number of individuals per day means only a limited amount of time can be spent scrutinis-

ing documentation. As the game progresses, the procedure becomes ever more byzantine and requires cross-referencing of paperwork, official stamps, and the jurisdictions of originator countries. Every day, the procedure changes, and the increasing amount of work needed to correctly process an applicant creates significant and ever increasing cognitive loading (Marshall, 2002; Ryu & Myung, 2005; Kahneman, 2012, p. 41). That in itself creates a situation where sloppy decision making is all but guaranteed.

Where the game achieves a masterstroke of morality though is in the way it handles rejection. All the player must do is find a reason to reject—there is no requirement, until late in the game, to give the applicant a chance to explain. If you must be given three pieces of documentation and you were only provided two, that's grounds for rejection. Querying the applicant may have resulted in them saying, "Sorry, here it is," but that takes time and cognitive effort to do. Stamping "denied" without query is quick, easy and considered to be correctly processing. Nowhere is this "loophole" emphasised in the game mechanics or documentation, but it has a tremendously powerful effect on your ability to juggle the need to earn a salary against the complexity of the task. Having a surplus also allows us to buy certain upgrades for our booth—these allow us to remove some of the burden from performing particular tasks. For example, instead of clicking the "approve" or "reject" stamps, we can have them quickly spring out on the tap of the space bar.

The processing loophole increases our ability to attain flow (Csikszentmihalyi, 2002) by taking much of the effortful cross-referencing out of the equation. The game quietly encourages a kind of "gamification" of processing while never explicitly rewarding it. We cannot say "we do this because the game presents us with a dilemma and we have to choose"—we choose purely because it is in our interests as players. Our character does not benefit from any upgrades we buy: we, as the players, are the ones who benefit. The character is just a projection of our own inherent desire to meet our financial obligations.

Thus, the morality of the game steps over the confines of the magic circle. If we choose to shortcut the process, then that is our choice, and it is done because of our inherent desire to minimise the cognitive costs of our actions (Kahneman, 2012, p. 40) so as to meet our end of day expense requirements. We can explicitly and consciously choose to take an ethical shortcut: The game does not judge us for doing so although applicants we reject may and gives us no reward that is directly linked to our "moral" decision. We are told to process quickly and accurately, and as long as we do that, the game has little to say.

In this way, *Papers, Please* removes the artifice of having morality be an internal ludic mechanic. Instead it becomes a reflection of our own willingness to obey either the spirit, or the letter, of the rules with which we are presented. It may take a number of playthroughs before the loophole is noticed, which in turn creates a fertile environment for us to meaningfully contemplate the difference between doing the right thing and doing the easy thing. The easy thing results in a simpler and more rewarding game for us. The task is less complex, and the

financial rewards we get allow us to relax by permitting us to build up a considerable surplus at the early, easier stages of processing. The right thing is both harder to do and financially punitive: It is very difficult, later on in the game, to process quickly enough to meet all our financial obligations whilst still being fair to applicants.

Essentially then the game is a balancing act between speed and fairness, and we can choose to skew towards one of these at the cost of the other. Meeting all our financial obligations requires a total of eleven applicants to be correctly processed, and that in turn creates a tipping point where we can reconsider our strategy. We may fairly process until we realise we haven't met our quota and then rapidly process the remainder. We may rapidly process until our quota is reached and then fairly process the rest. However, a quota based approach requires finances to be on a knife's edge: A surplus too must be built up. Despite the relative simplicity of the moral decisions, the effect of aggregating dozens of these across the 31 days of a game's campaign reveals a lot about us.

Coupled to this too is the game's sole concession to narrative: The emergence of a shadowy cabal, "The Order," aimed at overthrowing the current corrupt government of Arstotzka with the intention of instituting what has to be assumed will be another, different corrupt government. The player communicates with agents of the conspiracy, as well as Arstotzka officials investigating sedition, via messages passed to and from the border booth. They will ask the player to detain certain applicants or allow others to pass through unquestioned. The role the player takes with regards to this influences the ending, but for our purposes there is one specific element that creates an additional moral dilemma on us as we play. Secretly, we are passed a large sum of money and given an opportunity to accept or burn it. The sum is large enough to remove the day to day worry of meeting our quota and would allow us to move into premises that are expensive in terms of rent but more satisfying for our family. However, if we accept this sum, a few days later suspicious neighbours report our new found wealth to the authorities, and it is taken away from us along with any surplus we may have built up. This creates a situation where if we believed the money was ours, we may have gotten ourselves into a financial hole by spending it and ending up with larger overall expenses. Our response to this also flavours the way in which we approach the processing of applicants. An additional pressure has been placed on us just at the point we begin to really feel the weight of cognitive loading.

