‘Return to Roots’: An Examination of the Re-Presentations of Rurality Within Post-Apocalyptic Survival Video Games

by

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Abstract

Post-apocalyptic survival (PAS) themed video games provide a virtual world that re-presents the realities of current society. Current studies have examined the existence of game culture (Aldred & Greenspan, 2011; Atkins, 2006; Kücklich, 2006), but limited analysis has focused on how these cultures relate to their real world counterparts. This study examines the re-presentations of rural culture, violence, and the production of rural stereotypes within PAS video games applying a cultural criminology foundation and elements of social control theory (Hirschi, 1969). Nine video games were examined for their setting; conflict; rural culture/stereotypes; and social structures using content analysis and coding frames. Results that PAS video games provide mixed views of rural life/culture, but skewed depictions of violence and a continual reproduction of socially constructed stereotypes.

Keywords: Rural, Video Games Post-Apocalyptic, Survival, Lethal Violence
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Introduction

There is nothing here.

Vacant houses falling into disrepair, shells of former life, monuments of what the world once was.

There is no life, no green, no growth – just the dull hue of the Wasteland.

This is all that survived, a barren, desolate minefield inviting you to give up.

This is the scene set in the post-apocalyptic survival video games examined in the current study. Although the details vary between games, the core concept is the same: face the new world or die. There has been a rise in survival-themed video games, which make the player monitor vitals, scavenge for food/water, and avoid death consistently throughout gameplay. This parallels with the resurfacing of dystopia themed media in the 1990s, placing an emphasis on the pessimistic mentality of the populace towards current times and a displeasure towards the current sociopolitical environment (Aldred & Greenspan, 2011; Jameson, 2005; Moylan, 2000). The pessimistic assumption that humanity will destroy itself has boomed in the last decade in the form of zombie game culture (Canavan, 2010; Keebaugh, 2013) and general apocalyptic/post-apocalyptic story lines (Aldred & Greenspan, 2011; Kirkland, 2009). Post-apocalyptic survival (PAS) video games often feature dystopian narratives set not in industrial, urban centres, but rural wastelands, which is all that remains of a once flourishing world. This ‘return-to-roots’ approach emphasises a distrust or displeasure with the direction our current social, economic, technological, and political environment is headed (Baccolini, 2000; Jameson, 2005; Moylan, 2000, Seed, 2000).
Post-apocalyptic survival (PAS) games provide a unique platform for examining how rural culture is imagined. The current study examines nine video games: *Fallout, Fallout 2, Fallout 3, Fallout: New Vegas, Fallout 4, Metro 2033, Metro: Last Light, ICY,* and *Sheltered.* In these dystopian themed games, when the world and humanity are all but destroyed, the narratives emphasise a ‘return to roots’ approach to living. ‘Return to roots’ indicating a return to agrarian lifestyles with limited access to technology for assistance. These video games re-present rural culture (Hall, 1997) in a way other entertainment mediums cannot as players interact with the narrative, make choices which effect game play, and ultimately survive in the world provided. Through active engagement with rural settings, various levels of character conflicts, and unique social elements, the narratives of these games immerse the player in a virtual world whose inhabitants are forced to adopt a ‘return to roots’ approach to life. Therefore, by examining rural culture within video games one can seek to understand what players interact with in regards to the portrayed culture, the realities/stereotypes depicted in the game, and the underlying message being delivered.

Media products, such as films, TV shows, and novels have paid little attention to the realities of rural culture, preferring to reproduce common stereotypes about the rural idyll and those that live in rural areas (Bell, 1997; Dekeseredy, Muzzatti, & Donnermeyer, 2014; Donnermeyer & DeKeseredy, 2014; Woods, 2010). In recent decades the rise in rural set and agrarian video games have also added to this trend, creating idyllic versions of rural life that are too simplistic to address the complexities of modern rural life (Baker, 2015; Neilsen, 2016). The trend of pastoral and rural video game narratives and setting have expanded into the current PAS video game genre
infusing the games with elements of scavenging, crafting, and growing. Therefore, the focus of PAS video games on rural areas becomes twofold: one, there is an emphasis on limited resources, limited persons, and a need to work together in order to survive; two, there is a reflection on historical colony building in which like-minded people, brought together by circumstance, build informal social structures in which to barter, seek shelter, and ultimately live.

Additionally, PAS video games provide a glimpse at rural culture and rural violence through a unique lens that is directed by current culture and knowledge. There are mixed representations of rural violence in films and TV shows, ranging from exaggerated stereotypes to vaguely accurate realities (Bell, 1997; DeKeseredy, et al., 2014). Similarly, there is limited knowledge on the exact nature of rural crime that is consistent within a single nation, although work in that field is expanding (Ball, 2001; Donnermeyer & DeKeseredy, 2014; Doucet & Lee, 2014; Falcone et al., 2002; Weisheit & Wells; 1996). Rural crime occurs at a similar rate to urban crime statistically despite common beliefs in the quiet small town construct (Bell, 1997; Donnermeyer & DeKeseredy, 2014). Studies highlight a big gap between the media’s representation of rural crime and the statistical reality of rural crime; however, scholars have yet to examine how video games deal with rural crime, as the focus has so far been on TV shows and films. By examining how video games re-present rural crime, this study aims to assess the extent to which video game simulations of the rural deviate from or perpetuate existing media stereotypes.

This study aims to address four main research questions. How do the narratives of PAS video games act to enforce the dystopian nature of the rural? What aspects of rural
culture have been absorbed into the virtual worlds depicted by PAS video games? How do the conflicts within PAS video games, over resources and between individuals, reflect the realities of rural living? How do the settlements that form in PAS video games reflect the social structures and systems of rural communities? The manner in which these questions will be pursued is explained further in the below sections.

The Current Study

The current study employs a cultural criminological approach to the simulation of rural life in video games. Ferrell (2003) states that cultural criminology “critically investigates the ways in which the dynamics of media and popular culture, the lives and activities of criminals, and the operations of social control and criminal justice come together in everyday life” (p. 71). Video games are interactive media, which encourage the player – the individual controlling the in-game choices and navigation – to engage in the narrative and actively change the narrative to produce various endings within the storyline (Atkins, 2006; Surette, 2011) or outcomes in the games as some do not have fixed narratives. As such, these games have a reflexive relationship with culture; they produce culture, reflect culture, and allow players to engage with culture (Aldred & Greenspan, 2004; Schulzke, 2014; Steinkuehler, 2006). ‘Culture’ in this study refers to the selective re-presentation of cultural objects and ideologies that occur through popular culture mediums (Hall, 1997). Therefore, culture is reproduced through these symbols and elements presented, distributed, taught, and preserved within video games (Martin & Deuze, 2009). Due to this reproduction of culture, video games provide a platform for analysing culture in how it is re-presented and engaged with in a virtual world.
The current study will apply aspects of narratological and ludological analysis to nine separate video games. Narratology analyses media from their narrative structure, plot structure, and individual character development (Atkins, 2003; Murray, 1997). Narratives can be provided to players in a multitude of ways including descriptions of the world, events, and texts within game-play that are to be interpreted by the player (Schulzke, 2014). Contrary to this approach, Ludology asserts that video games require their own medium of analysis in order to be properly understood (Bogost, 2006 as cited in Schulzke, 2014). Due to the fact that video games are an interactive medium, in which players are active in the construction and outcome of the narrative, ludologists indicate that video games require a different form of analysis (Schulzke, 2014). In this matter, video games should be analysed for the algorithms that build them and game-play must be viewed as a learning process for the player (Montola, 2012; Schulzke, 2014). The current study will apply some aspects of ludology; however, it will be focusing mainly on the game narratives and setting for the purpose of analysis.

This study will examine the video game settings, rural cultural aspects of game play, the in-game conflict, and the social elements of game play. This study will apply a cultural criminology foundation with elements of social control theory (Hirschi, 1969) applied to the video game narratives. This study aims to explore how PAS video games display rural culture, at what level players are able to interact with rural consistent violence, and how prominent stereotypical rural themes are within the video game realm of entertainment.
Literature Review

Video Games and Culture

This study contributes to critical research on video games and culture, an area of inquiry that has grown in importance over the past decade. The stories that video games tell are a central means through which values, morals, and history of contemporary culture are communicated to groups of people, both large and small (Kirsh, 2006). While older media forms like TV shows and films can influence the beliefs and attitudes of individuals and groups in society (Jewkes, 2004), video games let the passive media consumer become the active player in an interactive storyline by immersing them in a simulated environment enabling them to shape what is happening (Atkins, 2006; Surette, 2011). Video games are cultural objects “with deep roots in the culture they stem from” (Kücklich, 2006: 104) and provide players with a lens into the society in which the games were created (Krzywinska, 2006; Surette, 2011; Williams, 2003). Therefore, the storylines, plots, and themes of video games often address larger social issues such as violence, political disruption, and civic unrest (Steinkuehler, 2006).

Although many are still quick to downplay the importance of video games as objects of serious cultural research, Aldred and Greenspan (2004) argue “post-apocalyptic digital games merit the same critical examination as their literary and cinematic counterparts” (p. 480). Video games actively create worlds that re-present institutions and ways of life; however, many of these alternate realities have a strong foundation in the real world (Schulzke, 2014). Video games are especially important when they can function as a social critique and offer a critical perspective on our current reality, especially virtual dystopias (Schulzke, 2014). These virtual spaces often mirror
the cultural realities of the real world to a point that there becomes a “naturalization” of the virtual world and the line between ‘real life’ and virtual becomes blurred (Kücklich, 2006: 341). Players become fully immersed in the virtual world and are therefore engage with the values, cultures, and beliefs presented within the narrative.

“The production of cultural perspective focuses on how the symbolic elements of culture are shaped by systems within which they are created, distributed, evaluated, taught, and preserved” (Peterson & Anand, 2004, p. 311). The video game industry “produces culture and culture produces an industry” (Negus, 1998: 359). This reflexive relationship represents more than a consumption of culture and media, but an active participation in virtual worlds that have been socially constructed (Rodrigues, 2001).

Previous research on video games has regarded video game culture as reflecting a particular niche as opposed to reflecting culture as a whole (Shaw, 2010). However, this view is changing and video games are increasingly being viewed as a vehicle of culture in which players can create, understand, and experience culture through game play (Aldred & Greenspan, 2004; Atkins, 2006; Bertozzi, 2014; Steinkuehler, 2006). This study contributes to the study of video games and/as culture by examining how PAS video games re-present and immerse the players in narratives and virtual worlds filled with rural culture that feedback into the ways North American culture imagines and makes the ‘rural’ meaningful.