Finally, the game also introduces opportunities to profit from institutional corruption. In this game world we are not the only ones who are paid for each applicant we process—so too are the police agents who deal with those applicants we detain in the booth. The chief officer at one point in the game tells us that we can split his processing fee if we send more people to him for questioning, whether they need to be detained or not. This creates a further subtlety in how we can approach the game, and what our actions within it say about us.

For *Papers, Please*, the key element in making this an externalised ethical judgement is that

we are never presented with a morality system. We don't build up a karma meter or unlock new powers based on how good we are. All we have is a financial target to meet and our own cognitive processing of documentation to do that. Our character has no personality, back story, or dialogue beyond the barked instructions of "next" and "papers, please". He, or indeed she, exists only to execute our actions within the depressing backdrop of a post-Soviet dystopia. We cannot dismiss what we do as being based on narrative or characterisation constraints—there is precious little of the former and nothing of the latter. How we interact with the game we are presented is a reflection of our own optimisation of the cost/benefit calculations with which we are presented (Kahneman, 2012, p. 40-42).

Spec Ops: The Line

Yager Development's (2012) *Spec Ops: The Line*, on the other hand, explicitly takes responsibility for structuring the moral message. It embeds it partially in the progressing narrative but also consciously externalises it onto the player participating in the game experience. The gameplay of *Spec Ops: The Line* is largely that of boilerplate third person tactical squad shooter: You control Martin Walker, head of a Delta Team special ops mission sent into a disaster-struck Dubai. The city has been buried by the desert as a result of catastrophic sand storms. The governmental structures of the city first downplayed the emergent tragedy and then escaped it before the worst of the situation hit. The United States army sent in military units to help keep the peace. Martin Walker's team was sent in to find out what happened to the "Damned 33rd" Battalion who had deserted en-masse after being told to abandon the inhabitants of the city to their fate.

It is important to recognise in *Spec Ops: The Line* that what we have is a game that seems to be engineered to be almost banal. It offers almost nothing new, save for a slightly gimmicky mechanic that allows for the player to shoot windows in buildings to engulf enemies in cascading sand. The character we inhabited, Martin Walker, was almost a parody in characterization: a clean cut, no-nonsense, All American Hero who led his equally clichéd companions through a thoroughly predictable game.

We began within a moveable perspective rail shooter: We were in a helicopter (Yager Development, 2012). Other helicopters were trying to shoot us out of the sky. We must stave off the assault with our mounted chain-gun—as we did, we whizzed past the chrome and steel high-rises of pre-apocalypse Dubai. When we had dispatched enough of our foes, we found a sand storm closing in on our position. We emerged out of it, and a damaged enemy helicopter spiraled into us. A few moments later, the screen faded, and we saw the text "Earlier..." Right away, we've been primed by the game to be on our guard. It is no stunning leap of faith to draw the conclusion that a military shooter will involve us in battle. However, we are given an early hint as to the way in which the hostilities will escalate. When we first took direct control of Martin Walker, we were simply on a scouting mission to find the source of a transmission indicating the commander of the Damned 33rd, Colonel Konrad, was still alive.

We progress slowly and tentatively towards the city of Dubai, aware of eyes upon us and wary of the possibility of attack.

When we encounter our first enemies, they are suitably othered (Joffe, 2011): masked foreign figures who fire upon us out of fear and suspicion. When we retaliate, it is an act of self-defence. We are never really reminded of the fact that our assailants too were likely acting in their own self-defence. We press forward, our role as the good guys under assault from the bad guys is one we can step into without conscious consideration. We mow down dozens of our foes, our three-man team building up a body count that would rival that of whole platoons. While comparatively workaday, it's as engaging as any such shooter can be provided novelty is not a feature that the player heavily values.