**Dystopias and Post-Apocalyptic Narratives**

This study is specifically interested in how PAS immerse players in rural-based virtual dystopias. In the past two decades, there has been a shift in literature, film, and other media, such as video games, towards more dystopian narratives (Aldred &
Greenspan, 2011). These creative outlets abound with visions of global destruction, political turmoil, and societal collapse, which provide a view of alternative societies that rise above our current technologically dependent and capitalist mentalities (Baccolini, 2000; Jameson, 2005; Moylan, 2000; Seed, 2000). Dystopias provide a fictional outlet for real world problems to be reshaped and critically addressed, quite often in a manner that questions the status quo and express displeasure with the current reality (Schulzke, 2014). This is a current reality that is burdened by technology, in environmental crisis, and filled with societal unrest, poverty, and conflict, and that barely breaks the surface of many observations of the current reality. Virtual dystopias found in interactive media such as video games also exist to challenge the status quo and existing ideologies (Schulzke, 2014).

The media re-presentation of rural spaces has been described as dystopic (Bell, 1997), placing the ‘rural’ in an alternate space from the norm and separate from traditionally habituated environments. This aspect of ‘othering’ is common in constructions of rural spaces that are not idyllic (Bell, 1997; Woods, 2010). Dystopian environs can take on many forms, often being described as a non-existent place, located in a current time and space that embodies the worst aspects of society (Sargent, 1994). Schulzke (2014) argues that dystopias that present societies in which escape is impossible are perhaps the most critical in their analysis of real world values, institutes, and problems. Schulzke’s (2014) concept of critical dystopias – which is contrary to the belief that within dystopias there must be an element of hope (Baccolini, 2004; Fitting, 2003; Moylan, 2000) – is often the case within PAS video games where the focus is more on surviving the world that has been created than fixing it (Fitting, 2003). The rural
dystopias presented within these PAS video games challenge the traditional idyllic view of the rural, thus providing an alternative setting for examination.

**Crime and violence in dystopian narratives.** Dystopian narratives are about societal unrest or destruction (Aldred & Greenspan, 2011; Jameson, 2005; Moylan, 2000). PAS video games thrive off of this foundation, projecting a future where governments no longer exist, survival is of the utmost importance, and anarchy is the norm. Additionally, in dystopian environments, especially post-apocalyptic narratives, crime is dictated by the need for resources, alienation from social groups, and fear of the environment (Versam, 2003). Violence within these environs is the norm, as conflict means survival, and lethal violence is often the first choice (Hitchens, Patrickson & Young, 2014). Therefore, it is important to highlight the difference in societal stresses when examining dystopian narratives, as survival drives individuals to act outside of normative behaviour in the current, real world. Thus, by examining the critical dystopias that PAS games stage and let people play in, this study contributes to budding research on the nexus of video games, dystopias, and rural narratives and settings.

**Post-Apocalyptic Survival (PAS) Video Games**

Survival-themed video games have been on the rise for the past two decades emerging off of the trend of survival horror video games that began in 1990 with franchises such as *Resident Evil* (1997-), *Clock Tower* (1998-), and *Silent Hill* (1999-) among others (Kirkland, 2009). Survival-themed video games appear in many forms with focuses on resource management, crafting, community building, scavenging, and general survival. ‘Survival’ for the purpose of this study refers to video games that require the player to manage resources such as food, water, and/or money. Additionally, the games
require the player to monitor their character’s health continuously throughout game play. All the while, during game play the player is faced with an environment, persons, and creatures that threaten the health of the player and without close monitoring could result in the player’s character’s death.

Although survival-themed video games have been around for several decades there has been a transition from the pastoral and resource based focus to place more emphasis on combat survival elements, dystopian narratives, and survival horror themes (Aldred & Greenspan, 2011; Kirkland, 2009). Bertozzi (2014) states “humans play games that prepare us for the culture in which we live. In turn, culture influences which forms of play are most useful and valuable” (438). These games allow players to play through an ‘end of the world’ experience, and survive it, providing that element of hope Moylan (2000) speaks about and allowing the player to overcome present anxieties about the current reality in a virtual space. Therefore, it can be understood from the themes within current survival video games that our current culture values games that prepare players, providing needed skills and various scenarios, for the potential of a future apocalypse.

An apocalypse is defined by the Webster English Dictionary as “a great disaster: a sudden and very bad event that causes much fear, loss, or destruction” (2016). Therefore, post-apocalyptic can be defined as being set after or in a time past the apocalypse that has occurred. It is common for PAS video games to adopt narratives involving things such as nuclear fallouts, viral epidemics, or ice ages. Regardless of the backstory, the destruction of the old world order is a concrete theme within PAS games. And there is one core concept: survival. There is a scarcity of resources whether it is food, water, ammunition,
or shelter and it is the player that adapts to the environment that succeeds within the new world (Bertozzi, 2014).

PAS games present players with a moral dilemma that does not exist as many games set in the present world. In order to survive within the new world, players must make difficult choices in order to progress through the narrative and participate in the flawed world that has been simulated for them (Aldred & Greenspan, 2011). Players are reminded constantly as they face people and monsters that “life is a struggle for survival in a world filled with others who want to kill them/or take their property and territory” (Bertozzi, 2014: 431). The PAS genre of video games is unique in the virtual world that it creates and the culture that it displays/creates with its players.

**Rurality and Rural Culture**

One of the most significant areas of research this study engages with and aims to make a contribution to is the criminological and sociological study of rural culture and representations of rural culture and stereotypes by media and cultural products. What, then, is rurality?

**Defining rurality.** There is no consensus definition of rural. Many researchers have attempted to define it by location and population, using specific geographical aspects or resources as markers of rurality. Common definitions range the population size from 10 000 to 30 000 (maximum) and a location outside of the main commuting zone of an urban centre (Kulig, Nahacheqsky, Hall, & Kalischuk, 2005). The socially constructed rural idyll is partly at fault for the limited views on rurality and the occurrences of rural communities (Bell, 1997; Woods, 2010). Rurality is produced and reproduced, yet it is rarely expanded upon to include the working, living, and playing that occurs within rural
areas and therefore it is lacking key elements of what encompasses rurality (Woods, 2010). This works to create an image of rurality that seems vaguely dystopic to newcomers and urban visitors in rural spaces (Bell, 1997).

For the purpose of the current study, common definitions of rurality based on size and location are of little use as in the post-apocalyptic setting as there are no urban centres and limited populations. It is, therefore, necessary to draw upon a definition of rural based on more socially and culturally specific aspects. First, rural areas have high levels of collective efficacy and density of acquaintanceship, indicating that those who live in the area are likely to be acquainted within one another (Donnermeyer, 2012; Weisheit & Wells, 1996). Second, rural areas foster a unique culture that separates that singular area from others (Ball, 2001).

**Rural culture.** The definition of rural culture is as disagreed upon as that of rurality. The problem for both arises in the fact that rural spaces are not homogeneous (Ball, 2001) and therefore in analysing one rural area the truths are not necessarily transferrable. Culture is also a complex concept that is always changing, evolving, and growing with its environment and rural culture is no exception (Eisenhauer, Hunter, & Pullen, 2010). Staged performances of rurality and rural culture act out the socially constructed representations of rural life (Woods, 2010); however, these are not necessarily realities. Rural culture is constructed from a unique compilation of environmental traits, community dynamics, individual traditions, and the ability to preserve yet adapt the aforementioned aspects over time (Eisenhauer et al., 2010; Woods, 2010).

Rural culture is learned, assuming that individuals are rational thinkers and able to absorb the social realities around them (Bandura, 1977), and this knowledge is passed
down from generation to generation, and the information is added, helping the culture change (Bonder, Martin, & Miracle, 2002). Rural culture is local to the area and involves traditions, norms, and ideals that are also localised (Eisenhauer et al., 2010). Rural culture is patterned by individual and social behaviours that are repeated and ritualised over time and influenced by historic, educational, and environmental factors (Eisenhauer et al., 2002; Shreffler-Grant, Hill, Weinert, Nichols, & Ide, 2007). Rural culture is evaluative as value systems are culturally engrained and influence the individual identities and social belonging of rural citizens; however, these values change generationally (Bonder et al., 2002). While many aspects of rural culture will remain stable over time, as generations change within rural areas aspects of the culture alter as well to reflect the social, political, technological, and economical times (Eisenhauer et al., 2010).

**Stereotypes about the rural.** As mentioned earlier in this study, the rural has often been stereotyped as idyllic environs, picturesque spaces of tranquility and neutrality (Bell, 1997; DeKeseredy et al., 2014; Donnermeyer & DeKeseredy, 2014; Woods, 2010). These depictions are filled with archetypes within the community, limited crime, and a welcoming manner (Woods, 2010). However, many media re-presentations of rurality take alternate approaches at these spaces. The horror genre, in particular, has a history of displaying rural areas as filled with murders, hillbillies, and supernatural entities (Bell, 1997; DeKeseredy, et al., 2014). The rural offers isolation and an alien environment for most urban audiences and therefore the prime setting for the horror genre (Bell, 1997). Stereotypes such as these are often the foundation for moral panics (Cohen, 1972), which can lead to fear of a group or space based on false information misrepresented by media platforms. Therefore it is important to consider that horror movies are not the only media
spaces to present anti-idyllic concepts of the rural. Video games, particularly PAS games, provide a platform to examine the stereotypes re-presented within the dystopic rural environ that are portrayed. This study aims to examine whether these stereotypes are unique to the platform or similar to those found in other mediums such as film and television.

**Rural Crime and Violence**

Since the industrial revolution attention has been pulled away from rural areas and directed towards urban centres in relation to crime and social disorder (Donnermeyer & DeKeseredy, 2014; Falcone, Wells, & Weisheit, 2002; Jobes, Donnermeyer & Barclay, 2005). In the last few decades more academic attention has been paid to rural areas with many authors addressing issues of rural crime, violence, homicide, and domestic abuse (Ball, 2001; Donnermeyer & DeKeseredy, 2014; Doucet & Lee, 2014; Falcone et al., 2002; Weisheit & Wells; 1996). This avenue of investigation has brought attention to the myths and realities about crime in rural areas and the individuals who live in rural areas.

Sanders (2010) makes the claim that “rural living is the largest single killer of humans today, the greatest source of malnutrition, infant mortality and reduced lifespan” (23). This is a lacklustre claim considering the constructed beliefs around rural areas of folk-devils, monsters, hillbilly killers, and other various evils being responsible for death and mayhem (Bell, 1997; DeKeseredy et al., 2014). However, the reality is much closer to Sanders (2010) claim than the construction of media franchises (news, film, literature, and video games) have generated in the past few decades. This study aims to consider the elements of conflict within PAS video games from a rural crime perspective and assess
whether they align with realities, follow existing stereotypes, or present new stereotypes about rural crime.

**Rural crime.** Rural crime occurs at a similar rate to urban crime statistically despite common beliefs of the rural idyll where everything is picturesque and peaceful (Ball, 2001; Donnermeyer & DeKeseredy, 2014; Woods, 2010). Crime presents itself differently in rural areas with more emphasis on domestic violence, vandalism, drug offences, and agricultural crimes (Ball, 2001; Carrington, Donnermeyer & DeKeseredy, 2014; Ceccato & Dolmen, 2013; Donnermeyer & Scheer, 2001; Dukes & Stein, 2003; Smith 2013). Violent crimes are more likely to occur at the hands of an acquaintance than a marauding stranger (Shai, 2010; Smith, 2013) due in large part to the social cohesion among rural communities (Jenson, 1998) and the density of acquaintanceship or the ‘everyone knows everyone’ principle (Freudenberg, 1986). This is not to say that crimes are not committed by ‘outsiders’ within rural communities, and despite the lower statistical occurrence of this there is a great deal of fear placed on outsiders for their potential to do harm to the community, its citizens, and its way of life (Elias & Scotson, 1994; Scott, Carrington, & McIntosh, 2011). Knowledge about rural crime is expanding, but as no two rural areas are the same (Ball, 2001) it is difficult to determine true trends in crime. Therefore, it is important to examine the media outlets that are contributing to the re-presentation of rural crime.