The change, when it comes, is subtle. As we progress, our goals shift, and we're no longer killing "foreigners." We're killing rebel American soldiers—"our guys," in other words. Then, we're killing refugees, and eventually we're just killing everything and everyone that comes our way. We start off as interlopers, and eventually become conquerors—the fear that we may feel of our opponents gives way to the fear they feel of us.

There is a particular flashpoint that occurs in the game: We reached the lip of a gate which looks down upon a large expanse of enemy soldiers and vehicles (Yager Development, 2012). Snipers began to fire upon our position. We were pinned down, and our death was assured if we cannot progress. The only way forward was by dropping white phosphorus rounds on to the enemies below—these rounds contain a highly incendiary compound which ignites on contact with air and clings to clothing and flesh (Frank, Schmucker, Nowortny, & Hinz, 2008). There is no in-game moral choice system here: There is only the single game option. We drop the rounds and progress, or we die where we stand.

Upon dropping the rounds, we found out that not only were soldiers present, but civilians were too (Yager Development, 2012). Our act of progress is in effect a war-crime (MacLeod & Rogers, 2007), and it is at this point the tone of the game shifts. The incident dramatically alters the dynamic of the soldiers in the squad, and the mental state of Walker himself begins to become highly suspect. The laughing and jokes between the squad members gradually devolves until it is full of bitter recrimination and self-loathing.

Walker's previously clinical military take-downs become increasingly brutal. He begins to hallucinate. He urges everyone forward even though they have long lost sight of their original mission. He takes increasing pleasure in the killing of targets. His dialogue shifts - he no longer used dispassionate language such as "Target eliminated." Instead he yelled triumphantly "Got the bastard!" (Yager Development, 2012). His justification for his actions becomes increasingly disconnected from reality. He insists, many times through the game, that he had been given no choice. "You brought this on yourself" is one of the arc phrases that justify, in Walker's mind, the carnage (Yager Development, 2012).

This is where the cleverness of *Spec Ops: The Line*'s design comes in. As Walker descends into his own world of justifications and rage, the loading screens that are presented to the player become increasingly meta-textual and introspective. They began with standard "plot summaries," such as "Rumours claim Konrad is still alive and hiding somewhere in Dubai" and "Cut off from the outside world, the 33rd turned against each other" (Yager Development, 2012). After the white phosphorus incident, they change subtly in tone. They become darker, and more menacing. They begin to deconstruct your relationship with the game and the extent to which you can declaim responsibility for the very act of playing. "You're still a good person," soothed one shortly after the war crime (Yager Development, 2012). "There is no difference between what is right and what is necessary."

As Walker descends into madness, the darkness intensifies—the knife twists, and the game introduces its first formal links between player and character: "The US military does not condone the killing of unarmed combatants. But this isn't real, so why should you care?" and "To kill for yourself is murder. To kill for your government is heroic. To kill for entertainment is harmless" (Yager Development, 2012). Finally, it faces us with the ultimate question: "Do you feel like a hero yet?"

The nature of the game is such that it becomes an intensely disquieting experience after a while. We do not control Walker—at best we point him in a direction. We are responsible for driving him, and yet we may find ourselves repulsed by what he does. The game continues to needle us - "can you even remember why you're here?" (Yager Development, 2012). The question is both aimed at Walker the character and us as the player. We may play video games for many reasons, but entertainment and enjoyment is by far the most common. *Spec Ops: The Line* (Yager Development, 2012) confronts us with the scenario that we are invested in the game, and yet not enjoying it because of how discomfiting the experience may be. In doing so, it provides us with the only real moral choice we have—to simply stop playing. It first hints at this as a possibility and gradually builds it into an explicit message. We are responsible for what happens, not because we picked a moral choice within a game but because we simply didn't exercise our ultimate sanction—to halt the unpleasantness by revoking our participation. If killed at a certain section of the game, it would simply insist that you "stop! Just fucking stop!" (Yager Development, 2012). It makes no bones that our choice to continue the game is a *moral* choice.

Moral decisions, in the real world, have a weight of consequence. There is little merit in doing the right thing if it is also the easy thing. To do the right thing when it is difficult is the more noble action. Frustratingly, simply doing the right thing by itself often provides no rewards, or even recognition. *Spec Ops: The Line* (Yager Development, 2012) incorporates this by never making the choice as simple as "press X to stop killing." The choice we have is to turn off the system and never receive formal recognition for it. Anything else would have been cheap. The ultimate responsibility for carrying out the atrocities is ours because we *chose* to play. It's not like we aren't warned—from the first steps onwards you are in violation

of your mission objectives, and the only way to stop violating them is to choose not to participate.