**Rural homicide.** Violence in rural communities, when it escalates to homicide, tends to vary slightly from their urban counterparts. In rural areas, the number of murders committed by handguns has declined since 1991, and in 2004 69% of violent incidents did not involve weapons at all (Butters, Brochu, & Erickson, 2011). Additionally, a study
of homicide in rural Alaska conducted by Shai (2010) discovered that guns were the
cause of death 58% of the time, knives 14% of the time, personal weapons (beating) 11%
of the time, blunt objects 7% of the time, and unknown objects 10% of the time. Contrary
to this, Carlson (2006) argues that access to firearms in rural areas is linked to high rates
of gun violence exposure, injury, and trauma. Although gun ownership is higher in rural
areas than in urban and access to guns is easier, the knowledge of gun handling for the
intended purpose such as hunting, protecting livestock, and marksmanship tends to be
higher (Slovak & Singer, 2001). Therefore, despite being used half the time in homicides,
they are not frequently considered weapons of violence.

**Rural substance use/abuse.** Rural substance use/abuse and alcoholism are often
forgotten about in the mix of media idyllic depictions. Donnermeyer and Scheer (2001)
indicate that rural areas have lower levels of substance use among youth due to social
controls and the density of acquaintanceship (Weisheit, Falcone, & Wells, 1999).
Contrary to this recent work in rural Ohio (Falck, Siegal, Wang, Carlson, & Draus, 2005)
and in Atlantic Canada (Parker, Jackson, Dykeman, Gahagan, & Karabanow, 2012)
indicates that substance abuse and alcoholism are on the rise in rural communities and
require awareness. Additionally, a study conducted by Lambert, Gale, and Hartley (2008)
of rural youth and young adults indicates that substance use and alcoholism is higher, if
not double that of their urban counter parts. The true nature of rural substance use/abuse
and alcoholism has yet to be completely determined, but work in this area can agree that
as urbanisation seeps into rural areas so do drugs and alcohol (Donnermeyer & Scheer,
2001). Therefore, it is important to consider substance use/abuse and alcoholism when
examining rural areas and their representation.
Theoretical Framework

This study applies a cultural criminology foundation to the analysis of the nine PAS video games chosen while using social constructionism and social control theory to examine the narratives and settings within the video games. Cultural criminology explores the convergence of “cultural and criminal processes in contemporary social life” (395) and brings together broader avenues that have emerged from sociology, criminal justice, and criminology (Ferrell, 1999). Cultural criminology, on a broad scale, represents the increase attention within criminology of the relevance of mass media in relation to the constructions of crime and crime control (Ferrell, 1999). Cultural criminology attempts to place cultural objects at the centre of criminological inquiry (Ferrell, Hayward, & Young, 2008). Virtual spaces, according to Hayward (2012), are one of the five spaces of cultural criminology, and although a great deal of attention has been placed on the crime that can occur within these virtual spaces less has been directed towards what these virtual spaces are saying about crime. This study aims to contribute to this discipline by examining this re-presentation of rural crime, spaces, and social systems within PAS video games as stereotypes and misrepresentations contribute to moral panics (Cohen, 1972) and unhelpful crime prevention policies (Weisheit, Wells, & Falcone, 1994).

Society, whether it exists in the real or virtual world, functions under a set of rules, which are constructed to hold the potential to change as the society evolves. Social control theory aims to explain why individuals obey the rules of society (Hirschi, 1969). There are four aspects to social bonds, which go beyond the influence of the home: attachment, commitment, involvement, and belief (Hirschi, 1969). Despite social control
theory’s focus on community dynamics and informal controls it has not been utilised to examine crime in rural communities, although aspects are often indirectly made reference to. Many rural studies have indicated that rural communities are often governed by informal social controls, such as family or peer groups, as opposed to formal social controls such as institutions or police (Cebulak, 2004; Donnermeyer, Scott, & Barclay, 2013; Lee, 2008; Weisheit & Donnermeyer, 2000). This study will examine the in-game social structures within the communities present to see if they mirror social control aspects that are present within rural communities in the real world or deviate from the realities.

People construct their reality based on what they see and their social interactions with the world around them (Berger & Luckmann, 1967; Gergen, 1985). Modern society, particularly Western society, functions under the belief that reality and knowledge is without influence from social events and that they are fixed items (Surette, 2011). Social constructionists function under the belief that people choose to see the world in a certain way. “For the most part we do not first see, and then define. We define and then see...” (Lippmann, 1922: 54 as cited in Surette, 2011). People are empty vessels until they are shaped and influenced by their surroundings, making them a product of their environments (Beirne & Messerchmidt, 2000). Social knowledge can be acquired through personal experiences, significant others, social groups/institutions, or the media; the latter three producing a symbolic reality in order to construct social norms (Berger & Luckmann, 1967; Surette, 2011). It is important to take social constructionist theory into consideration when considering PAS video games and the rural culture that is portrayed as these video games were developed by individuals to be consumed by a culturally
driven audience. Although this theory will not be a driving force in this study, it requires acknowledgement as almost all reality, according to Berger and Luckmann (1967), is socially constructed.

Methodology

Sample

The initial search for video games for inclusion in this study was conducted through Steam, which is a digital distribution source created by the Valve Corporation for video games. Steam is a database dedicated solely to video games available on personal computers (PC), although these games may also be available on additional platforms. Steam was chosen as it is the largest digital distribution platform for PC video games with 70-75% (estimated) of all games being purchased through this medium (Edwards, 2013; Grafts, 2009). Despite the presence of other Internet video game databases (Internet Game Database, giantbomb.com, and watchsurvival.com to name a few) these are user-curated and therefore the lists are not controlled. Steam is a corporate owned purchase site that users are able to contribute to. Therefore, the content, at least in relation to video games, is updated and controlled by the corporation. This made it the ideal site for the current inquiry, as there was a hired level of control over the content available in the database.

Steam is not the only online purchase database for video games; however, it is the most widely used (Edwards, 2013; Grafts, 2009). Additional platforms include the following: GOG Limited located in Nicoasia, Cyprus; Gamers Gate AB located in Stockholm, Sweden; Direct2Drive; Impulse; Apple Incorporated’s App Store; Xbox Live Games; and PlayStation Store (to name a few). Gamers Gate AB is the main competitor
for Steam; however, Steam still remains the dominant online purchase database. This is why Steam was chosen for the current inquiry, despite the fact that games that are not available for PC would not be included in the results.

The initial search through Steam utilised the term “Games” coupled with “Post-apocalyptic” to reveal 105 search results that qualified. The second round Steam search utilised the search term “Games” coupled with “Post-apocalyptic” and “Survival” to reveal 56 results that qualified, all of which had been present in the previous search.

From this list, games were eliminated if they were outliers and tagged incorrectly, which occurs sometimes with user-tagged systems such as Steam. Elimination only occurred after a careful investigation into the game to ensure the tag was inaccurate. Games were eliminated if they were set in urban environments or space primarily as that is not the focus of this study. Games were eliminated if zombies or paranormal entities were the primary conflict within the game, as that is not the focus of this study.

The remaining 22 games were sorted into two categories. The first featured games that included human vs. environment as the primary conflict within the game and human vs. human as the secondary conflict. This category included 16 results. The second featured games that included human vs. environment as the primary and, potentially, only conflict. This category included six results. After careful consideration of all six games within this category to ensure a complete lack of human vs. human conflict all six were eliminated.

Although Steam is limited in its content occasionally, with console games being slow to transition to PC versions, there were very few cases of this in the current genres being searched. Most would have been eliminated based on the earlier mentioned criteria.
The one notable exception is *The Last of Us* (2013), available for PlayStation 3. Had this game been available on Steam, it would have also been considered for examination in the current study.

Finally, the games were narrowed down further to include only games that occurred in rural environments, featured human vs. environment as their primary conflict, and human vs. human as their secondary conflict. The final sample included nine games ranging in release date from 1997 to 2016 (see Table 1). The games chosen for the final sample included the *Fallout* series, the *Metro* series, *ICY*, and *Sheltered* (see Appendix A for full game summaries). The *Fallout* series was chosen because it provided an extended timeline for examining community building and social structures within the rural communities. Similarly, *ICY* provided a view at a post-apocalyptic world several years after the fallout, presenting with established communities. The *Metro* series, despite not taking place in a traditional rural setting, presented with rural community dynamics within the post-apocalyptic world and rural setting elements on the surface. And *Sheltered* provided a micro level analysis of an individual group dynamic within the post-apocalyptic setting in conflict with a rural setting and individuals.

### Table 1: Final sample of video games (PC vs. Console)

<table>
<thead>
<tr>
<th>PC Platform</th>
<th>Console Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fallout 3 (2008)</td>
</tr>
</tbody>
</table>

The final sample falls into two categories of games in more way than one. First, there are four PC Platform games and five console games as indicated in Table 1. Second, there are two of the games that are individual narrative, which allows for unique
elements for each game, and seven that are part of a series narrative, which allows for carryover elements between games and a continuation of concepts (see Table 2). And third, the division in figure 2 also represents the separation of corporate created video games, by larger companies, and independently created video games. It is important to note the distinction, as independent games exist outside the mainstream domain of video game culture (Martin & Deuze, 2009). It is also the independent ‘indie’ game companies that are often responsible for changing the landscape of gaming, as they often challenge the status quo of the gaming industry, and thus effect the market demands for the larger corporate companies (Martin & Deuze, 2009).

**Table 2: Final sample of video games (Individual vs. Series)**

<table>
<thead>
<tr>
<th>Individual</th>
<th>Series</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fallout 3 (2008)</td>
</tr>
<tr>
<td></td>
<td>Fallout 2 (1998)</td>
</tr>
<tr>
<td></td>
<td>Fallout (1997)</td>
</tr>
<tr>
<td></td>
<td>Metro: Last Light (2013)</td>
</tr>
<tr>
<td></td>
<td>Metro 2033 (2010)</td>
</tr>
</tbody>
</table>

**Procedure and Coding**

In order to fully grasp the visual and narrative aspects of the rural areas, rural culture, and rural violence presented within the video games they were played and/or watched in their original form without the addition of game modifications (MODs) or downloadable content (DLCs). The use of narratological and ludological perspectives will benefit the current study when applied in a manner that complements each other (Schulzke, 2014). Therefore, some elements of ludology will be applied to the analytical process as the game play does not progress linearly and the player is responsible for elements of the game’s development, especially in relation to violence (Schulzke, 2014).
However, the main focus of analysis will be on the game narrative and setting. Game
narratives can be given to the player through descriptions of the world, events in game
play, or gather indirectly through interactions with the world (Schulzke, 2014). The
narratological approach allows video games to be examined in the same manner as films,
which are equally culturally relevant (Aldred & Greenspan, 2011; Schulzke, 2014). The
games were played and/or watched first to explore the environments in which they were
set and then again to explore the character interactions presented to examine the re-
presentation of rural culture and the presence of rural violence stereotypes.

The sample was examined via content analysis, a method frequently chosen when
dealing with mass media products such as films, television shows, and video games (Tian
& Robinson, 2014). Through abductive analysis (Ezzy, 2002) that focused individual on
game narrative and some scripts, and collectively on the group of games, I was able to
engage in reflective reasoning that facilitates coding frames and grounded theory (see
Glaser and Strauss 1967). Framing theory posits that an individual issue can be viewed
from a variety of perspectives and therefore be constructed based on the values and
considerations of multiple individuals (Chong & Druckman, 2007). Framing allows an
individual to conceptualize an idea and orient their thinking around that issue (Chong &
Druckman, 2007). On the primary level, the games were analysed in relation to setting,
conflict, rural culture, and social elements. Sub-frames of analysis examine how these
four primary frames are divided (see Table 3). These sub-frames interrogate each frame
for subtle and overt distinctions between groupings in the larger frames. These frames are
not an exhaustive list of items considered in each section, and, as with research driven by
grounded theory, many items and facts emerged that were not considered primarily.
Table 3: Coding frame for in-game analysis

<table>
<thead>
<tr>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilderness/Rural/Rural with Urban Structures</td>
</tr>
<tr>
<td>• What element does the wilderness play in the game play?</td>
</tr>
<tr>
<td>• What environment is the game set in?</td>
</tr>
<tr>
<td>• What is the conflict with the environment for the character?</td>
</tr>
<tr>
<td>• What does it provide the player (i.e. food, shelter, equipment)?</td>
</tr>
<tr>
<td>• What challenges does the wilderness pose to the player?</td>
</tr>
<tr>
<td>• Is the setting an essential element in the storyline?</td>
</tr>
<tr>
<td>• Do the former urban structures take away from the rural settlements?</td>
</tr>
<tr>
<td>• Have rural communities settled within former urban areas?</td>
</tr>
<tr>
<td>• Are the urban elements of the setting essential to the storyline?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conflict and Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human vs. Environment/Human vs. Human/Human vs. Monster</td>
</tr>
<tr>
<td>• Is it the primary, secondary, or tertiary form of conflict within the narrative?</td>
</tr>
<tr>
<td>• Is this conflict the result of limited resources within a post-apocalyptic world?</td>
</tr>
<tr>
<td>• Is this conflict intentional or a product of the environment?</td>
</tr>
<tr>
<td>• What weapons are used most often?</td>
</tr>
<tr>
<td>• Could the conflict be resolved without violence?</td>
</tr>
<tr>
<td>• Do the monsters serve a purpose in the narrative (i.e. food)?</td>
</tr>
<tr>
<td>• Is the primary conflict with the monster violent; is the main goal to kill them?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rural Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density of acquaintanceship/ Collective knowledge/Shared history</td>
</tr>
<tr>
<td>• Do the members of the rural settlement present a density of acquaintanceship (i.e. everyone knows everyone)?</td>
</tr>
<tr>
<td>• Do the members of the rural settlement have a shared understanding of the rules of their community?</td>
</tr>
<tr>
<td>• Are the members of the settlement distrusting to outsiders?</td>
</tr>
<tr>
<td>• Are the members of the settlement unwilling to trade/barter/speak with outsiders?</td>
</tr>
<tr>
<td>• Do the members of the settlement have a shared history or knowledge of important events?</td>
</tr>
<tr>
<td>• Is each rural settlement different or do they share similar aspects?</td>
</tr>
<tr>
<td>• What does this say about rural culture?</td>
</tr>
<tr>
<td>• What stereotypes are depicted?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Structures and Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-game character/Informal social controls/Formal social controls</td>
</tr>
<tr>
<td>• Is the character solo, in a partnership, or in a group?</td>
</tr>
<tr>
<td>• Does the presence of social interaction throughout the game affect the game play (if applicable)?</td>
</tr>
<tr>
<td>• How does the social isolation add to the narrative (if applicable)?</td>
</tr>
<tr>
<td>• Is the character designed by you or pre-designed for the game?</td>
</tr>
<tr>
<td>• Does the pre-designed character embody rural stereotypes?</td>
</tr>
<tr>
<td>• Are there informal social controls within the rural settlements (family groups, shop owners, etc.)?</td>
</tr>
<tr>
<td>• Are there any formal social controls within the rural settlements (i.e. sheriff, government, etc.)?</td>
</tr>
<tr>
<td>• What are the formal/informal dynamics within the rural settlements?</td>
</tr>
<tr>
<td>• What impact do these have on game play?</td>
</tr>
<tr>
<td>• What challenges do the formal/informal social controls pose to the player?</td>
</tr>
</tbody>
</table>
Results

Although the results will be discussed thematically in relation to the structure of the coding frames and how the information was vetted out of the various games, there is a great deal of overlap between the categories. This is due to the complexity of video game narratives and the intricate nature of the worlds created. Therefore, information will be discussed in the most relevant category.

Setting

The ‘real world’ setting of the video game is relevant when considering the social structures and controls (discussed in depth later) that may appear during the course of the narrative. Three of the video games examined take place in a Russian-type setting with direct (Metro 2033 and Metro: Last Light) or indirect (ICY) references to Russian culture or society. Metro 2033 and Metro: Last Light are set in the Moscow metro system and make direct reference to station stops and locations within Moscow. The remaining six video games examined take place in a United States (US) of America-type setting with either direct (Fallout, Fallout 2, Fallout 3, Fallout: New Vegas, and Fallout 4) or indirect (Sheltered) references to United States culture or society. Fallout and Fallout 2 are set in southern California and parts of Oregon with mentions of the ruminants of the west coast. Fallout 3 is set in Washington, D.C., Virginia, and Maryland including references to the Washington Monument, the Lincoln Memorial, and the Jefferson Monument. Fallout: New Vegas is set in California, Utah, Nevada, and Arizona including references to the Hoover Dam, the Vegas Strip, and the Mojave Desert. And Fallout 4 is set in Massachusetts including references to Cambridge, Boston, and Massachusetts Institute of Technology (MIT). By providing ‘real world’ settings the majority (7 of 9) of the games
are able to ground the player experience in these ‘real’ settings thus pulling it from a completely fictional, virtual conception to a potential real possibility. These settings, despite being former urban metropolises, are now in ruin and exist only to house small communities that embody rural social systems.

More importantly, each game holds unique rural elements, some existing in the isolated wasteland and some within former urban structures, which add to the game world created. These elements can be a physical landscape that is isolated, scarcely populated, and filled with wildlife or social structures such as settlements and factions, which encompass rural culture (discussed in depth later). The passive nature of rural elements within the video games allows for a foundational support for further rural concepts within the video games.

All of the games examined present a conflict for the user in which the main commonality is that the surface of the world is dangerous and potentially uninhabitable. *ICY*, *Metro 2033*, and *Metro: Last Light* present a frozen wasteland, an ice age as a result of a nuclear fallout and the harsh Russian climate. These games occur on different timelines. *Metro 2033* and *Metro: Last Light* present a narrative that occurs twenty years after the fallout where the surface is uninhabitable, the air is unbreathable, the surface has high levels of radiation, and there are several dangerous elements. *ICY* takes place several years (undefined) after the nuclear fallout, the surface is dangerous, but the air is breathable and several settlements have been formed. Alternatively, the games that occur in the US (*Sheltered, Fallout, Fallout 2, Fallout 3, Fallout: New Vegas, and Fallout 4*) depict the wasteland as a deserted, barren, dangerous, and irradiated environment. *Sheltered* occurs just after the nuclear fallout (time frame non-specified), the surface is
uninhabitable due to severe radiation and staying on the surface is hazardous. The *Fallout* series occurs several years after the fallout (80-210 years depending on the game), the surface has irradiated areas, and dangerous hazards such as sink holes and landmines; however, it is inhabitable (see Table 4 for timeline). All of the games present the players with animal or mutant threats on the surface increasing the danger.

### Table 4: Timeline of video games post nuclear fallout

<table>
<thead>
<tr>
<th>Video Game</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Metro</em> Series – Nuclear Fallout</td>
<td>2013</td>
</tr>
<tr>
<td><em>Metro</em> 2033</td>
<td>2033</td>
</tr>
<tr>
<td><em>Metro: Last Light</em></td>
<td>2034</td>
</tr>
<tr>
<td><em>Fallout</em> Series – Nuclear Fallout</td>
<td>2077</td>
</tr>
<tr>
<td><em>Fallout</em></td>
<td>2161</td>
</tr>
<tr>
<td><em>Fallout 2</em></td>
<td>2241</td>
</tr>
<tr>
<td><em>Fallout 3</em></td>
<td>2277</td>
</tr>
<tr>
<td><em>Fallout: New Vegas</em></td>
<td>2281</td>
</tr>
<tr>
<td><em>Fallout 4</em></td>
<td>2287</td>
</tr>
</tbody>
</table>

All of the games present elements within game play that act to re-present rural settings and rural culture (discussed in depth later). The virtual spaces in all of the games examined provide resources for the user’s survival. These resources vary depending on the game structure but can include: ammunition, water, food, medicine, shelter, tradable goods, materials from past culture, and clothing. These resources are scarce due to the destruction of society and production networks, competition with other humans, and the monopolisation of goods via trading posts. However, the environment within the game is designed to support the player’s survival as long as he/she works for it.

**Conflict and Violence**

There were three levels of conflict present in all video games examined, although the presence of each level varied between games. The primary conflict in all of the video games analysed is human vs. environment. As the games chosen for this study fall into
the survival genre, this is not surprising. Players are forced to scavenge for resources, maintain, and fight for survival. There are many environmental threats such as exposure (4 of 9 games), hunger (5 of 9 games), dehydration (6 of 9 games), lack of shelter (9 of 9 games), injury (9 of 9 games), and terrain (6 of 9 games). However, these are not ‘pure’ survival game in which the only conflict is with the environment. Despite many environmental threats, greater to worries abound once the player leaves the safety of his/her home, vault, encampment, or subway tunnel.

The secondary conflict in all of the video games analysed is human vs. human. This type of conflict is often the result of the limited number of resources available in the post-apocalyptic world. In the Fallout series this conflict often occurs with raiders and bandits, but can occur with anyone. In Sheltered it is with any random traveller trying to survive the wasteland. And in ICY there are bandits and marauders that will threaten the safety of the player’s group. This conflict can be avoided sometimes by sneaking around or avoiding these groups rather than confronting them in all games analysed, or by trading or exchanging favours with the groups as opposed to presenting a hostile front. Additionally, this conflict can occur because of warring factions that have formed in the post-apocalyptic world in an attempt to bring structure to the new world (7 of 9 games). These factions reflect the values of the former society (discussed in depth later) and conflict during game-play is unavoidable (Metro series) unless there are narrative options to join the faction (Fallout series).