This central message of *Spec Ops: The Line* finds an echo in *The Stanley Parable* (Galactic Cafe, 2013): One of its many layered endings included a section where Stanley is to be crushed by a pair of metal jaws. The jaws stopped short of killing him, and we had a chance to escape into another part of the game world. Another voice interjected into the game, taking the place of the narrator and outlining the metaphysical quandary at the heart of the ‘choices’ you can make:

Can you see? Can you see how much they need one another? No, perhaps not. Sometimes these things cannot be seen. But listen to me, you can still save these two. You can stop the program before they both fail. Press “escape” and press “quit.” There’s no other way to beat this game. As long as you move forward, you’ll be walking someone else’s path. Stop now, and it will be your only true choice. (Galactic Cafe, 2013)

In the end, the morality of Walker in *Spec Ops: The Line* is irrelevant. His path is set, and while we may make some minor decisions along the way, in the end we are walking someone else’s path. While we do not have the power to meaningfully stray from the road, we do have the power to stop walking. As the WOPR so notably said in the movie *Wargames* (Goldberg & Badham, 1983), “the only winning move is not to play.” In a game like *Spec Ops: The Line*, where we are explicitly given a moral choice that weighs upon us as a player rather than Walker as a character, we are ultimately responsible for the atrocities we commit if we continue. It is externalised morality in its purest form because it deprives us of narrative or ludic justification. Some have complained that the white phosphorus dilemma lacks weight because it offers no in-game choice. It is the argument of this paper that it has weight precisely *because* it offers no in-game choice. Judging by the many critiques, critical readings and contemplative essays that have been generated about *Spec Ops: The Line* (c.f. Keogh, 2013; Guzman, 2013; Schulzke, 2013), it’s clear that at least for a subset of its players that the moral message within the game has allowed for a deeper engagement with our relationship to the title than any karma system could ever hope to do.

Conclusion

Video game morality systems often lack the weight to make us genuinely reflective of our actions. Like books or movies, the morality embedded in most games is one that is experienced through narrative. Ludic constraints limit the ability of game developers to offer truly complex moral dilemmas that might serve to illuminate these issues outside the context of the game. The conventions of morality systems, bound as they are within the tropes of conventions of the industry, are at best a way to flavour an experience and build an incentive for re-playability into a title.

Papers, Please (Pope, 2013) and *Spec Ops: The Line* (Yager Development, 2012) represent two titles that have transcended these limits by placing the ethical burden on the player. These burdens are external to the game itself and divorced from in-game narrative and ludic consequences. In the process, they offer an opportunity for deeper contemplation and reflection on the actions we have taken. The actions do not benefit the character within the game. They do not lock or unlock narrative options. Instead, they have impact only upon us as a player. These games fundamentally reinterpret the relationship between the player, the character and the game itself.

It is unlikely that the techniques used by these games can be fully generalised into all game titles. *Spec Ops: The Line* is effective largely because of how it subverts the standard tropes of the military shooter. *Papers, Please* is effective because of the way in which it consciously engineers a situation where cognitive loading of the player is the limiting factor to success and then discreetly makes available shortcuts. The distinctiveness of both is sufficient that it would be difficult, if not impossible, to adopt their conventions more broadly across the industry.

What they do serve as though are compelling counterexamples that show how meaningful gameplay can be if the shallow simplicity of conventional karma systems are rejected. At the same time, they represent the product of two completely different development models. *Spec Ops: The Line* (Yager Development, 2012) shows that experimentation with the standard tropes of the industry is not the exclusive province of the indie game. *Papers, Please* (Pope, 2013) shows that there is no need for costly cut-scenes, voiced dialogue or graphics to create an emotionally involving experience. Both represent an original approach taken to both the telling of a story, and the coherent, holistic merging of narrative and game mechanics. In this context then, these games serve not as worked examples but instead inspirational touchstones. They show that when well designed and engineered, games can offer truly meaningful experiences for players, and that these experiences can be sufficiently compelling to be carried with us into real life. This won't be true for all players in all circumstances, but true for enough players in enough circumstances to warrant our attention and to permit us confidence that future titles will always have the project of unexpectedly getting under our skin and into our psyche.