The tertiary conflict in all of the video games analysed is human vs. mutant/animal. This conflict is an equal or lesser threat to the player’s safety than other humans depending on the game. In the Metro series the player is confronted with a variety of
mutated creatures in various sizes which must be killed on sight or they will kill the player. In *ICY* the player encounters mutants that must be killed immediately for protection, and animals that must be killed for food and protection. *Sheltered* presents the player with mutated humans which the player can choose to kill or avoid and animals which provide food for the player’s family. The *Fallout* series is unique in the fact that it shows a variety of mutated humans and animals that serve various purposes. Mutated animals run wild and pose threats to the player’s safety, but have also been domesticated as livestock (discussed in depth later). Irradiated humans can be cognitively aware and functioning beings or feral entities that threaten the player’s safety. And there are super-mutants, which are genetically enhanced humans that can be friend or foe depending on the player’s current allegiance. This level of conflict within the games is almost always necessary, except in the case of cognitively aware mutants (*Sheltered* and *Fallout* series).

The types of violence varied within each video game, with all video games escalating to lethal violence (homicide) quite frequently. Assault occurs, however, it is more common to kill a potential threat than disable them in the PAS video games examined. It is possible to play (7 of 9 games) without killing humans with the exception of those mandated to drive the narrative forward. Therefore, players have made it through the games with zero kills or under a half dozen kills. *ICY* and *Sheltered* are the exceptions as there are turn-based situations where the choice of avoiding conflict is not allowed. However, the design and direction of these games are to kill individuals and entities that threaten the player’s survival and this is further persuaded by the weapons made available through game-play (see Figure 1 & 2).
Figure 1: Screenshot of Pipboy 2000 from *Fallout* which summarizes kill scores through the game. Similar tally screens can be found in *Fallout 2*, *Fallout 3* (loading screens), and *Fallout 4* (stats section).

The post-apocalyptic world offers a variety of weapons to the survivor struggling to make it through. Guns appeared in all nine games analysed; however, their usefulness and relevance varied. *Sheltered* relies heavily on melee weaponry, which are blunt or bladed objects, and quickly shows the user the irrelevancy of guns due to the scarcity of ammunition and unreliability. *ICY* places a high emphasis on guns for their reliability in hunting but does allow players to choose melee weapons or a bow to hunt or attack enemies for stealth purposes and the conservation of ammunition. It is only in the *Fallout* series and the *Metro* series where players see an abundance of weaponry and the ability to craft guns in order to enhance their ability to do damage (see Appendix B for full count). There is also an abundance of melee weapons, explosives, and, in the *Fallout* series, energy weapons. The scarcity of ammunition is made more prominent in the *Metro* series, as melee weapons are not as useful in killing humans or mutants. However, ammunition is still a crucial element in the *Fallout* series in order to survive, particularly in *Fallout* and *Fallout 2*. 
Due to the scarcity of resources, the concept of death is no longer sacred in any of the video games examined. The only exceptions being ICY where the player gives a tribesman a proper funeral and Sheltered where the player’s character will experience trauma in-game if they harvest the meat of a dead family member. Sheltered remains an exception also as the only body the player can desecrate is that of a dead family or shelter member. The player is also provided with the option to incinerate or bury them upon death. The remaining games allow the player to search bodies, no matter how recently deceased, for ammunition, clothing, food, water, medication, and assorted goods. This is the main way to acquire things within the game, with the exception of stealing it (discussed in depth later). Death is just an element of game-play and therefore must be used to the player’s advantage.

**Rural Culture and Stereotypes**

Within all nine video games analysed there were settlements that emerged in the post-apocalyptic world that re-present rural life. These provided the foundation for the examination of rural culture and the reproduction of rural stereotypes. These settlements, vaults, encampments, or stations are the convergence points of people coming together after the destruction of modern society and the ‘return to roots’ approach to rebuilding life is notable.

All of the video games analysed presented settlements that had a shared knowledge and history of the events that had occurred in the world. In ICY, Fallout 3, Fallout: New Vegas, and Fallout 4 where a great deal of time has passed since the initial nuclear fallout there is some diluting of the narrative. However, all settlements are aware of their origin stories and how they came to be located where they are. Talking with settlers (9 of 9),
reading discarded documentation (7 of 9), and logging into computer databases (5 of 9) allows the player to learn about the individual history of each settlement and the unique dynamic of that settlement.

Despite the unique history of each settlement and the various dynamics of their construction, both physically and in population, there are five elements of rural culture/life that translate throughout all settlements in all nine video games examined. The first element is the ‘everyone knows everyone’ (8 of 9 games) concept of rural living (Weisheit & Wells, 1996). Sheltered is the only game that does not present with this element, as the player is limited to the association with his/her immediate family, and individuals he/she invites into the shelter later in the game who then have to gain the player’s trust. In the Metro series, there are several occurrences where individuals are known throughout more than one station (Hunter and Khan) either personally or by reputation. Similarly, in ICY when travelling between settlements there is a shared knowledge of individuals from other settlements that are traders or have a reputation for their skills. The Fallout series offers a different dynamic, presenting a closeness among the residents of settlements yet very little overlap outside of settlements with the exception of caravan traders. This closeness among settlers leads to the reproduction of several rural stereotypes such as the ‘town mom’, the ‘town drunk’, and the ‘town crazy’. Although ICY and the Metro series present with some stereotypes, the most prominent examples appeared within the Fallout series.

The second element is the fear of outsiders (9 of 9 games) concept which is persistent in rural culture (Scott, et al., 2011). All of the games examined present with some variation of this fear acting to isolate the settlement within itself in order to remain
safe. In Sheltered fearing outsiders means survival as outsiders threaten the safety of the player’s family, shelter, and access to supplies. Despite this ingrained fear of outsiders, Sheltered forces the player to accept new people into the shelter in order to survive and expand the living situation. Similarly, the settlements in ICY and the Fallout series must accept strangers in order to receive water, food, ammunition, and other tradable goods. However, that does not mean all settlements welcome strangers. A common theme in all video games examined is the presence of underground shelters that act to protect and isolate communities from the dangers of the outside world. In the Fallout series, these appear as vaults that were the original refuge when the fallout occurred. During the course of the series these vaults open their doors to explore the wasteland, gather supplies, and deal with traders, but there is a general reluctance to let others into the vaults. The Metro series occurs completely underground, with a fear of the surface and those on the surface. In ICY there is a vault type structure called Eden, where the player’s character is originally from, that seeks to remain hidden despite holding all of the resources to restore humanity. There is a need to protect not only the people within settlements but the resources that the settlements have.

The third element is the presence of agriculture and animal husbandry (7 of 9 games) which is a prominent aspect of rural culture (Woods, 2010). In the Metro series the settlers have taken to raising livestock, specifically pigs and chickens, in the subway tunnels in order to provide fresh food to the populace. Additionally, settlers plant crops of tomatoes and potatoes in some areas and even tobacco and marijuana are grown. In the Fallout series Brahmin, a mutated breed of cattle with two heads, are domesticated and herds appear around many settlements. In Fallout: New Vegas a mutated variation of big
horn sheep called Bighorners appear and are domesticated by two different settlements. Additionally, in the *Fallout* series several types of vegetables can be planted and grown, although the emphasis on user-farming does not appear until *Fallout 4*. However, settlements have farms of melons, tatos (a mutated hybrid of a tomato and a potato), mutfruit, carrots, and corn, among other vegetables. In *ICY* and *Sheltered* the emphasis is placed on hunting/trapping for food, as opposed to agriculture and animal husbandry; however, the association between hunting and rural culture is very prominent.

The fourth element is the knowledge of crafting and weaponry (9 of 9 games) that is an implied aspect of rural culture. As discussed in the previous paragraph, *ICY* expects its character to have a knowledge of weaponry sufficient enough to hunt with. This knowledge will affect the survival of the player’s entire tribe. In *Sheltered* the player’s family’s knowledge of crafting, seemingly acquired from nowhere, is the only thing that keeps the family clean, allows them access to clean water, and allows the shelter the potential to expand. In the *Fallout* series, the character’s knowledge of weaponry allows the player to survive the wasteland, including protecting his/herself and killing mutated animals for food. This knowledge of crafting and repair allows the player to progress through the game. Some of this knowledge is gained through textbooks (*Fallout* and *Fallout 2*) or through completing tasks (*Fallout 3*, *Fallout: New Vegas*, and *Fallout 4*). In *Fallout 4*, the character automatically possesses the crafting ability to demolish buildings, plant crops, build reinforcements, and furnish homes despite having spent the last 210 years cryogenically frozen. In the *Metro* series, there is a reference to crafting in relation to weaponry, which can occur with the assistance of a weapons dealer, and the crafting of railcars. Knowledge of weapons is implied; however, many stations where weapons can
be purchased also include a gun range where players can practice and improve weapon skills.

The fifth element is the presence of drug and alcohol culture (8 of 9 games) which is commonly associated with rural areas (Falck, et al., 2005; Lambert, et al., 2008; Parker, et al., 2012). In the *Fallout* series there are a wide variety of drugs and alcoholic substances available in the post-apocalyptic world (see Appendix C). These substances do various things to improve the character’s abilities in-game, but only for a short period of time, and the aftermath and/or addiction to them is not a smooth process. As the series progresses, and time passes in the wasteland, the availability of different types of chemical and alcoholic substances increases. A player can progress through the game without using chemicals or alcohol; however, there are benefits to it provided the player can avoid getting his/her character addicted. Almost every settlement has a drinking establishment in the wasteland if nothing else. In the *Metro* series, despite the apocalypse causing everyone to flee underground, there is still a drug culture that has emerged in the growth of marijuana in the tunnels. There is also a large presence of alcohol in the game series as it is available at most stations for consumption. *ICY* also presents with bars and drinking establishments at several of the settlements despite a lack of other structures.

**Social Structures and Controls**

The social elements in the video games pay tribute to the environment in which each game is set and need to be taken into consideration when examining the controls and structures present. It is important to consider that three of the nine games are set in Russia and reflect Russia culture and social dynamics. Unique to these storylines is the aspect of bullets as currency, the emphasis on militarization (*Metro* series), and the perpetual cold
weather. The remaining six games are set in the US and reflect the culture and social dynamics of that country. Unique to these storylines is the aspect of caps as currency (Fallout series), the presence of fallout shelters, and the do-it-yourself mentality that disregards the need for government assistance.

In all of the video games examined the player has the option to travel alone or with a companion. ICY and Sheltered are the only games in which the character’s family/tribe are with the player almost all of the time; however, the player can go on independent missions without them. In the Fallout series the player can choose to have companions join him/her in order to help fight or carry supplies. These are not mandatory. In the Metro series, the narrative is linear so companions come and go as the developers intended. Companions remove some of the isolation of the post-apocalyptic world, provide an expanded look at the history of the world, and allow for assistance against dangers. With the exception of game generated companions, everyone else encountered in the wastelands is friend or foe, more often than not foe.

All of the video games examined are driven by a trade culture mentality, indicating that without communication with other people the character (and therefore the player) is unlikely to survive the post-apocalyptic world. It is often more beneficial to trade than kill a stranger, as they may have useful items. And stealing from a stranger can be beneficial (Metro series and Fallout series); however, if the character gets caught it will result in the entire settlement attacking him/her as he/she has violated their trust (Fallout series). In ICY traders bring news from across the Vale (the wasteland) along with supplies to be bartered. Similarly, the caravan traders in the Fallout series provide information on what is happening in the wasteland and with the factions that have
formed. In the *Metro* series, the traders have the supplies but it is The Spartans (or the Rangers of the Order) that hold the information, as their men travel between the stations and to the surface on a mission to save humanity. Contrary to the other games, *Sheltered* has no established traders and the player must trade with whomever the opportunity arises with.

The presence or absence of social controls are influential on the characters in the video games, and by association the user playing the video game, and contribute to the decisions they make. As can be assumed with the destruction of modernity that many formal social controls that had previously existed would disappear. This was only partially true. Education as an institution is non-existent with the exception of the vault culture in *Fallout 3* and the mandatory Generalized Occupational Aptitude Test (G.O.A.T.) that vault children must undergo at the age of 16. None of the other games examined presented any reference to an education system available in the post-apocalyptic world. Religion as a formal institution is non-existent but religious sub-groups emerge within the post-apocalyptic world (6 of 9 games). *ICY* has The White People who are a religious group dedicated to righting the sins of humanity and not repeating the mistakes of the past. *Fallout 3* and *Fallout 4* introduces the Church of the Children of Atom who believe the nuclear fallout was a great event that rebirthed the earth. In the *Fallout* series Christianity still exists but in the background of the post-apocalyptic world in various pockets and elements of Mormonism also exists. However, all other religious groups reflect cult structure or tribal religious structures rather than formal church systems.
The formal social control that seemed to remain very prominent within the post-apocalyptic world is that of police or some other type of law-enforcing agency. Of the video games examined eight of nine presented with types of law-enforcing agencies of various degrees of power within their settlements or the post-apocalyptic world at large. In ICY all settlements had guards at their gates monitoring the individuals who came and went from the Vale, and at times enforcing curfews or baring travellers access to villages. Eden has a formal leader and also control of military forces. In the Metro series, particularly Metro 2033 when Artyom (main character) is not a member of the Rangers of the Order, many stations are guarded by armed men and trespassers who are not known will be killed or imprisoned. Additionally, in the Metro series it the Rangers of the Order that aim to maintain order in the metro as the Fourth Reich and the Red Line war against each other vying for supreme power. The Fourth Reich and the Red Line also control military forces. In the Fallout series, specifically Fallout and Fallout 2 there is a presence of police within larger settlements. These people are supposed to uphold law and order but mostly are just present. Additionally, the Enclave (Fallout), the New California Republic (NCR), and Caesar’s Legion (Fallout: New Vegas) control military forces. In Fallout 3 the vault has formal law enforcement, but outside of the vault this is not as prominent. In the later Fallout games, settlements have sheriffs, robot guards called Sentry Bots (Fallout: New Vegas and Fallout 4), and super mutants. Additionally, the Brotherhood of Steel acts to maintain law and order in the Fallout series as well as preserve humanity.

As formal social controls deteriorated with the destruction of modern society, informal social controls flourished with a reversion to simpler social structures reliant on
small social groups to maintain order. Informal social controls present in the manner of family or peer relations which influence decisions (Hirschi, 1969). All of the video games examined presented with some element of informal social control, whether it was direct family or peer influence. *ICY* presents with a social group, the character’s tribe and family, compiled of one distinct leader (the player/character) and members who come and go during the player’s travels, but all have influence on the decisions being made in the game. All of the settlements visited in the game have a social structure and hierarchy of power that dominates how things are run. *Sheltered* is run by a family structure; however, since the player can control all individuals within the shelter it is difficult to ascertain the structure of power within the God-like game-play.

In the *Metro* series, there is very minimal familial informal social control emphasised within the game. Family-based informal social structures are present within the civilian sections of the game; however, the main story arc forces more of military and formal controls. Artyom, main character, experiences informal social controls through his connects to members of the Rangers of the Order and other travellers throughout the metro who influence the decisions he makes along his journey. In the *Fallout* series informal social controls are present in all settlements as they are populated by family or social groups, with an elected or self-appointed leader. Within the vaults, the overseer is the leader, but family structures exist and peer relationships influence choices. Informal social controls appear in groups such as the Khans, who are raiders and follow no moral compass yet have a leader. Additionally, cult-type religious groups that are dictated by informal social structures appear within the *Fallout* series. These groups vary from
benign social groups such as the Treeminders that worship Harold in Oasis to aggressive like the Children of the Cathedral who plan a mass genocide of the human race.

**Discussion**

The video games analysed in the previous section rely on the setting to provide an unobtrusive backdrop that re-presents rural life, to provide an element of conflict for the players, or to support the rurality within the narrative. There were three levels of conflict present in all video games examined, human vs. environment, human vs. human, and human vs. mutant/animal, although the presence of each level varied between games. The types of violence present varied within each video game, with all video games escalating to lethal violence quite frequently. Assault occurs, however, it is more common to kill a potential threat than disable them in PAS video games. There are five elements of rural culture that translate throughout all settlements in all nine video games examined: ‘everyone knows everyone’ mentality; fear of outsiders; agriculture and animal husbandry; knowledge of crafting and weaponry; and drug and alcohol culture. As formal social controls deteriorated with the destruction of modern society, with the exception of law enforcement and military culture, informal social controls flourished with a reversion to simpler social structures reliant on small social groups to maintain order.

The themes which emerged persistently throughout the nine video games analysed fall underneath four categories similar to those outlined in the results section. However, there were unique elements that emerged. These four categories will be identified as the following: an element of hope; everyone has a gun; the reproduction of stereotypes; and military, cults, and fanatics. These themes appeared in various forms in all nine video games analysed and transcended beyond the original coding frames outlined. These
themes reveal unique connections in regards to the previous research in the field of games culture and rural criminology. Although limited, the area of rural criminology highlights some clear conceptualizations about rural crime and violence. When compared to the video game recreations of this, the video games varied greatly from statistical information. The social structures and controls depicted within the video game narratives provided a much better examination of rural culture and trends than the recreations of violence and crime.

**An Element of Hope**

The settings of all nine video games examined is a post-apocalyptic environment, suffering from the aftermath of a nuclear fallout in which modern society has been completely destroyed and the user must survive in the new world. This reflects a cultural shift in media towards more dystopian narratives (Aldred & Greenspan, 2011) in which global destruction, political turmoil, and societal collapse are central themes (Baccolini, 2000; Jameson, 2005; Moylan, 2000; Seed, 2000). Although survival-themed video games have been around for several decades there has been a transition in focus to place more emphasis on combat survival elements, dystopian narratives, and survival horror themes (Aldred & Greenspan, 2011; Kirkland, 2009). This can be seen in all of the video games analysed in this study. The fact that death is a persistent factor in each narrative if the player does not defend his/herself properly, heal in time, or manage food/water makes the survival elements extend beyond the traditional pastoral resource management games. Players are reminded constantly as they play that “life is a struggle for survival in a world filled with others who want to kill them/or take their property and territory” (Bertozzi, 2014: 431). The struggles, hardships, and environmental conflict presented within these
settings also align with the experiences of rural living, which is often resource dependent (Stedman, et al., 2004) and isolated from governmental assistance.

Critical dystopias are categorised as such due to their presence of an element of hope for a utopian future hidden in the dystopian state (Baccolini, 2004; Fitting, 2003; Moylan, 2000). Despite the seemingly hopeless nature of post-apocalyptic narratives of eight of nine video games analysed there is a common element of hope hidden within each storyline. In ICY there is Eden, the underground sanctuary that holds the capability of restoring the world to its former glory. In Metro 2033, Artyom, despite having been raised in the underground a place that “kills the belief in miracles, [and] teaches you to live without hope”, is hopeful for the future of humanity (4A Games, 2010). His faith falters at times, but in the end, it is he that destroys the Dark Ones and gives hope for survival to those in the underground. There is an alternate ending to allow the Dark Ones to live as they are not a threat to humanity; however, this does not translate into the sequel. In Metro: Last Light it is Artyom still who claims that “hope still lives while the Order holds D6, while even a single one of us still draws breath” as they fight the Red Line for control of the metro and the ultimate fate of humanity (4A Games, 2013).

The Fallout series varies slightly in the fact that the player’s decisions throughout the game can drastically affect the ending provided and the future of humanity. In Fallout, the vault dweller (the player) plays a crucial role in saving the people in Vault 13 and various sects of individuals throughout the wasteland as well as preventing a mass genocide planned by the Children of the Cathedral. Hope for the future is found in the settlers encountered during the player’s travels. Similarly, in Fallout 2 when the character, a descendant of the vault dweller, set out to find a Garden of Eden Survival Kit
(GECK) there is hope in the existence of Vault City and the destruction of the Enclave who were also planning a mass genocide. In *Fallout 3*, the player can choose to stop another mass genocide and decide that, “Humanity with all its flaws was deemed worthy of preservation” (Bethesda Game Studios, 2008). Despite which ending the player chooses in *Fallout 4* the element of hope persists. The Institute ending summarizes it as follows: “You will not be loved, but you will save humanity. However you choose to define it” (Bethesda Game Studios, 2015). *Fallout: New Vegas* is perhaps the only narrative in the *Fallout* series that has a pessimistic note no matter which route the player takes in the storyline, and there are multiple. The game concludes on the note: “In the new world of the Mojave Wasteland, fighting continued, blood was spilled, and many lived and died - just as they had in the Old World. Because war... war never changes” (Obsidian Entertainment, 2010).

Schulzke (2014) proposes a critical dystopia where the focus is not on fixing the new world, but rather on surviving it, a concept that appears in *Sheltered* and *Fallout: New Vegas*, and is an undertone in the remaining video games. By providing no solution to the current social dilemma it allows players to be more critical about the values, institutes, and problems presented within the narrative (Schulzke, 2014). The *Fallout* series repeated tagline of “war never changes” is indicative of this critical reflection (Bethesda Game Studios, 2015; Bethesda Game Studios, 2008; Black Isle Studios, 1998; Interplay Entertainment, 1997; Obsidian Entertainment, 2010). And the *Metro* series use of phrases like “even the apocalypse didn't stop us from killing each other over ideology” (4A Games, 2010). The use of critical dystopian narratives to ground the storylines
around societal issues that players must engage with, question, and potentially overcome allows the games to take a real world tone within a virtual context.