References

2K Boston, & 2K Australia (2007). *Bioshock*. PC: 2K Games.

Activision. (1986). *Alter Ego*. Commodore 64: Activision.

Adams, T. (2006). *Slaves to Armok: God of Blood Chapter II: Dwarf Fortress*. PC: Bay 12 Games.

Alter Ego vignette script format. (n. d.). Retrieved from http://fileformats.archiveteam.org/wiki/Alter_Ego_Vignette_Script_format

Babij, K. (2012). The good, the bad, and the neutral: Problems with the ethical constructions of video and computer games. In M. Wysocki (Ed.), *Ctrl-alt-play: Essays of control in video gaming* (pp. 158-168). Jefferson, NC: McFarland & Company

Barton, M. (2008). *Dungeons and desktops: The history of computer role-playing games*. Philadelphia: Taylor & Francis.

Bentham, J. (2009). *An introduction to the principles of morals and legislation*. BiblioLife

Bethesda Game Studios. (2008). *Fallout 3*. PC: Bethesda Softworks.

BioWare. (2003). *Star Wars: Knights of the Old Republic*. PC: LucasArts.

BioWare. (2005). *Jade Empire*. PC: Valve Corporation.

BioWare. (2010). *Mass Effect 2*. PC: Electronic Arts.

BioWare. (2011). *Star Wars: The Old Republic*. PC: Electronic Arts & LucasArts.

BioWare. (2012). *Mass Effect 3*. PC: Electronic Arts.

BioWare, & Demiurge Studios. (2007). *Mass Effect*. PC: Electronic Arts.

Black Isle Studios. (1999). *Planescape: Torment*. PC: Interplay Entertainment

Castronova, E. (2006). *Synthetic worlds: The business and culture of online games*. University Of Chicago Press.

Consalvo, M. (2005). Rule sets, cheating, and magic circles: Studying games and ethics. *International Review of Information Ethics*, 4(2), 7-12.

Craft, A. J. (2007). Sin in cyber-eden: Understanding the metaphysics and morals of virtual worlds. *Ethics and Information Technology*, 9(3), 205-217.

Chen, J. (2007). Flow in games (and everything else). *Communications of the ACM*, 50(4), 31-34.

Choose Multiple. (2009). *Alter Ego*. Internet: Choose Multiple. Retrieved from <http://www.playalterego.com/alterego>

Csikszentmihalyi, M. (2002). *Flow: The classic work on how to achieve happiness, with a new introduction by the author*. Rider & Co.

Dreier, J. (1990). Internalism and speaker relativism. *Ethics*, 101(1), 6-26.

Ebert, R. (2010, April 16). Video games can never be art [Web log post]. Retrieved from <http://www.rogerebert.com/rogers-journal/video-games-can-never-be-art>

Frank, M., Schmucker, U., Nowotny, T., Ekkernkamp, A., & Hinz, P. (2008). Not all that glistens is gold: civilian white phosphorus burn injuries. *The American Journal of Emergency Medicine*, 26(8), 974-e3.

Galactic Cafe. (2013). *The Stanley Parable*. PC: Steam.

Gee, J. P. (2006). Why game studies now? Video games: A new art form. *Games and Culture*, 1(1), 58-61.

Green, A. (2013). Masahiro Sakurai: Stories in Video Games Can be “Irkso””. *Nintendo Life*. Retrieved from http://www.nintendolife.com/news/2013/02/masahiro_sakurai_stories_in_video_games_can_be_irksome

Goldberg, L. (Producer) & Badham, J. (Director). (1983). *Wargames* [Motion picture]. USA: MGM/UA Entertainment Company.

Guzman, E. (2013). *Spec Ops: The Line* marries narrative and violence, while other games flounder. *2D-X*. Retrieved from <http://www.2d-x.com/exploring-violence-and-narrative-in-gaming>

Heron, M., & Belford, P. (2014). It's only a game—Ethics, empathy, and identification in game morality systems. *The Computer Games Journal*, 3(1), 34-52.

Heron, M. and Belford, P. (in press). Simply for the love of it – A case study in hobbyist and indie game development. Forthcoming.