**Everyone has a Gun**

The trend of extreme violence is not uncommon in video games where players are provided with an enemy that they will want to kill (Hitchens et al., 2014). The goal within these mediums of entertainment, in relation to violence, is not to be accurate, but to provide a target that the player will want to vanquish (Hichens et al., 2014). The unique aspect of PAS video games is that, although enemies are presented in the form of mutated beings, many of the individuals the player encounters in-game benefit the player more through association as opposed to conflict. The need for cooperation, interaction, and shared goods within PAS video games sets them apart from traditional violent video games.

The violence that is depicted in all of the video games examined in this study escalates to lethal violence, quite frequently, with the presence of assault scattered throughout the games. The method in which lethal violence is perpetrated is not representative of rural realities (Slovak & Singer, 2001). Even considering nation-wide statistics for the United States (3.5/100 000) and Russia (3.08/100 000) lethal violence incidents were committed using a firearm; the level of lethal violence committed within the virtual worlds are extreme (Xu, Murphy, Kochanek, & Bastian, 2016; Butchart, Mikton & Krug, 2014). Shai’s (2010) study of lethal violence in rural Alaska indicated that guns were the cause of death only 58% of the time, which is contrary to the use of guns as the primary weapon in seven of nine of the video games. The *Fallout* series presents players with a plethora of weaponry (see Appendix B, Table 5) ranging from
small arms to large-scale energy weapons. This is not entirely surprising as the US ranks number one globally for possession of firearms at an average of 88 per 100 people (Karp, 2007) and 2.7 million military weapons (Karp, 2013). Therefore, the availability of firearms after the destruction of society would be vast. Given the choice between a gun and a baseball bat in defence against a mutated being, the decision is fairly simple. This is similar for the Metro series where a gun is the player’s primary weapon. Although civilian weapon ownership is significantly lower in Russia, 8.9 per 100 people, (Karp, 2007) there are 26 million military weapons registered in Russia (Karp, 2013) and it is military weapons often referenced within game-play. Sheltered is the only game to reflect rural norms in its lack of reliance on firearms for lethal violence, and ICY is the only game to depict guns used specifically for hunting purposes and secondly for defence (Slovak & Singer, 2001). Guns may be the first choice of weapon in the player’s arsenal in the post-apocalyptic world, but this does not reflect rural violence trends.

According to Butters, Brochu, and Erickson (2011), 69% of violent incidents involving rural youth did not involve weapons at all. Therefore, in addition to committing lethal violence via guns, knives and blunt objects are available within the game world, as well as beating someone to death with the character’s bare hands. According to Shai (2010) when committing lethal violence knives are the choice of weapon 14% of the time, personal weapons (beating) 11% of the time, blunt objects 7% of the time, and unknown objects 10% of the time. In all video games, except ICY, the option to perpetrate lethal violence by these means exists. Sheltered places an emphasis on melee conflict as the main choice of conflict/lethal violence. The Fallout series and the Metro series provide the players with various methods and a wide range of options (see
Appendix B). Again, this provides an unrealistic example of the frequency in which lethal violence occurs in rural areas; however, the post-apocalyptic rural is a different dynamic that cannot be completely compared to current societal rural areas.

Despite the lack of connection in weaponry, there is comparative overlay between criminal types present within the nine video games analysed and the rural taxonomy of criminals provided by Smith (2013). Most prominent type is the ‘travelling fraternity’ defined as a criminal group that is nomadic (Smith 2013). In the Fallout series, this appears in the form of the Khans and Raiders, and in Fallout: New Vegas as the Fiends, Jackals, Vipers, and Scorpions. In ICY the ‘travelling fraternity’ appears as raider groups who attack the tribe while the player travels through the Vale. In Sheltered this is anyone the player meet outside of the shelter, as he/she is one of the few people with a permanent location making all other groups nomadic. The second type is the ‘village criminal’ defined as a criminal group that is of high concern to the village and authorities (Smith, 2013). In the Fallout series these appear as gangs such as the Kings, the Skulz, the Blades, the Crypts, and the Powder Gangers. The third type is the ‘rural criminal’ defined as an individual who commits a crime within the settlement but is not a large cause for concern (Smith, 2013). In the Metro series the player encounters various criminal types who sneak Artyom into the Fourth Reich and the Red Line encampments, as well as free imprisoned criminals. In the Fallout series handling local criminals can earn the player goodwill with the settlement and gain the player information. In ICY handling local criminals is a good way to make money or get supplies. Therefore, according to Smith’s (2013) taxonomy, the video games support rural criminal types.
The Reproduction of Stereotypes

The elements of rural culture depicted within the nine video games examined vary from exaggerated stereotypes to accurate representations of social structures within rural communities. Rural communities are not homogenous (Ball, 2001), and as such, there is no way to say what is completely ‘rural’ by definition. All of the communities examined in all of the video games are unique within the virtual worlds, varying in population, composition, beliefs, and resources. There is a limited social construction of the concept of rural formed by idyllic images of countryside landscapes and rustic settlements (Bell, 1997; Woods, 2010). The truth about rurality and rural culture extends far beyond physical landscape, and into the very social structure of the community, which was the main focus of examination within this study.

Elements of rural culture translate well within the virtual worlds depicted in the nine video games analysed. The emphasis on agriculture and animal husbandry, the resource depending communities, and the trade culture are trends that translate from the virtual post-apocalyptic world into real world rural communities (Smith, 2013; Stedman, Parkins, & Beckley, 2004). There is a shared history among the residents in all communities (Bonder, et al., 2002) in all video games examined. In the Fallout series, the player can see this history evolve and change (Eisenhauer et al., 2002; Shreffler-Grant, et al., 2007) with social groups such as the Khans, the New California Republic, the Brotherhood of Steel, the Enclave, and the Followers of the Apocalypse. There are shared values and beliefs within each settlement visited (Eisenhauer et al., 2010) in each video game or the player’s own settlement in the case of Sheltered. The rural lifestyles depicted in these video games are not the rustic idyll assumed with rurality (Bell, 1997), but rather
a harsh struggle for survival more consistent with the struggles of real-world rural communities.

Story telling is a central point in how we communicate the values, morals, and history of a culture (Jewkes, 2004), and interactive media allows the player to become an active member of that storyline by becoming fully immersed in the history and culture discussed (Atkins, 2006; Surrette, 2011). Problematic to this experience is when the culture virtually re-presented is littered with stereotypes as these shape the general perceptions of the culture (Cohen, 1972). Culture is learned, assuming that individuals are rational thinkers and can absorb the constructed realities around them (Bandura, 1977), and therefore it is important to consider the stereotypes about rural culture presented within the video games analysed in this study.

Although all of the video games examined presented with stereotypes in some form, the most notable emerged in the settlements within the Fallout series. Within each game, there are several reoccurring rural stereotypes such as the ‘town mom’, the ‘town drunk’, and the ‘town crazy’. These stereotypes indicate certain aspects about rural culture that are not entirely true. The ‘town mom’, even called ‘mom’ in Fallout 2 is a character that looks out for the settlement, often the children, and is the one to speak to if the player want to learn anything. In Fallout 2 this character runs Mom’s Diner and states. “I even treat people like they’re my kin - long as you obey my rules that is” (Interplay Entertainment, 1997). The ‘town drunk’ appears in various areas in the Fallout series, sometimes with a name and sometimes without a name. In Fallout: New Vegas the player is responsible for removing the drunks from Freeside as they vomit and stagger about. The ‘town crazy’ can appear in multiple roles in the Fallout world, either an
individual high on one of the multiple drugs available, someone who has been exposed to too much radiation, or someone who has finally given in to the loneliness of the wasteland. Additionally, these video games emphasise the stereotype that crime is committed by outsiders (the player), and settlers are wary of the player’s presence (Ball, 2001; Scott, et al., 2011; Smith, 2013). Despite the real world similarities in the virtual counterparts, the stereotypes about rural culture have still persisted.

These stereotypes are also followed by the emphasis on substance abuse and addiction within the rural communities. The *Fallout* series shows a persistent drug culture and alcohol is available in almost every settlement regardless of the level of development (see Appendix C). *ICY* also presents an alcohol driven society within the new world with an abundance of bars in the settlements visited in the Vale. Despite the re-presentation of the rural idyll within media and the socially constructed belief of purity within rural communities (Bell, 1997; Woods, 2010), this depiction is accurate based on recent findings. Recent studies have found that rural communities have high levels of substance use/abuse and alcoholism among youth and young adults (Falck, et al., 2005; Lambert, et al., 2008; Parker, et al., 2012). Therefore, the depiction of post-apocalyptic settlements having such trends is not far fetched. It can be hypothesised that due to the stress of survival, the pessimistic lifestyle, and the limited resources that drug culture and alcoholism would increase in post-apocalyptic rural communities.

**Military, Cults, and Fanatics**

The formal social controls depicted in the video games analysed are military groups, government organisations, and religious factions. Education does not appear as a functional institution in the post-apocalyptic world. Although the military has very little
formal structure in the new world, there are several military groups that arise. Although there is the Brotherhood of Steel within the *Fallout* series the more prominent example of formal military life is within the *Metro* series where military life is the only alternative to civilian life. There is a clear example of the military institutionalization present within the Rangers of the Order (Berger & Luckmann, 1967; Goffman, 1961). This is more visible in *Metro: Last Light* when Artyom is a member and the player sees him question his orders but feel obligated to complete them: “I must do what Hunter demanded of me…I must prove to them all that I deserve to be one of them. To be one of the Order’s fighters, to dedicate my life to the protection of humanity” (4A Games, 2013). Military structures within the post-apocalyptic world act to supply order and security in a time when neither is available to the average civilian.

Government organisations try to take roles of power in the post-apocalyptic world without much success as their platforms rarely suit the needs of the populace. The Enclave from the *Fallout* series aims to destroy all individuals who possess even the slightest bit of radiation and therefore cleanse the new world. The Fourth Reich and The Red Line war for power in the *Metro* series continue the real world conflict between Nazism and Communism, something that has historical roots in Russian society. And in *ICY* Vernon, who controls Eden, wants to hide the saviour to the world from everyone. Whereas government organisations are often influential and have a great deal of control over their citizens, it is often civilians who are responsible for the downfall of governments in these narratives and military structures take their place.

Religious groups in the post-apocalyptic world are few and vary in construction and dogma. Hirschi (1969) indicates that connections to community systems and values build
social control, and formal institutions such as religious houses act to ground an individual within a community (Lee, 2008). Association with a religious group can ground an individual within a community setting such as those involved in Christianity, Mormonism, Dharma, and Buddhism (*Fallout* series). Otherwise, religious association can segregate an individual from society such as The White People (*ICY*), The Children of Atom (*Fallout 3 and Fallout 4*), and the Hubologists (*Fallout 2 and Fallout 4*). Religion does not serve the same purpose as it traditionally did in real-world rural communities in the post-apocalyptic world; however, the social division between religious dogmas translates from the virtual to the real world.

Studies have indicated that rural communities are often governed more prominently by informal social controls as opposed to formal social controls (Cebulak, 2004; Donnermeyer, et al., 2013; Weisheit & Donnermeyer, 2000). The informal social controls depicted in the video games analysed appear in the form of family groups, tribes, brotherhoods, and cults. The commonality within these informal social structures is that it is a fear of the outside world, and a fear of outsiders that unites them and makes them a potential threat (Elias & Scotson, 1994; Scott, et al., 2011).

Family groups and tribes appear in many forms within the video games and have either a passive influence on the player as a character (*Fallout: New Vegas* and *Metro: Last Light*) or a direct influence as they are the driving force for the player’s choices (*Fallout, Fallout 2, Fallout 3, Fallout 4, Metro 2033, Sheltered, and ICY*). In *Sheltered* and *ICY* the player is directly responsible for the wellbeing of his/her family/tribe and therefore more weary of outsiders as they could be a threat (Elias & Scotson, 1994). Hirschi (1969) indicates that a strong bond with family/peer groups builds social control
and in these video games family is a driving factor for completing many of the main tasks in the story arcs.

Similar to family/tribes there is the presence of brotherhoods, more prominent in the *Metro* series with the military institutionalization (Berger & Luckmann, 1967; Goffman, 1961) although evident in the Brotherhood of Steel in the *Fallout* series. Undergoing initiation tasks and passing training in order to qualify for these groups provides an elitist quality to them separating them from the average settlement within the wasteland. Additionally, both the Rangers of the Order and the Brotherhood of Steel operate under the same mission statement to save and preserve humanity. There is a high level of attachment and belief (Hirschi, 1969) among the members of these organisations and as a member in *Fallout* (and others depending on in-game choices) and *Metro: Last Light* these organisations influence the player’s choices throughout the games.

The presence of cults within the video games examined is yet another stereotype about rural culture (DeKeseredy, et al., 2014). The *Fallout* series presents these in abundance: the Pillars of the Community (*Fallout 4*), the Treeminders (*Fallout 3*), Renewal (*Fallout 2*), and The Children of the Cathedral (*Fallout*). Although the character does not join any cults, as a player there is contact with these groups quite frequently. The leaders of cult groups are often charismatic and possess the ability to manipulate and influence followers to do things they would not normally have done (Schwartz & Kaslow, 2001). Such is definitely the case within the *Fallout* series as individuals expose themselves to radiation, dip themselves in toxic chemicals, and plan mass genocides for the sake of appeasing their cult leader.
Conclusion

Post-apocalyptic survival (PAS) themed video games provide a platform for rural culture, violence, and stereotypes to be displayed and examined as the games take a ‘return to roots’ approach following the destruction of modern society. This study analysed nine video games set in post-apocalyptic environments with human vs. environment as their primary conflict and human vs. human as their secondary conflict. These games were examined for their setting and environment, conflict and violence, rural culture and stereotypes, and social structures presented within the nine video games chosen. This revealed similar findings about the environment to Bertozzi, (2014), that it is used as the driving force of the narrative and a core feature of survival-themed video games. The violence depicted in the games was not realistic in relation to rural statistics; however, the criminal types that appeared are similar to common rural typologies (Smith, 2013). The elements of rural culture that are re-presented within the games varied between accurate in the depictions of a shared history and established-outsider relations to the reproduction of stereotypes about rural archetypes. And the social structure displayed within the video games was accurate to rural communities with an emphasis on informal social control governing most settlements.

This study, although based in cultural criminology, expands well beyond this discipline. The relevance of video games and the content they re-present as a medium for interactive entertainment, information transfer, and cultural learning expands into game studies, sociology, and communication studies. Video games provide a platform for the analysis of multiple disciplines. This study examined one viewpoint on a sample of nine
video games to determine if particular aspects were present/absent. The potential for future exploration within this sample, and with video games, in general, is vast.

**Limitations and Future Research**

Although the study showed that post-apocalyptic survival-themed video games reflect rural criminal types, stereotypes, substance use, and social structures it is not without its limitations. The video games were analysed by a single researcher, which biases the opinions of them. In future research, the content analysis of the video games would benefit from two or more researchers viewing them so as to eliminate bias. All of the video games were sourced through Steam, one of multiple online databases. Utilising Steam also limited the search to only games that are available on PC as well as console systems and does not allow the research to see games that are only available on console systems. Therefore, these games were not included. In future, several databases should be used in order to guarantee a comprehensive list of video games. The search for video games was completed in March 2016 and therefore any games released after this date were not included in the study. The video games were analyzed thematically, with conclusions being drawn after the sample had been viewed. Had another approach been used to view the sample different conclusions may have been drawn. The analysis was also limited by the theoretical focus chosen. If alternate theories had been selected then different results would have been revealed.

Additionally, the sample was limited to post-apocalyptic survival-themed games in which human vs. human conflict was the secondary conflict type. In future, changing this criterion to human vs. zombie or human vs. supernatural could expand or change the research findings in relation to criminal types, stereotypes, substance use, and social
structures. This analysis paid limited attention to gender and sexuality, despite previous research in both games studies and rural studies with focuses in these areas. In future, gender representations within PAS video games and sexuality should be explored. This analysis focused heavily on the *Fallout* series, as it made up five of the nine games within the sample. This focus limited the analysis as the remaining games were often compared to the *Fallout* series unintentionally. In future, focusing on a single game or series, although limiting, would enhance the depth of the data gathered and perhaps show more consistent trends in relation to rural culture and the reproduction of stereotypes.
References


Canavan, G. (2010). “‘We are the walking dead’: Race, time, and survival in zombie narrative”. *Extrapolation, 51*(3), 431-453.


Jameson, F. (1982). “Progress versus utopia; or, can we imagine the future?”. Science-Fiction Studies, 9(2), 147-158.


**Ludography**


Unicube & Team 17 Digital Ltd. (2016). *Sheltered*. PC. Team 17 Ltd.
Appendix A – Video Game Summaries

*Sheltered* (2016) is a survival-management game set after a global apocalypse. Your role is to take care of your family who now live in a deserted fallout shelter. You must do whatever it takes to keep them alive.

*ICY* (2015) is a post-apocalyptic survival game set in the new Ice Age. Every decision you make effects your followers as you lead them across the white wasteland searching for the members of your tribe who were taken from you.

In *Fallout 4* (2015) you are the sole survivor of Vault 111, where every member was cryogenically frozen to wait out a world devastated by nuclear war. You enter a world where ever second is a fight for survival on a mission to find your infant son who was stolen from you.

In *Metro: Last Light* (2013) you play as Artyom, a year after the events of the previous game and a new member of the Rangers of the Order. You are on a mission to kill the one remaining Dark One, but like everything in a post-apocalyptic world it does not go as planned. You must save yourself, your people, and the world, as you know it.

In *Metro 2033* (2010) you play as Artyom, born in the last days before the apocalypse and raised in the metro. Your journey takes you beyond your metro-station’s limits to warn the remnants of mankind of a terrible approaching threat and seek help in defending humanity against it.

In *Fallout: New Vegas* (2010) you play as the courier caught in the wrong place at the wrong time. After a bullet to the head you are on a mission for revenge. Along the way you have to deal with ongoing power struggles within New Vegas and an all-out faction war.
In *Fallout 3* (2008) you are a resident of Vault 101 where you had spent your entire life until your father goes missing. Determined to find him, you leave the Vault on a mission to find your father, braving the outside world, a place now call “Capital Wasteland”, that has been devastated by nuclear warfare.

In *Fallout 2* (1998) you start in the Wasteland on a mission to find the Garden of Eden Creation Kit to save your primitive village. Your mission will not be easy and very few you will meet on the way will provide you with real help. This is a battle you must win on your own.

In *Fallout* (1997) you are a resident of Vault 13 until your Water Chip malfunctions and you are chosen to venture out into the Wasteland in search for a replacement. You must learn the way of the Wasteland quickly in order to survive or you become just another fallen hero.
Appendix B - Weapons

Table 5: Summary of the number of types of firearms available to players in the *Fallout* and *Metro* series (Wikia, 2016).

<table>
<thead>
<tr>
<th>Video Game</th>
<th>Pistols</th>
<th>Rifles</th>
<th>Shotguns</th>
<th>Submachine Guns</th>
<th>Big Guns</th>
<th>Energy Weapons</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Fallout</em></td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>7</td>
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<tr>
<td><em>Fallout 2</em></td>
<td>11</td>
<td>16</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td><em>Fallout 3</em></td>
<td>12</td>
<td>15</td>
<td>5</td>
<td>2</td>
<td>17</td>
<td>24</td>
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<tr>
<td><em>Fallout: New Vegas</em></td>
<td>18</td>
<td>25</td>
<td>9</td>
<td>8</td>
<td>5</td>
<td>44</td>
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<td><em>Fallout 4</em></td>
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<td>24</td>
<td>4</td>
<td></td>
<td>16</td>
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<td><em>Metro 2033</em></td>
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<td>5</td>
<td>3</td>
<td></td>
<td>2</td>
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<tr>
<td><em>Metro: Last Light</em></td>
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<td>10</td>
<td>6</td>
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Table 6: Summary of the number of types of melee weapons and explosives available to players in the *Fallout* and *Metro* series (Wikia, 2016).

<table>
<thead>
<tr>
<th>Video Game</th>
<th>Bladed</th>
<th>Blunt Objects</th>
<th>Explosives</th>
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<td>5</td>
<td>4</td>
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<tr>
<td><em>Fallout 2</em></td>
<td>14</td>
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<td>5</td>
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<td><em>Fallout 3</em></td>
<td>26</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td><em>Fallout: New Vegas</em></td>
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<td>21</td>
<td>25</td>
</tr>
<tr>
<td><em>Fallout 4</em></td>
<td>17</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td><em>Metro 2033</em></td>
<td>1</td>
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<td>2</td>
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<tr>
<td><em>Metro: Last Light</em></td>
<td>2</td>
<td>4</td>
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Appendix C – Chemicals and Alcohol

Table 7: Chemical substances featured in the *Fallout* series (Wikia, 2016).

<table>
<thead>
<tr>
<th>Chemicals</th>
<th><em>Fallout</em></th>
<th><em>Fallout 2</em></th>
<th><em>Fallout 3</em></th>
<th><em>Fallout: New Vegas</em></th>
<th><em>Fallout 4</em></th>
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<td>Ant Nectar</td>
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<td>Fire Ant Nectar</td>
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<td>Coyote Tobacco Chew</td>
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<td>Rebound</td>
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<td>Rocket</td>
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<td>Hydra</td>
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<td>Daddy-O</td>
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<td>Fury</td>
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<td>Day Tripper</td>
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<td>X-Cell</td>
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Table 8: Alcoholic substances featured in the *Fallout* series (Wikia, 2016).

<table>
<thead>
<tr>
<th>Alcohol</th>
<th><em>Fallout</em></th>
<th><em>Fallout 2</em></th>
<th><em>Fallout 3</em></th>
<th><em>Fallout: New Vegas</em></th>
<th><em>Fallout 4</em></th>
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<tbody>
<tr>
<td>Beer</td>
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<td>Bourbon</td>
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<td>Rum</td>
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<td>Dixon’s Whiskey</td>
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<tr>
<td>Moonshine</td>
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<tr>
<td>Absinthe</td>
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