Huizinga, J. (1971). *Homo ludens: A study of the play-element in culture*. Boston: Beacon Press. Imaginary Realities. (2013). *Epitaph Online*. Internet. Retrieved from <http://epitaphonline.co.uk/>

Joffe, H. (2011). Othering of people and phenomena. In Christie, D. J. (Ed.), *The encyclopedia of peace psychology* (pp. 739-743). Oxford: Blackwell.

Kahneman, D. (2011). *Thinking, fast and slow*. Allen Lane.

King, B., & Borland, J. (2003). *Dungeons and dreamers: The rise of computer game culture from geek to chic*. New York: McGraw-Hill Osborne Media.

Keogh, B. (2013). *Killing is harmless: A critical reading of Spec Ops: The Line*. Stolen Projects.

Lange, A. (2014). "You're just gonna be nice": How players engage with moral choice systems. *Journal of Game Criticism*, 1(1). Retrieved from <http://gamescriticism.org/articles/lange-1-1>

Lionhead Studios. (2001). *Black & White*. PC: EA Games.

MacLeod, I. J., & Rogers, A. P. V. (2007). The use of white phosphorus and the law of war. *Yearbook of International Humanitarian Law*, 10, 75-97.

Marshall, S. P. (2002). The index of cognitive activity: Measuring cognitive workload. In *Proceedings of the 2002 7th Annual IEEE Conference on human factors and power plants* (pp. 7-5). IEEE.

McKelvey, N. (2012). Applying ethics to modern game design. *Applying Ethics to Modern Game Design*. *Computer Games Journal*, 1(1), 39-50.

Obsidian Entertainment. (2004). *Star Wars: Knights of the Old Republic II—The Sith Lords*. PC: LucasArts.

Obsidian Entertainment. (2010). *Fallout: New Vegas*. PC: Bethesda Softworks

Origin Systems. (1985). *Ultima IV: Quest of the Avatar*. Commodore Amiga: Origin Systems.
Pope, L. (2013, August 8). *Papers, Please*. PC.

Quantic Dream. (2010). *Heavy Rain*. Playstation 3: Sony Computer Entertainment.

Reimer, J. (2005, November 30). Roger Ebert says games will never be as worthy as movies. *Ars Technica*. Retrieved from <http://arstechnica.com/news.ars/post/20051130-5657.html>.

Rockstar San Diego, Rockstar North, Rockstar NYC, Rockstar Leeds, Rockstar New England, Rockstar Lincoln. (2010). *Red Dead Redemption*. Xbox 360: Rockstar Games.

Ryu, K., & Myung, R. (2005). Evaluation of mental workload with a combined measure based on physiological indices during a dual task of tracking and mental arithmetic. *International Journal of Industrial Ergonomics*, 35(11), 991-1009.

- Schulzke, M. (2009). Moral decision making in fallout. *Game Studies*, 9(2). Retrieved from <http://gamestudies.org/0902/articles/schulzke>
- Schulzke, M. (2013). Simulating philosophy: Interpreting video games as executable thought experiments. *Philosophy & Technology*, 27(2), 251-265.
- Sicart, M. (2005). *The ethics of computer game design*. Cambridge, MA: MIT Press
- Sicart, M. (2009). The banality of simulated evil: designing ethical gameplay. *Ethics and information technology*, 11(3), 191-202.
- Sucker Punch Productions. (2009). *InFamous*. Playstation 3: Sony Computer Entertainment.
- Smuts, A. (2005). Are Video Games Art? *Contemporary Aesthetics*, 3.
- Squire, K. (2002). Cultural framing of computer/video games. *Game Studies*, 2(1). Retrieved from <http://www.gamestudies.org/0102/squire/>
- Telltale Games. (2012). *The Walking Dead*. PC: Telltale Games.
- Yager Development. (2012). *Spec Ops: The Line*. PC: 2K Games.
- Zimmerman, E. (2012). Jerked around by the magic circle—clearing the air ten years later. *Gamasutra*. Retrieved from http://www.gamasutra.com/view/feature/135063/jerked_around_by_the_magic_circle_.php?print=1
- Zagal, J. P. (2009). Ethically notable videogames: Moral dilemmas and gameplay. In *Breaking new ground: Innovation in games, play, practice and theory, Proceedings of DiGRA 2009*.